Filter Summary Report: TIA,some,parasitic,Z3,Z5,ZL

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$10.44 \text{INVALID-ORDER-} 44 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) $. 61
$10.45 \text{INVALID-ORDER-} 45 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) $. 61
10.46INVALID-ORDER-46 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$. 61
$10.47 \text{INVALID-ORDER-47 } Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots \dots$. 61
$10.48 \text{INVALID-ORDER-} 48 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L \overline{L}_L s^2 + 1} \right)' \dots $. 61
10.49INVALID-ORDER-49 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$. 61
$10.50 \text{INVALID-ORDER-50 } Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s + \frac{1}{2} + \frac{1}{2}} \right) \dots $. 62
10.51INVALID-ORDER-51 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 62
10.52INVALID-ORDER-52 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	
10.53INVALID-ORDER-53 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s} \right)$. 62
$10.54 \text{INVALID-ORDER-} 54 \ Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right) \dots $. 62
10.55INVALID-ORDER-55 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L + \frac{1}{C_L s} \right)$. 62
10.56INVALID-ORDER-56 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s} \right)$. 62

10.57INVALID-ORDER-57 $Z(s) = \left(\right.$	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	62
10.58INVALID-ORDER-58 $Z(s) = \left(\right.$	$\left(\infty,\;\infty,\;R_{3},\;\infty,\;rac{1}{C_{5}s+rac{1}{R_{5}}+rac{1}{L_{5}s}},\;L_{L}s+R_{L}+rac{1}{C_{L}s} ight)\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots$	63
10.59INVALID-ORDER-59 $Z(s) = \left(\frac{1}{2} \right)^{-1}$	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	63
`	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	63
j	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	63
<u> </u>	$\left(\infty,\ \infty,\ R_3,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ rac{1}{C_Ls} ight)$	63
10.63INVALID-ORDER-63 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty, \ rac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ rac{R_L}{C_L R_L s + 1} ight)$	63
10.64INVALID-ORDER-64 $Z(s) = \left(\right.$	$\left(\infty,\;\infty,\;R_{3},\;\infty,\;rac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\;R_{L}+rac{1}{C_{L}s} ight)$	63
10.65INVALID-ORDER-65 $Z(s) = \left(\right.$	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + \frac{1}{C_Ls} \right)$	63
10.66INVALID-ORDER-66 $Z(s) = \left(\right.$	$\left(\infty,\;\infty,\;R_{3},\;\infty,\;rac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\;rac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.\;.$	64
10.67INVALID-ORDER-67 $Z(s) = 0$	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots \ $	64
10.68INVALID-ORDER-68 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	64
_	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	64
10.70INVALID-ORDER-70 $Z(s) = \left(\frac{1}{2} \right)^{-1} $	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	64
\	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$	64
\	$\left(\infty, \ \infty, \ R_3, \ \infty, \ rac{R_5 \left(L_5 s + rac{1}{C_5 s} ight)}{L_5 s + R_5 + rac{1}{C_5 s}}, \ rac{R_L}{C_L R_L s + 1} ight)$	64
`	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$	64
\	$\left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$	65
10.75INVALID-ORDER-75 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$		65
10.76INVALID-ORDER-76 $Z(s) = \left(\begin{array}{c} 10.76INVALID-ORDER-76 \end{array}\right)$	$\begin{pmatrix} \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s} \end{pmatrix} \\ \begin{pmatrix} \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \end{pmatrix} \\ \begin{pmatrix} \infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \end{pmatrix} \\ \end{pmatrix} $	65
10.77INVALID-ORDER-77 $Z(s) = \left(\begin{array}{c} 10.77INVALID-ORDER-77 \end{array}\right)$	$(\infty, \infty, R_3, \infty, \frac{R_5(L_5s + \frac{1}{C_5s})}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}})$	65
10.78INVALID-ORDER-78 $Z(s) = \left(\frac{1}{s}\right)^{-1}$	$(\infty, \infty, R_3, \infty, \frac{R_5(L_5s + \frac{1}{C_5s})}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$	65
10.79INVALID-ORDER-79 $Z(s) = \left(\begin{array}{c} \\ \end{array} \right)$	$\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	65
10.80INVALID-ORDER-80 $Z(s) = \left(\begin{array}{c} \\ \end{array} \right)$	$(\infty, \infty, \frac{1}{C_{3s}}, \infty, R_5, R_L)$	65
10.81INVALID-ORDER-81 $Z(s) = ($	$\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{1}{C_L s} \Big) \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots $	65
10.82INVALID-ORDER-82 $Z(s) = ($	$\infty, \ \infty, \ \frac{1}{C_{3s}}, \ \infty, \ R_5, \ \frac{R_L}{C_L R_L s + 1} \Big)$	66
10.83INVALID-ORDER-83 $Z(s) = ($	∞ , ∞ , $\frac{1}{C_{3s}}$, ∞ , R_5 , $L_L s + \frac{1}{C_{Ls}}$)	66
10.84INVALID-ORDER-84 $Z(s) = \left(\right.$	$(\infty, \infty, \frac{1}{C_3s}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls})$	66
10.85INVALID-ORDER-85 $Z(s) = \left(\right.$	$\left(\infty,\;\infty,\;rac{1}{C_{3s}},\;\infty,\;R_{5},\;rac{L_{Ls}}{C_{L}L_{L}s^{2}+1}+R_{L} ight)$	66
10.86INVALID-ORDER-86 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$ \begin{array}{c} \infty, \infty, R_3, \infty, \frac{1}{L_5 + R_5 + c_5^2}, \frac{L_L L_5}{C_L L_5} + H_L \\ \\ (\infty, \infty, R_3, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + c_5^2}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{L_5 s}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L R_5 s + 1}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_5 s + 1}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s + \frac{1}{C_L s}}{L_L s + L_L + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s + R_L + \frac{1}{C_L s}}{L_L L_5 s^2 + 1} + R_L) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L L_5 s^2 + 1}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L s}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L s}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L s}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L s}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L L_5 + \frac{1}{C_L s}}{L_L L_5 + \frac{1}{C_L s}}) \\ \\ (\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L L_5}, \frac{1}{C_L s}) \\ \\ \end{array}$	66
10.87INVALID-ORDER-87 $Z(s) = ($	$(\infty, \infty, \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls})$	66

$10.88 \text{INVALID-ORDER-88 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) $	6
$10.89 \text{INVALID-ORDER-89 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $	6
$10.90 \text{INVALID-ORDER-90 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $	6
10.91INVALID-ORDER-91 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	<i>i</i> 7
10.92INVALID-ORDER-92 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \frac{1}{C_{Ls} + \frac{1}{R_{L}} + \frac{1}{L_{Ls}}}\right)$	<i>j</i> 7
$10.93 \text{INVALID-ORDER-93 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $	57
$10.94 \text{INVALID-ORDER-} 94 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_S}}\right) $	57
10.95INVALID-ORDER-95 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$	5 7
10.96INVALID-ORDER-96 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$ 6	j 7
$10.97 \text{INVALID-ORDER-97 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $	57
10.98INVALID-ORDER-98 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$	<u>5</u> 7
10.99INVALID-ORDER-99 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$	i8
10.10 0 NVALID-ORDER-100 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	j8
10.10 I NVALID-ORDER-101 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	j8
10.10 2NVALID-ORDER-102 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	i 8
10.10 E NVALID-ORDER-103 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$	i8
10.10 INVALID-ORDER-104 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	i 8
10.10 INVALID-ORDER-105 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	i8
10.10 E NVALID-ORDER-106 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	8ز
$10.10 \text{INVALID-ORDER-} 107 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	j 9
10.10 NVALID-ORDER-108 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	j 9
$10.10 \mathfrak{P} \text{NVALID-ORDER-109 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) $	j 9
$10.11 \text{@NVALID-ORDER-}110 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L\right) $ $10.11 \text{@NVALID-ORDER-}111 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) $ $10.11 \text{@NVALID-ORDER-}112 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) $ $10.11 \text{@NVALID-ORDER-}112 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) $	j 9
10.11INVALID-ORDER-111 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	j 9
$10.11 \text{ 2NVALID-ORDER-} 112 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) \qquad . \qquad $	j 9
10.11 2NVALID-ORDER-113 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	39
10.11 INVALID-ORDER-114 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	j 9
10.115NVALID-ORDER-115 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	0
10.116NVALID-ORDER-116 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	
10.11 T NVALID-ORDER-117 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	0'
$10.11 \&NVALID-ORDER-118 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	0
10.11 9 NVALID-ORDER-119 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)'$ 10.12 0 NVALID-ORDER-120 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L\right)$ 70 70 70 70 70 70	0'
10.12 0 NVALID-ORDER-120 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$	0
$10.12INVALID-ORDER-121 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_4Ls^2+1}, \ \frac{1}{C_Ls}\right) \ \dots $	0

$10.12 \text{ 2NVALID-ORDER-} 122 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots \ $
10.12\(\text{ENVALID-ORDER-123} \(Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) \qquad \tag{71}
10.12\(\text{4NVALID-ORDER-124}\(Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right) \tag{71}
10.12 INVALID-ORDER-125 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.126NVALID-ORDER-126 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right)$
$10.12\text{INVALID-ORDER-}127\ Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \ \dots \ $
10.12 NVALID-ORDER-128 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.12 9 NVALID-ORDER-129 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.13 Q NVALID-ORDER-130 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L\right)$
10.13INVALID-ORDER-131 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$
$10.132\text{NVALID-ORDER-}132\ Z(s) = \left(\infty,\ \infty,\ \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \frac{R_L}{C_LR_Ls + 1}\right) $
10.13 B NVALID-ORDER-133 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.13\(\text{LNVALID-ORDER-134}\(Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \qquad \qqqq \qqq \qqqq \qqq \qqqq \qqq
10.135NVALID-ORDER-135 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.136NVALID-ORDER-136 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.13 \text{INVALID-ORDER-} 137 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $
10.13 NVALID-ORDER-138 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.13 NVALID-ORDER-139 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.14 0 NVALID-ORDER-140 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_{3}s}, \ \infty, \ \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, \ R_{L} \right)$
10.14INVALID-ORDER-141 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s}\right)$
10.142NVALID-ORDER-142 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$
10.14\(\mathbb{R}\)NVALID-ORDER-143 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
10.14\(\text{INVALID-ORDER-144}\(Z(s) = \left(\infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s} \right) \\ \tag{73}\)
$10.145 \text{NVALID-ORDER-} 145 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)' $
10.146NVALID-ORDER-146 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3}s}, \infty, \frac{1}{C_{5}s + \frac{1}{2} + \frac{1}{2}}, L_{L}s + R_{L} + \frac{1}{C_{L}s}\right)$
10.14 TNVALID-ORDER-147 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
$10.14 \text{INVALID-ORDER-} 147 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $ $10.14 \text{INVALID-ORDER-} 148 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $ 74
10.15 0 NVALID-ORDER-150 $Z(s) = (\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L)$
10.15INVALID-ORDER-151 $Z(s) = (\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s})$
$10.152 \text{NVALID-ORDER-} 152 \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $
10.15 ENVALID-ORDER-153 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s}\right)$
7

10.154NVALID-ORDER-154 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s} \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	74
10.15 NVALID-ORDER-155 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{1}{C_{3}s},\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)$	75
10.156NVALID-ORDER-156 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{1}{C_{3s}},\ \infty,\ rac{L_{5s}}{C_{5}L_{5s}^2+1}+R_{5},\ L_{Ls}+R_{L}+rac{1}{C_{Ls}} ight)$	75
10.15 TNVALID-ORDER-157 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \dots $	75
10.15&NVALID-ORDER-158 $Z(s)=$	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \dots $	75
10.15 9 NVALID-ORDER-159 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	75
	$=\left(\infty,\;\infty,\;rac{1}{C_{3}s},\;\infty,\;rac{R_{5}\left(L_{5}s+rac{1}{C_{5}s} ight)}{L_{5}s+R_{5}+rac{1}{C_{5}s}},\;R_{L} ight)$	75
10.16INVALID-ORDER-161 $Z(s) =$	$=\left(\infty,\;\infty,\;rac{1}{C_{3}s},\;\infty,\;rac{R_{5}\left(L_{5}s+rac{1}{C_{5}s} ight)}{L_{5}s+R_{5}+rac{1}{C_{5}s}},\;rac{1}{C_{L}s} ight)$	75
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots \ $	75
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s} \right) \dots $	76
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s} \right) $	76
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \qquad \dots $	76
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots $	76
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}} \right) \right) $	76
	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \dots $	76
10.16 9 NVALID-ORDER-169 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	76
10.17 0 NVALID-ORDER-170 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ R_L ight)$	76
10.17 I NVALID-ORDER-171 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ rac{1}{C_Ls} ight)$	77
	$=\left(\infty,\ \infty,\ rac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ rac{R_L}{C_LR_Ls+1} ight)_{\sim}$	77
10.178NVALID-ORDER-173 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ L_Ls+rac{1}{C_Ls} ight)$	77
10.17#NVALID-ORDER-174 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots $	77
10.175NVALID-ORDER-175 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2+1} + R_L \right) \dots $	77
10.176NVALID-ORDER-176 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_{3}}{C_{3}R_{3}s+1},\ \infty,\ R_{5},\ rac{R_{L}\left(L_{L}s+rac{1}{C_{L}s} ight)}{L_{L}s+R_{L}+rac{1}{C_{L}s}} ight)$	77
10.17 NVALID-ORDER-177 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_3}{C_2R_2s+1},\ \infty,\ rac{1}{C_5s},\ R_L+rac{1}{C_Ls} ight)$	77
10.17\nablaNVALID-ORDER-178 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{R_3}{C_3R_3s+1},\ \infty,\ rac{1}{C_5s},\ L_Ls+rac{1}{C_Ls} ight)$	77
10.179NVALID-ORDER-179 $Z(s) = \displaystyle$	$=\left(\infty,\;\infty,\;rac{R_{3}}{C_{3}R_{3}s+1},\;\infty,\;rac{1}{C_{5}s},\;rac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)$	77
10.18 0 NVALID-ORDER-180 $Z(s) =$	$= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)' \dots $ $= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots $	78
10.18INVALID-ORDER-181 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}} ight)$	78
10.182NVALID-ORDER-182 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right)$	78
10.18 B NVALID-ORDER-183 $Z(s)=$	$= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $ $= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $ $= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) $	78
10.18#NVALID-ORDER-184 $Z(s)=$	$= \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right) \dots $	78

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10.18 INVALID-ORDER-185 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right) . . . . . . . . . . . . . . . .
10.18 INVALID-ORDER-186 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.18TNVALID-ORDER-187 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots
10.189NVALID-ORDER-189 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . . . . . .
10.19 INVALID-ORDER-190 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.19INVALID-ORDER-191 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_{2s} + 1}, \infty, R_5 + \frac{1}{C_{5s}}, R_L + \frac{1}{C_{Ls}}\right) \dots \dots
10.192NVALID-ORDER-192 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_5 s}\right) . . . . .
10.19 INVALID-ORDER-193 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots
10.194NVALID-ORDER-194 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . . . . .
10.19 INVALID-ORDER-195 Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_L s}} \right)
10.19TNVALID-ORDER-197 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.19 NVALID-ORDER-198 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right) . . . . . . . . . . . .
10.19 NVALID-ORDER-199 Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}) . . . . . . . . . .
10.200NVALID-ORDER-200 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.20INVALID-ORDER-201 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_5s}\right) . . . . . .
10.202NVALID-ORDER-202 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots
10.20 INVALID-ORDER-203 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right) .....
10.20 NVALID-ORDER-209 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_4 s}\right) . . . . . . .
10.210NVALID-ORDER-210 Z(s) = (\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}) \dots
10.21INVALID-ORDER-211 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) \dots
10.212NVALID-ORDER-212 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
10.21 NVALID-ORDER-213 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots \dots
10.214NVALID-ORDER-214 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . .
10.21 INVALID-ORDER-215 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \dots \dots \dots
10.21 \text{ (INVALID-ORDER-216 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots 
10.21 INVALID-ORDER-217 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
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10.219NVALID-ORDER-219 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right) . . . . . .
10.220NVALID-ORDER-220 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.22INVALID-ORDER-221 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) . . . . . .
10.222NVALID-ORDER-222 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_4 s}\right) \dots
10.22\( \text{NVALID-ORDER-223} \( Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{L_5 s} + \frac{R_5}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right) \quad \tau \tau \tau \tau \tag{2.8}
10.224NVALID-ORDER-224 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . .
10.22\( \text{INVALID-ORDER-225} \( Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{R_5 + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_1} + \frac{1}{L_L s}} \right) \)
10.226NVALID-ORDER-226 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_1 s^2 + 1} + R_L\right) . . . . . . . . .
10.22\text{INVALID-ORDER-}227 \ Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right) \ \dots 
10.23©NVALID-ORDER-230 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots
10.232NVALID-ORDER-232 Z(s) = \left( \infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{L_s} + \frac{1}{L_s}}, L_L s + \frac{1}{C_L s} \right) ......
10.23\(\text{2NVALID-ORDER-233}\(Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_F} + \frac{1}{L_F s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \\ \tag{2.5}\(\text{1.5}\)
10.23 INVALID-ORDER-235 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{L_s} + \frac{1}{L_s}}, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_s}}\right)
10.23 \text{ (INVALID-ORDER-236 } Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_\kappa} + \frac{1}{L_\kappa s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \quad \dots \dots \dots
10.23 INVALID-ORDER-237 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right) \dots
10.23\( \text{NVALID-ORDER-238} \( Z(s) = \left( \infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L \right) \\ \tag{1...} \\ \ta
10.239NVALID-ORDER-239 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right) \dots \dots \dots
10.24 INVALID-ORDER-240 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_2 L_2 s^2 + 1} + R_5, \frac{R_L}{C_2 R_2 s + 1}\right)
10.24INVALID-ORDER-241 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right) \dots
10.242NVALID-ORDER-242 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2 R_2 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)
10.24 INVALID-ORDER-243 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_4L_4s^2+1}\right) . . .
10.24 INVALID-ORDER-244 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right) . . . . . . .
10.24 INVALID-ORDER-245 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{L_5} + \frac{1}{L_5}}\right) . . . . . . . . .
10.24 INVALID-ORDER-246 Z(s) = \left(\infty, \infty, \frac{R_3}{C_2R_2s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_4s^2+1} + R_L\right) . . . . . . . . . . . .
10.24TNVALID-ORDER-247 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.24\(\text{ENVALID-ORDER-248}\(Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right) \dots \tau. \dots
10.249NVALID-ORDER-249 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)
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10.25 0 NVALID-ORDER-250 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left(L_5 s+\frac{1}{C_5 s}\right)}{L_5 s+R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s+1}\right) \dots $	86
10.25INVALID-ORDER-251 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left(L_5 s+\frac{1}{C_5 s}\right)}{L_5 s+R_5 +\frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \dots $	86
	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left(L_5 s+\frac{1}{C_5 s}\right)}{L_5 s+R_5 +\frac{1}{C_5 s}}, \ L_L s+\frac{1}{C_L s}\right) \ \dots $	87
	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	87
	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left(L_5 s+\frac{1}{C_5 s}\right)}{L_5 s+R_5+\frac{1}{C_5 s}}, \ L_L s+R_L + \frac{1}{C_L s}\right) \ \dots $	87
	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right) $	87
	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	87
	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{R_5 \left(L_5 s+\frac{1}{C_5 s}\right)}{L_5 s+R_5 +\frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s+\frac{1}{C_L s}\right)}{L_L s+R_L +\frac{1}{C_L s}}\right) \ \dots \right)$	87
10.258NVALID-ORDER- 258 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ R_L\right)$	87
10.25 9 NVALID-ORDER-259 $Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$	87
10.26 0 NVALID-ORDER-260 $Z(s) =$	$(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1})$	88
10.26INVALID-ORDER-261 $Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$	88
	$\left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots$	88
	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	88
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	88
10.26 Б NVALID-ORDER-265 $Z(s)=$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	88
10.26 GNVALID-ORDER-266 Z(s) =	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	88
10.26 TNVALID-ORDER-267 $Z(s) =$	$(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{1}{C_{5s}}, R_L + \frac{1}{C_{r,s}})$	88
	$\left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{1}{C_{5s}}, L_L s + \frac{1}{C_{Ls}}\right)$	88
	$\left(\infty,\infty,R_3+\frac{1}{C_2s},\infty,\frac{1}{C_5s},\frac{L_Ls}{C_LL_1s^2+1}\right)$	89
10.270NVALID-ORDER-270 $Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	89
10.27INVALID-ORDER-271 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	89
10.272NVALID-ORDER-272 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	89
10.27 & NVALID-ORDER-273 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{1}{C_{5s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \right)$	89
10.27#NVALID-ORDER-274 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right)$	89
10.27 Б NVALID-ORDER-275 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$	89
10.276NVALID-ORDER-276 $Z(s) =$	$(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s})$	89
10.27 NVALID-ORDER-277 $Z(s) =$	$\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{1}{C_{L}s} \right) $ $\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{1}{C_{L}s} \right) $ $\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{R_{L}}{C_{L}R_{L}s+1} \right) $ $\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ R_{L} + \frac{1}{C_{L}s} \right) $ $\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ L_{L}s + \frac{1}{C_{L}s} \right) $ $\left(\infty, \ \infty, \ R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ L_{L}s + \frac{1}{C_{L}s} \right) $	89
10.27&NVALID-ORDER-278 $Z(s) =$	$(\infty, \infty, R_3 + \frac{1}{C_2 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1})'$	90
10.27 9 NVALID-ORDER-279 $Z(s) =$	$ \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $ $ \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) \ \dots $	90
10.280NVALID-ORDER-280 $Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	90
10.28INVALID-ORDER-281 $Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \\ \ldots \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \\ \ldots \\ \ldots \\ \ldots \\ \ldots$	90

	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	
10.28 2 NVALID-ORDER-282 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \dots $	90
10.28 NVALID-ORDER-283 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$	90
10.284NVALID-ORDER-284 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	90
10.28 INVALID-ORDER-285 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ R_L + \frac{1}{C_{Ls}}\right)$	90
10.28 6 NVALID-ORDER-286 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ L_L s + \frac{1}{C_{Ls}}\right)$	90
10.28 T NVALID-ORDER-287 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	91
10.28\ngraphandeltaNVALID-ORDER-288 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	91
10.28¶NVALID-ORDER-289 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \ \dots $	91
10.29 0 NVALID-ORDER-290 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	91
10.29INVALID-ORDER-291 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $	91
10.29 2 NVALID-ORDER-292 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L\right)$	91
10.29 B NVALID-ORDER-293 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + \frac{1}{C_{5s}}, \ \frac{1}{C_{Ls}}\right)$	91
10.29#NVALID-ORDER-294 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	91
10.29 INVALID-ORDER-295 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + \frac{1}{C_{5s}}, \ R_L + \frac{1}{C_{Ls}}\right)$	92
10.296NVALID-ORDER-296 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$	92
10.29 T NVALID-ORDER-297 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + \frac{1}{C_{5s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	92
10.29&NVALID-ORDER-298 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	92
10.29 9 NVALID-ORDER-299 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	92
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + \frac{1}{C_{5s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	92
10.30 INVALID-ORDER-301 $Z(s) = \displaystyle$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + \frac{1}{C_{5s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $	92
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L\right)$	92
10.30 3 NVALID-ORDER-303 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_{Ls}}\right)$	93
10.30 4 NVALID-ORDER-304 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$	93
10.30 NVALID-ORDER-305 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$	93
10.30 6 NVALID-ORDER-306 $Z(s) =$	$\begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \end{pmatrix} $ $\begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \end{pmatrix} $ $\begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \end{pmatrix} $ $\begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \end{pmatrix} $	93
10.30TNVALID-ORDER- $307 Z(s) =$	$\left(\infty, \infty, R_3 + \frac{1}{C_{38}}, \infty, \frac{L_{58}}{C_{5L_5s}^2 + 1}, \frac{L_{L8}}{C_{tL_ts}^2 + 1}\right)$	93
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right)$	
10.30 9 NVALID-ORDER-309 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$	93
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	
10.31 INVALID-ORDER-311 $Z(s) = \displaystyle$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \ \dots $	94
10.312NVALID-ORDER-312 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L \right)^{2s}$	94
10.318NVALID-ORDER-313 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_{5s}}, \ \frac{1}{C_{Ls}} \right) \ \dots $	94
10.31 4 NVALID-ORDER-314 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right) \qquad \dots \qquad $	94
10.31 SNVALID-ORDER-315 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_{5s}}, \ R_L + \frac{1}{C_{Ls}}\right)$	94

10.316NVALID-ORDER-316 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$	94
10.31 T NVALID-ORDER-317 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	94
10.31&NVALID-ORDER-318 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ L_5s + R_5 + \frac{1}{C_{5s}}, \ L_Ls + R_L + \frac{1}{C_{Ls}}\right)$	94
10.31 9 NVALID-ORDER-319 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots $	95
	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	95
10.32INVALID-ORDER-321 $Z(s) = \displaystyle$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $	95
10.322NVALID-ORDER-322 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L\right)$	95
10.32 % NVALID-ORDER-323 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s}\right)$	95
10.32#NVALID-ORDER-324 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $	95
10.32 Б NVALID-ORDER-325 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L + \frac{1}{C_L s}\right)$	95
10.326NVALID-ORDER-326 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$	95
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots $	96
10.32&NVALID-ORDER-328 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	96
10.32¶NVALID-ORDER-329 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right) \right) $	96
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	96
10.33INVALID-ORDER-331 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \ \dots $	96
	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L\right)$	96
10.332NVALID-ORDER-333 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s}\right)$	96
10.33 4 NVALID-ORDER-334 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{\dot{R_L}}{C_L R_L s + 1}\right)$	96
10.33 5 NVALID-ORDER-335 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s}\right)$	97
10.336NVALID-ORDER-336 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s}\right)$	97
10.33 T NVALID-ORDER-337 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	97
10.33&NVALID-ORDER-338 $Z(s)=$	$ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s} \end{pmatrix} $ $ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s} \end{pmatrix} $ $ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} \end{pmatrix} $ $ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s} \end{pmatrix} $	97
10.33 9 NVALID-ORDER-339 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right) \dots $	97
10.34 ONVALID-ORDER-340 $Z(s)=$	$\left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	97
10.34 INVALID-ORDER-341 $Z(s) = \displaystyle$	$\begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \end{pmatrix} \\ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L \end{pmatrix} \\ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}} \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \dots \\ \dots \\$	97
$10.34 {\tt 2} {\tt NVALID-ORDER-342} \ Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_{3s}}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_c s}}, \ R_L \right)$	97
10.34%NVALID-ORDER-343 $Z(s) =$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right) $	98
10.34#NVALID-ORDER-344 $Z(s)=$	$ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \\ \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \frac{R_L}{C_5 s}, $	98
10.34 5 NVALID-ORDER-345 $Z(s)=$	$\left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \ \dots $	98

$10.34 \text{ 6NVALID-ORDER-346 } Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	98
$10.34 \text{INVALID-ORDER-} 347 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots $	98
$10.34 \& NVALID-ORDER-348 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots $	98
$10.349 \text{NVALID-ORDER-} 349 \ Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \right) $	98
$10.35 \text{@NVALID-ORDER-350 } Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	98
10.35INVALID-ORDER-351 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \dots$	99
$10.352\text{NVALID-ORDER-}352\ Z(s) = \left(\infty,\ \infty,\ L_3s + \frac{1}{C_3s},\ \infty,\ R_5,\ \frac{1}{C_Ls}\right)\ \dots$	99
$10.35 \text{\&NVALID-ORDER-353} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $	99
10.35\(\text{4NVALID-ORDER-354}\(Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, R_5, R_L + \frac{1}{C_Ls}\right) \\ \tag{2.5}\(\text{1.5}\)	99
$10.35 \text{ Invalid-Order-} 355 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right) \ \dots $	99
10.356NVALID-ORDER-356 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	99
$10.35\text{TNVALID-ORDER-357}\ Z(s) = \left(\infty,\ \infty,\ L_3s + \frac{1}{C_3s},\ \infty,\ R_5,\ L_Ls + R_L + \frac{1}{C_Ls}\right)\ \dots \dots$	99
10.35\(\text{ENVALID-ORDER-358} \(Z(s) = \left(\infty, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \] \tag{2.5}	99
10.35 9 NVALID-ORDER-359 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	100
$10.36 \text{ @NVALID-ORDER-360 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	100
10.36INVALID-ORDER-361 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$	100
10.362NVALID-ORDER-362 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	100
10.36 RNVALID-ORDER-363 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$	100
10.36\(\text{anvalid}\) NVALID-ORDER-364 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{3.8}}, \infty, \frac{1}{C_{5.8}}, R_L + \frac{1}{C_{L.8}}\right)$	100
10.36 INVALID-ORDER-365 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	100
10.366NVALID-ORDER-366 $Z(s) = \left(\infty, \infty, L_3s + \frac{1}{G}, \infty, \frac{1}{G}, \frac{L_Ls}{G^{-1}}\right)'$	100
10.36TNVALID-ORDER-367 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	101
$10.36 \text{INVALID-ORDER-} 367 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) $ $10.36 \text{INVALID-ORDER-} 368 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $ $10.36 \text{INVALID-ORDER-} 368 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $	101
10.369NVALID-ORDER-369 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_0 s}, \infty, \frac{1}{C_7 L_3 s^2 + 1} + R_L\right)$	101
$10.37\text{@NVALID-ORDER-370 } Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$ $10.37\text{@NVALID-ORDER-371 } Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ R_L\right) $	101
$10.37 \text{INVALID-ORDER-371 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L\right) $	101
10.37 P NVALID-ORDER-372 $Z(s) = \left(\sum_{n=0}^{\infty} \sum_{k=0}^{\infty} \frac{R_5}{n} \right)$	101
10.37 INVALID-ORDER-373 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$	101
10.37 INVALID-ORDER-374 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$	101
10.37 INVALID-ORDER-375 $Z(s) = (\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s})$	102
10.376NVALID-ORDER-376 $Z(s) = (\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1})'$	102
$10.37 \text{INVALID-ORDER-} 373 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1} \right) $ $10.37 \text{INVALID-ORDER-} 374 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right) $ $10.37 \text{INVALID-ORDER-} 375 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s} \right) $ $10.37 \text{INVALID-ORDER-} 376 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L s^2 + 1} \right) $ $10.37 \text{INVALID-ORDER-} 377 \ Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $	102
$10.37 \text{\&NVALID-ORDER-378 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s + \frac{1}{L_L s}} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	102

10.37 9 NVALID-ORDER-379 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	02
$10.38 \text{ @NVALID-ORDER-380 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	02
10.38INVALID-ORDER-381 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L\right)$	02
10.382NVALID-ORDER-382 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$	02
10.38\(\text{2NVALID-ORDER-383} \(Z(s) = \left(\infty, \infty, \infty, \left(L_3 s + \frac{1}{C_5 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right) \] \qquad \tag{10.38} \(\text{2NVALID-ORDER-383} \(Z(s) = \left(\infty, \infty, \infty, \left(L_3 s + \frac{1}{C_5 s}, \infty, \infty, \frac{R_L}{C_L R_L s + 1} \right) \]	03
10.38\(\text{anvalid-ORDER-384}\(Z(s) = \left(\infty, \infty, \left(L_3s + \frac{1}{C_3s}\), \infty, \(R_5 + \frac{1}{C_5s}\), \(R_L + \frac{1}{C_Ls}\)\\ \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \tag{\chi} \q	.03
10.38 INVALID-ORDER-385 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	03
$10.38 \text{ 6NVALID-ORDER-386 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	03
10.38TNVALID-ORDER-387 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s} \right)$	03
10.38\(\text{NVALID-ORDER-388} \(Z(s) = \left(\infty, \infty, \infty, \left(L_3 s + \frac{1}{C_5 s}, \infty, \infty, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \] \qquad \qqquad \qqqqq \qqqqqq	.03
10.38 9 NVALID-ORDER-389 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	03
10.39@NVALID-ORDER-390 $Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$	03
10.39INVALID-ORDER-391 $Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L\right)$	04
10.392NVALID-ORDER-392 $Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$	04
10.39\(\text{2NVALID-ORDER-393} \(Z(s) = \left(\infty, \infty, \infty, \left(L_3 s + \frac{1}{C_5 s}, \infty, \infty, \left(L_5 s + \frac{1}{C_L R_L s + 1} \right) \right] \qq \qua	04
10.39\(\text{4.NVALID-ORDER-394}\(Z(s) = \left(\infty, \infty, \lambda, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)\)	04
10.39 INVALID-ORDER-395 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	04
10.396NVALID-ORDER-396 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	04
10.39 INVALID-ORDER-397 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	04
10.39 NVALID-ORDER-398 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	04
10.39 INVALID-ORDER-399 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	05
$10.40 \text{ @NVALID-ORDER-400 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	
10.40INVALID-ORDER-401 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L\right)$	05
$ \begin{array}{c} () \\ () \\ () \\ () \\ () \\ () \\ () \\ () $	05
10.40 B NVALID-ORDER-403 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$	05
$10.40 \text{INVALID-ORDER-} 404 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s} \right) $ $10.40 \text{INVALID-ORDER-} 405 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) $ $10.40 \text{INVALID-ORDER-} 405 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) $	05
10.40 INVALID-ORDER-405 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$	05
$10.40 \text{ 6} \text{NVALID-ORDER-406 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_S^2 + 1} \right) \qquad . \qquad $	05
$10.40 \text{ INVALID-ORDER-407 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $	06
$10.40 \text{\&NVALID-ORDER-} 408 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $ $10.40 \text{\&NVALID-ORDER-} 409 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $ $10.40 \text{\&NVALID-ORDER-} 409 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $	06
10.40 9 NVALID-ORDER-409 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	06
$10.41 \text{@NVALID-ORDER-410 } Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)' $	06
	06
10.41 2 NVALID-ORDER-412 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$	06

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10.418NVALID-ORDER-413 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.414NVALID-ORDER-414 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_{2}s}, \infty, L_5 s + R_5 + \frac{1}{C_{5}s}, R_L + \frac{1}{C_{L}s}\right) \dots \dots
10.41 INVALID-ORDER-415 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots \dots
10.416NVALID-ORDER-416 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . .
10.41TNVALID-ORDER-417 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . . . .
10.41 NVALID-ORDER-418 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \dots \dots \dots
10.419NVALID-ORDER-419 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots
10.420NVALID-ORDER-420 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
10.42INVALID-ORDER-421 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right) . . . . . . . . . . . .
10.422NVALID-ORDER-422 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right) \dots \dots \dots
10.42 \text{ENVALID-ORDER-} 423 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \ \frac{R_L}{C_L R_L s + 1} \right) \quad \dots 
10.424NVALID-ORDER-424 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right) \dots \dots \dots
10.429NVALID-ORDER-429 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{Rc} + \frac{1}{Lcs}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . . .
10.43 INVALID-ORDER-430 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)
10.43INVALID-ORDER-431 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right) \dots \dots
10.432NVALID-ORDER-432 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_4 s}\right) \dots \dots
10.438NVALID-ORDER-433 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_4 R_4 s + 1}\right) \dots
10.43 INVALID-ORDER-434 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_2 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_5 s}\right)
10.43 INVALID-ORDER-435 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)
10.436NVALID-ORDER-436 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
10.43 INVALID-ORDER-437 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.43\(\text{NVALID-ORDER-438}\) Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_7} + \frac{1}{L_4 s}}\right)
10.439NVALID-ORDER-439 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots \dots
10.44 INVALID-ORDER-440 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.44INVALID-ORDER-441 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right) . . . . . . . . . . .
10.442NVALID-ORDER-442 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right) \dots \dots
10.44 \text{ENVALID-ORDER-} 443 \ Z(s) = \left( \infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left( L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right) \quad . \quad .
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	$\left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \dots $ 110
	$\left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \ \infty, \ L_{3}s + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \ \dots \ $
	$\left(\infty, \ \infty, \ L_{3}s + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}}\right)\right)^{\prime} \dots \dots$
	$\left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $ $\left(\sum_{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)} R_5 \left(L_5 s + \frac{1}{C_5 s}\right) R_5 \left(L_5 s + \frac{1}{C_5 s}\right) \right)$
	$\left(\infty, \ \infty, \ L_{3}s + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right) \dots $ 111
	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ R_5, \ R_L + \frac{1}{C_Ls}\right)$
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right) \dots \dots$
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots$
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots$
	$\left(\infty, \infty, \frac{L_{3}s}{C_3L_3s^2+1}, \infty, R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, R_L\right)$
	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.45&NVALID-ORDER-458 $Z(s) =$	$(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1})$
10.45 9 NVALID-ORDER-459 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$
10.46 0 NVALID-ORDER-460 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
10.46 I NVALID-ORDER-461 $Z(s) =$	$(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1})$
	$(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls})$
	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.464NVALID-ORDER-464 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.46 5 NVALID-ORDER-465 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) $ $\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right) $ $\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right) $ $\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right) $ 113
10.466NVALID-ORDER- 466 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)$
10.46 T NVALID-ORDER- 467 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.468NVALID-ORDER- 468 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$
10.46 9 NVALID-ORDER-469 $Z(s) =$	$\left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, R_{L} + \frac{1}{C_{L}s}\right) \dots \dots$
10.47 0 NVALID-ORDER-470 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$
10.47 INVALID-ORDER-471 $\boldsymbol{Z}(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.472NVALID-ORDER-472 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.47 B NVALID-ORDER-473 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \ \dots \ $
10.474NVALID-ORDER-474 $Z(s) = \displaystyle$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.47 5 NVALID-ORDER-475 $Z(s)=$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots $ 114

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10.47 INVALID-ORDER-477 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots
10.479NVALID-ORDER-479 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) . . . . . . .
10.48\(\text{LNVALID-ORDER-483}\(Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_r} + \frac{1}{L_rs}}\right) \quad \tag{115}
10.48 TNVALID-ORDER-487 Z(s) = (\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}) . . . . . . . . . . . . .
10.489NVALID-ORDER-489 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) \dots \dots
10.49 \text{INVALID-ORDER-491 } Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \quad \dots 
10.49 \text{ENVALID-ORDER-} 493 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \ \dots 
10.49 INVALID-ORDER-495 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
10.496NVALID-ORDER-496 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) . . . . . . . . . . . . . . . .
10.49TNVALID-ORDER-497 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right) \dots \dots \dots
10.49 NVALID-ORDER-498 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_7 R_1 s + 1}\right) \dots \dots
10.499NVALID-ORDER-499 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right) . . . . . . .
10.50\(\text{ENVALID-ORDER-503}\) Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{B_L} + \frac{1}{L_L s}}\right)
10.504NVALID-ORDER-504 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) . . . . . . .
10.50 INVALID-ORDER-505 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.506NVALID-ORDER-506 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots \dots
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10.51\( \text{NVALID-ORDER-513} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_3L_3s^2 + 1}, \infty, \frac{L_5s}{L_5s} + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right) \quad \tag{\cdots} \quad \quad \tag{\cdots} \quad \quad \tag{\cdots} \quad \tag{\cdots} \quad \tag{\cdots} \quad \quad \tag{\cdots} \quad \tag{\cdots} \quad \tag{\cdots} \quad \quad
10.514NVALID-ORDER-514 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_4L_4s^2+1} + R_L\right) \dots \dots
10.51 INVALID-ORDER-515 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) . . . . . . . .
10.51 INVALID-ORDER-517 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{R_5}}, \frac{1}{C_L s}\right) \dots \dots
10.52 \text{INVALID-ORDER-} 521 \ Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) 
10.52\(\text{ENVALID-ORDER-523}\(Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{R_5}}, \frac{1}{C_Ls+\frac{1}{R_T}+\frac{1}{L_Ls}}\)
                                                                                                 10.524NVALID-ORDER-524 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_{\varepsilon}}+\frac{1}{L_{\varepsilon}s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots
10.52 INVALID-ORDER-525 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
10.52 INVALID-ORDER-527 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_4 s}\right) \dots
10.52\( \text{NVALID-ORDER-528} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_2L_2s^2 + 1}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{R_L}{C_LR_Ls + 1} \right) \quad \tau \tau \tau \tau \tag{1.5}
10.529NVALID-ORDER-529 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)
10.530NVALID-ORDER-530 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right) \dots
10.532NVALID-ORDER-532 Z(s) = (\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}) . . . . . . . .
10.538NVALID-ORDER-533 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls + \frac{1}{R_r} + \frac{1}{L_rs}}\right) .....
10.53TNVALID-ORDER-537 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right) . . . . . . . . .
10.53\(\text{8NVALID-ORDER-538}\(Z(s) = \int(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls+1}\right) \\ \tag{2.12}
10.53 \text{ (NVALID-ORDER-539 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \quad \dots \qquad 122
10.540 \text{NVALID-ORDER-} 540 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \ \infty, \ \frac{R_{5}\left(L_{5}s+\frac{1}{C_{5}s}\right)}{L_{5}s+R_{5}+\frac{1}{C_{5}s}}, \ L_{L}s+\frac{1}{C_{L}s} \right)
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10.54INVALID-ORDER-541 $Z(s) = \left(\frac{1}{2} \right)^{-1}$	$\left(\infty,\ \infty,\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}},\ \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \qquad \qquad 1$	122
10.54 P NVALID-ORDER- 542 $Z(s) = \left(\frac{1}{2}\right)$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, L_Ls+R_L+\frac{1}{C_Ls}\right)$	122
10.54\(\mathbb{B}\) NVALID-ORDER-543 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array} \right)$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right) \right) $	122
10.544NVALID-ORDER-544 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}+R_L\right)$	122
10.54 5 NVALID-ORDER-545 $Z(s) = \left(\right.$	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right) \ \dots \ $	122
10.546NVALID-ORDER-546 $Z(s) = \left(\right.$	$\left(\infty,\ \infty,\ L_3s+R_3+rac{1}{C_3s},\ \infty,\ R_5,\ rac{1}{C_Ls} ight)$	123
10.54 T NVALID-ORDER-547 $Z(s) = \left(\right.$	$\left(\infty,\ \infty,\ L_3s+R_3+rac{1}{C_3s},\ \infty,\ R_5,\ rac{R_L}{C_LR_Ls+1} ight)$	123
10.54\(\text{NVALID-ORDER-548} \(Z(s) = \) ($\left(\infty, \ \infty, \ L_3 s + R_3 + rac{1}{C_3 s}, \ \infty, \ R_5, \ R_L + rac{1}{C_L s} ight)$	123
10.54 9 NVALID-ORDER-549 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s+R_3+rac{1}{C_3s}, \ \infty, \ R_5, \ L_Ls+rac{1}{C_Ls} ight)$	123
10.55 0 NVALID-ORDER-550 $Z(s) = $	$\stackrel{\longleftarrow}{(}\infty, \ \infty, \ L_3s+R_3+rac{1}{C_3s}, \ \infty, \ R_5, \ rac{L_Ls}{C_LL_Ls^2+1} \stackrel{\frown}{)}$	123
10.55INVALID-ORDER-551 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls})$	123
10.552NVALID-ORDER-552 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)^{'}$	123
10.55 E NVALID-ORDER-553 $Z(s) = \left(\right.$	$\left(\infty, \ \infty, \ L_3s + R_3 + rac{1}{C_3s}, \ \infty, \ R_5, \ rac{L_Ls}{C_LL_Ls^2 + 1} + R_L ight)$	123
10.554NVALID-ORDER-554 $Z(s) = \left(\begin{array}{c} 0 & 0 \\ 0 & 0 \end{array}\right)$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)^{\prime}$	124
		124
10.556NVALID-ORDER-556 $Z(s) = $	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls})$	124
10.55 T NVALID-ORDER-557 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1})$	124
10.55 NVALID-ORDER-558 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_4s}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls})$	124
10.55 9 NVALID-ORDER-559 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls})$	124
10.56 0 NVALID-ORDER- 560 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_2s}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1})'$	124
10.56INVALID-ORDER-561 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls})$	
10.56 2 NVALID-ORDER- $562~Z(s) =$	$ \begin{pmatrix} \infty, \infty, L_{3}s + R_{3} + \frac{1}{C_{3}s}, \infty, \frac{1}{C_{5}s}, \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}} \\ \infty, \infty, L_{3}s + R_{3} + \frac{1}{C_{3}s}, \infty, \frac{1}{C_{5}s}, \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L} \end{pmatrix} $	125
10.56 R NVALID-ORDER-563 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$	125
10.564NVALID-ORDER-564 $Z(s) = \left(\frac{1}{2} \right)$	$\left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)\right)$	125
10.56 5 NVALID-ORDER-565 $Z(s) = \left(\right.$	$\left(\infty, \ \infty, \ L_{3}s + R_{3} + rac{1}{C_{3}s}, \ \infty, \ rac{R_{5}}{C_{5}R_{5}s+1}, \ R_{L} ight)$	125
10.56 C NVALID-ORDER-566 $Z(s) = \left(\right.$	$ \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ R_{L} \right) \qquad . \qquad $	125
10.56 T NVALID-ORDER- $567 Z(s) = ($	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{R_L}{C_LR_Ls + 1}\right)$	125
10.56NVALID-ORDER- $568 Z(s) = ($	$\left(\infty, \ \infty, \ L_3s + R_3 + rac{1}{C_3s}, \ \infty, \ rac{R_5}{C_5R_5s + 1}, \ R_L + rac{1}{C_Ls} ight) \ \ \ldots \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	125
10.56 9 NVALID-ORDER-569 $Z(s) = ($	$\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ rac{R_{5}}{C_{5}R_{5}s+1},\ L_{L}s+rac{1}{C_{L}s} ight)$	125
10.57 0 NVALID-ORDER-570 $Z(s) = \hat{C}$	$(\infty, \infty, L_3s + R_3 + \frac{1}{G}, \infty, \frac{R_5}{GR_{-1}}, \frac{L_Ls}{GL_{-2+1}})$	126
10.57INVALID-ORDER-571 $Z(s) = ($	$\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ rac{R_{5}}{C_{5}R_{5}s+1},\ L_{L}s+R_{L}+rac{1}{C_{L}s} ight)$	126
10.572NVALID-ORDER-572 $Z(s) = \left(\begin{array}{c} \\ \end{array}\right)$	$\left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) $	126
10.57 3 NVALID-ORDER-573 $Z(s) = ($	$(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L)$	126

10.574NVALID-ORDER-574 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	126
10.57 5 NVALID-ORDER-575 $Z(s) =$	$=\left(\infty,\ \infty,\ L_3s+R_3+rac{1}{C_3s},\ \infty,\ R_5+rac{1}{C_5s},\ R_L ight)$	126
10.576NVALID-ORDER-576 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ R_{5}+rac{1}{C_{5}s},\ rac{1}{C_{L}s} ight)$	126
10.57 T NVALID-ORDER-577 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ R_{5}+rac{1}{C_{5}s},\ rac{\dot{R}_{L}}{C_{L}R_{L}s+1} ight)$	126
10.57&NVALID-ORDER-578 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) \ \dots $	127
10.579NVALID-ORDER-579 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ R_{5}+rac{1}{C_{5}s},\ L_{L}s+rac{1}{C_{L}s} ight)$	127
10.58 ONVALID-ORDER- $580~Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \ \dots $	127
10.58INVALID-ORDER-581 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	127
10.582NVALID-ORDER-582 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \dots $	127
	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $	127
10.58#NVALID-ORDER-584 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \dots $	127
10.58 INVALID-ORDER-585 $Z(s) =$	$=\left(\infty,\ \infty,\ L_3s+R_3+rac{1}{C_3s},\ \infty,\ L_5s+rac{1}{C_5s},\ R_L ight)$	127
10.586NVALID-ORDER-586 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ L_{5}s+rac{1}{C_{5}s},\ rac{1}{C_{L}s} ight)$	128
10.58 T NVALID-ORDER-587 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ L_{5}s+rac{1}{C_{5}s},\ rac{R_{L}}{C_{L}R_{L}s+1} ight)$	128
10.58\mathbb{R}NVALID-ORDER-588 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+\frac{1}{C_{3}s},\ \infty,\ L_{5}s+\frac{1}{C_{5}s},\ R_{L}+\frac{1}{C_{L}s}\right)$	128
10.58 9 NVALID-ORDER-589 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ L_{5}s+rac{1}{C_{5}s},\ L_{L}s+rac{1}{C_{L}s} ight)$	128
10.59 ONVALID-ORDER- $590 Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $	128
10.59INVALID-ORDER-591 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots $	128
10.592NVALID-ORDER-592 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \ \dots $	128
10.59 BNVALID-ORDER-593 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \dots $	128
10.594NVALID-ORDER-594 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	129
10.59 NVALID-ORDER-595 $Z(s) =$	$=\left(\infty,\ \infty,\ L_3s+R_3+rac{1}{C_3s},\ \infty,\ rac{L_5s}{C_5L_5s^2+1},\ R_L ight)$	129
10.596NVALID-ORDER-596 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s} \right) $	129
10.59 T NVALID-ORDER-597 $Z(s) =$	$ \begin{array}{l} (\infty, \ \infty, \ L_{3}s + R_{5} + C_{3}s, \ \infty, \ C_{5}L_{5}s^{2} + 1, \ R_{L}) \\ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{1}{C_{L}s} \right) \\ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ R_{L} + \frac{1}{C_{L}s} \right) \end{array} $	129
10.59&NVALID-ORDER-598 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ rac{L_{5}s}{C_{5}L_{5}s^{2}+1},\ R_{L}+rac{1}{C_{L}s} ight)$	129
10.59 9 NVALID-ORDER-599 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) \dots $	129
10.60 ONVALID-ORDER- $600 Z(s) =$	$= \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \ \frac{L_{L}s}{C_{L}L_{s}s^{2}+1} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	129
10.60 I NVALID-ORDER-601 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ L_Ls + R_L + \frac{1}{C_Ls} \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	129
10.60 2 NVALID-ORDER-602 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right) \dots $	130
10.60 B NVALID-ORDER-603 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \ \dots \ $	130
10.604NVALID-ORDER-604 $Z(s) =$	$= \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}} \right) $ $= \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} + R_{L} \right) $ $= \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}} \right) $ $= \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, \ \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}} \right) $	130
10.60 Δ NVALID-ORDER-605 $Z(s)=$	$ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ R_{L} \right) $ $ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s} \right) $ $ = \left(\infty, \ \infty, \ L_{3}s + R_{3} + \frac{1}{C_{3}s}, \ \infty, \ L_{5}s + R_{5} + \frac{1}{C_{5}s}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) $	130
10.60 6 NVALID-ORDER-606 $Z(s) =$	$= \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right) $	130
10.60 TNVALID-ORDER-607 $Z(s) =$	$=\left(\infty,\ \infty,\ L_{3}s+R_{3}+rac{1}{C_{3}s},\ \infty,\ L_{5}s+R_{5}+rac{1}{C_{5}s},\ rac{R_{L}}{C_{L}R_{L}s+1} ight)$	130

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10.60\( \text{NVALID-ORDER-608} \( Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_{2s}}, \infty, L_5 s + R_5 + \frac{1}{C_{2s}}, R_L + \frac{1}{C_{2s}} \right) \\ \tag{1...}
10.609NVALID-ORDER-609 Z(s) = (\infty, \infty, L_3s + R_3 + \frac{1}{C_2s}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}) . . . . . . . .
10.610NVALID-ORDER-610 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . . . .
10.61INVALID-ORDER-611 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . .
10.612NVALID-ORDER-612 Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_I} + \frac{1}{L_Ls}}\right) . . . . . . . . . .
10.61 INVALID-ORDER-613 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots
10.61 INVALID-ORDER-614 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)^{s}
10.61 INVALID-ORDER-615 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{Rs} + \frac{1}{Ls s}}, R_L\right) . . . . . . . . . . . .
10.616NVALID-ORDER-616 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right) \dots \dots
10.61 INVALID-ORDER-617 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots
10.61 NVALID-ORDER-618 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{I_c s} + \frac{1}{I_c s}}, R_L + \frac{1}{C_L s}\right)
10.61 NVALID-ORDER-619 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right) ......
10.62 \text{ONVALID-ORDER-} 620 \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots 
10.62\( \text{NVALID-ORDER-623} \( Z(s) = \left( \infty, \infty, \left( L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{R_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \)
10.62 INVALID-ORDER-625 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right) . . . . . . . . . . . . . . .
10.62 INVALID-ORDER-626 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right) \dots
10.62TNVALID-ORDER-627 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_4 R_4 s + 1}\right).
10.62\( \text{NVALID-ORDER-628} \( Z(s) = \left( \infty, \infty, \lambda_s \, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s} \right) \]
10.629NVALID-ORDER-629 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)
10.63@NVALID-ORDER-630 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_2 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots
10.63INVALID-ORDER-631 Z(s) = (\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}) . . . .
10.632NVALID-ORDER-632 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right)
10.63\( \text{NVALID-ORDER-633} \( Z(s) = \left( \infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_1 L_1 s^2 + 1} + R_L \right) \)
10.634NVALID-ORDER-634 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)
10.63 INVALID-ORDER-635 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right) . . .
10.636NVALID-ORDER-636 Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)...
10.63\( \text{NVALID-ORDER-638} \( Z(s) = \left( \infty, \infty, \left( L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \infty, \frac{R_5 \left( L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_1 s}}, \ R_L + \frac{1}{C_{I.s}} \right) \)
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	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right) \ \dots $	134
10.64©NVALID-ORDER-640 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + R_3 + rac{1}{C_3s}, \ \infty, \ rac{R_5\left(L_5s + rac{1}{C_5s} ight)}{L_5s + R_5 + rac{1}{C_5s}}, \ rac{L_Ls}{C_LL_Ls^2 + 1} ight)^{-1} \ \dots \ $	134
	$\left(\infty,\ \infty,\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},\ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots $	134
	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right) \right) $	135
10.64 & NVALID-ORDER-643 $Z(s)=$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right) \dots $	135
10.64#NVALID-ORDER-644 $Z(s) =$	$\left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \ \dots $	135
10.64 5 NVALID-ORDER-645 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ R_5, \ R_L + \frac{1}{C_L s}\right)$	135
10.64 6 NVALID-ORDER-646 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ R_{5}, \ L_{L}s + \frac{1}{C_{L}s}\right)$	135
10.64 NVALID-ORDER-647 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ R_{5}, \ L_{L}s + R_{L} + \frac{1}{C_{L}s}\right) \dots $	135
	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots $	135
10.64 9 NVALID-ORDER-649 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	135
10.65 0 NVALID-ORDER-650 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s+\frac{1}{R_{3}}+\frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ R_{L}\right)$	136
	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$	136
10.65 2 NVALID-ORDER-652 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \ \dots $	136
10.65 B NVALID-ORDER-653 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) \qquad \dots $	136
10.65#NVALID-ORDER-654 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ L_{L}s + \frac{1}{C_{L}s}\right) \ \dots $	136
	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	136
10.656NVALID-ORDER-656 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right) \qquad \dots $	136
10.65TNVALID-ORDER- 657 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s + \frac{1}{L_{L}s}}\right) \\ \left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \\ \ldots \\ \left(\infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + 1} + R_{L}\right) \\ \ldots \\ \ldots \\ \ldots$	136
10.65&NVALID-ORDER-658 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$	137
10.65 9 NVALID-ORDER-659 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	137
10.66 ONVALID-ORDER-660 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \infty, \frac{R_{5}}{C_{5}R_{5}s + 1}, R_{L}\right) \qquad \qquad$	137
10.66INVALID-ORDER-661 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right)$	137
10.662NVALID-ORDER-662 $Z(s) =$	$\begin{pmatrix} \infty, \ \infty, \ \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \end{pmatrix} \qquad $	137
10.66\$NVALID-ORDER-663 $Z(s) =$	$\left(\infty, \infty, \frac{\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	137
10.664NVALID-ORDER-664 $Z(s) =$	$\left(\infty,\ \infty,\ rac{1}{C_3 s + rac{1}{R_3} + rac{1}{L_3 s}},\ \infty,\ rac{R_5}{C_5 R_5 s + 1},\ L_L s + rac{1}{C_L s} ight)$	137
10.66 INVALID-ORDER- 665 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	137

10.694NVALID-ORDER-694 $Z(s)=$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.69\$NVALID-ORDER-695 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots $
10.69 6 NVALID-ORDER-696 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right) $
10.69 T NVALID-ORDER-697 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.69&NVALID-ORDER-698 $Z(s)=$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.69 9 NVALID-ORDER-699 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
10.70INVALID-ORDER-701 $Z(s) = \displaystyle$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) \ \dots \ $
10.70 2 NVALID-ORDER-702 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) $
10.70 B NVALID-ORDER-703 $Z(s)=$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) $
10.70 4 NVALID-ORDER-704 $Z(s) = \displaystyle$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.70 5 NVALID-ORDER-705 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.70 6 NVALID-ORDER-706 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right) \ \dots \ $
10.70 T NVALID-ORDER-707 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right) \dots \dots$
	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) .$
10.70 9 NVALID-ORDER-709 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \dots $
10.71 © NVALID-ORDER-710 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.71 INVALID-ORDER-711 $Z(s) = \displaystyle$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.71 2 NVALID-ORDER-712 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right) \dots $
10.71 2 NVALID-ORDER-713 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{C_L s}{C_L R_L s + 1} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s} \right) $ $\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s} \right) $
10.71 4 NVALID-ORDER-714 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right) \dots $
10.71 SNVALID-ORDER-715 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots $
10.71 6 NVALID-ORDER-716 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.71 T NVALID-ORDER-717 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right) $
10.71&NVALID-ORDER-718 $Z(s) =$	$\begin{pmatrix} \infty, & \infty, & C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}, & \infty, & C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}, & LL^{S} + RL + C_{L}s \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, & \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}} \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, & \frac{LLs}{C_{L}L_{s}s^{2} + 1} + R_{L} \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{1}{C_{5}s + \frac{1}{R_{5}} + \frac{1}{L_{5}s}}, & \frac{R_{L}(L_{L}s + \frac{1}{C_{L}s})}{L_{L}s + R_{L} + \frac{1}{C_{L}s}} \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, & R_{L} \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, & \frac{1}{C_{L}s} \end{pmatrix}$ $\begin{pmatrix} \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, & \frac{1}{C_{L}s} \end{pmatrix}$ $\begin{pmatrix} 144 \\ \infty, & \infty, & \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, & \infty, & \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1} + R_{5}, & \frac{1}{C_{L}s} \end{pmatrix}$
10.71 9 NVALID-ORDER-719 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{L}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \dots $
10.72 0 NVALID-ORDER-720 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.72INVALID-ORDER-721 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $

10.722NVALID-ORDER-722 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $. 145
10.72 % NVALID-ORDER-723 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s}\right)$. 145
10.72#NVALID-ORDER-724 $Z(s)=$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s}\right)$. 145
10.72\$NVALID-ORDER-725 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$. 145
10.72 6 NVALID-ORDER-726 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots $. 145
10.72 T NVALID-ORDER-727 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right)$. 145
10.72\nablaNVALID-ORDER-728 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 145
10.72 9 NVALID-ORDER-729 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)^{\frac{1}{L_5 s}}\right)^{\frac{1}{L_5 s}} \ . \ . \ . \ . \ . \ . \ . \ . \ . \$. 145
10.730NVALID-ORDER-730 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L \right)$. 146
10.73 I NVALID-ORDER-731 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right) \dots $. 146
10.732NVALID-ORDER-732 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right) \ \dots $. 146
	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \dots $. 146
	$\left(\infty,\ \infty,\ \frac{1}{C_3s+\frac{1}{R_3}+\frac{1}{L_2s}},\ \infty,\ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}},\ L_Ls+\frac{1}{C_Ls}\right)\ \dots$. 146
	$\left(\infty,\ \infty,\ \frac{1}{C_3 s + \frac{1}{R_5} + \frac{1}{L_0 s}},\ \infty,\ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{L_c s}},\ \frac{L_L s}{C_L L_L s^2 + 1}\right) \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $. 146
10.736NVALID-ORDER-736 $Z(s) =$	$\left(\infty,\ \infty,\ \frac{1}{C_3s+\frac{1}{R_3}+\frac{1}{L_3s}},\ \infty,\ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}},\ L_Ls+R_L+\frac{1}{C_Ls}\right) \ \ \ldots \ \ \ \ldots \ \ \ldots \$. 146
	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right) \right) \ \dots $. 146
10.73NVALID-ORDER- 738 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_1 + \frac{1}{1} + \frac{1}{1}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_1s}, \frac{L_Ls}{C_1 L_2 + \frac{1}{2} + 1} + R_L\right)$. 147
10.73 9 NVALID-ORDER-739 $Z(s) =$	$\left(\infty, \infty, \frac{1}{C_{3}s + \frac{1}{R_{3}} + \frac{1}{L_{3}s}}, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_{5}, R_{L} + \frac{1}{C_{L}s} \right) \\ \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2} + 1} + R_{3}, \infty, R_{5}, R_$. 147
10.74 0 NVALID-ORDER-740 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, R_5, \frac{1}{C_Ls}\right)$. 147
10.74INVALID-ORDER-741 $Z(s) =$	$\left(\infty, \infty, \frac{L_{3S}}{C_2L_2S^2+1} + R_3, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$. 147
10.74 2 NVALID-ORDER-742 $Z(s) =$	$\left(\infty,\infty,rac{L_3s}{C_3L_3s^2+1}+R_3,\infty,R_5,R_L+rac{1}{C_Ls} ight)\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots$. 147
10.74BNVALID-ORDER- 743 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$. 147
10.74INVALID-ORDER- 744 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$. 147
10.74 5 NVALID-ORDER-745 $Z(s) =$	$\left(\infty,\infty,rac{L_3s}{C_2L_3s^2+1}+R_3,\infty,R_5,L_Ls+R_L+rac{1}{C_Ls} ight)$. 147
10.746NVALID-ORDER-746 $Z(s) =$	$ \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5, \ L_Ls + R_L + \frac{1}{C_Ls} \right) \ \dots $ $ \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right) \ \dots $. 148
10.74 TNVALID-ORDER-747 $Z(s) =$	$\left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$. 148
	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ts}}\right) \ \ \dots \ \ \dots \ \ \dots$	
	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \frac{1}{C_5s}, \ R_L\right)$	
10.750NVALID-ORDER- $750 Z(s) =$	$\left(\infty, \ \infty, \ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1} + R_{3}, \ \infty, \ \frac{1}{C_{5}s}, \ \frac{1}{C_{L}s}\right) \ \dots \ $. 148
10.75INVALID-ORDER-751 Z(s) =	$\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right) \ \dots $. 148
(*)	$V = V_3L_3S + 1$ $V_5S = V_LR_LS + 1$	_

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10.752NVALID-ORDER-752 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) ......
10.75 INVALID-ORDER-755 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)......149
10.75 NVALID-ORDER-758 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)^{-1}.
10.76 \text{ @NVALID-ORDER-766 } Z(s) = \left( \infty, \ \infty, \ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1} + R_{3}, \ \infty, \ \frac{R_{5}}{C_{5}R_{5}s+1}, \ \frac{1}{C_{L}s + \frac{1}{R_{L}} + \frac{1}{L_{L}s}} \right) 
10.76\( \text{NVALID-ORDER-768} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_3L_3s^2 + 1} + R_3, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left( L_Ls + \frac{1}{C_Ls} \infty \)}{L_Ls + R_L + \frac{1}{C_Ts}} \)
            10.782NVALID-ORDER-782 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_2s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right) \dots \dots \dots
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10.78 INVALID-ORDER-786 Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_T} + \frac{1}{L_Ts}}\right) ......
10.78 INVALID-ORDER-787 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \dots \dots \dots
10.78 \text{\&NVALID-ORDER-788 } Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_T s}} \right) \right. \tag{153}
10.789NVALID-ORDER-789 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_2 s^2 + 1} + R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) ......
10.79 INVALID-ORDER-790 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, \frac{L_5s}{C_2L_2s^2+1}, \frac{1}{C_2s}\right) . . . . . . . . . . . .
10.79INVALID-ORDER-791 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right) \dots
10.792NVALID-ORDER-792 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right) . . . . . . .
10.79\( \text{NVALID-ORDER-793} \( Z(s) = \left( \infty, \infty, \frac{L_3s}{C_3L_3s^2 + 1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls} \right) \\ \tag{1.5} \quad \text{...} \quad \text{...} \quad \text{...} \quad \text{...} \quad \end{array}
10.794NVALID-ORDER-794 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right) . . . . . .
10.79 \text{ @NVALID-ORDER-796 } Z(s) = \left(\infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \quad \dots 
10.80 DNVALID-ORDER-800 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1} + R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right) \dots \dots
10.80INVALID-ORDER-801 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right) . . . .
10.802NVALID-ORDER-802 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_5s}\right) \dots \dots \dots
10.80 INVALID-ORDER-803 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_2 L_2 s^2 + 1} + R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots \dots
10.804NVALID-ORDER-804 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_4L_4s^2+1}\right) \dots \dots \dots
10.80 \text{ (INVALID-ORDER-806 } Z(s) = \left(\infty, \ \infty, \ \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \quad \dots 
10.81\(\text{4NVALID-ORDER-814}\(Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{1_t - 1}}, \frac{L_Ls}{C_LL_Ls^2+1}\right) \quad \tag{1.56}
10.816NVALID-ORDER-816 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s+\frac{1}{R_s}+\frac{1}{L_5s}}, \frac{1}{C_Ls+\frac{1}{R_r}+\frac{1}{L_1s}}\right)
10.81 \text{INVALID-ORDER-} 817 \ Z(s) = \left( \infty, \ \infty, \ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \ \infty, \ \frac{1}{C_5 s + \frac{1}{L_r} + \frac{1}{L_r}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \quad \dots
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10.84¶NVALID-ORDER-847 $Z(s) =$	\	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$			$\left(\frac{s + \frac{1}{C_L s}}{R_L + \frac{1}{C_L s}}\right)$.	 	 	 	 . 160
10.84\NVALID-ORDER-848 $Z(s) =$	$(\infty, \infty,$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}, R_L$. 160
10.849NVALID-ORDER-849 $Z(s) =$	$(\infty, \infty,$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}, \frac{1}{C_L s}$. 160
10.85 0 NVALID-ORDER-850 $Z(s) =$	($, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$			/		 	 	 		 	 	 	 . 161
10.85INVALID-ORDER-851 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}$, $R_L +$	$\frac{1}{C_L s}$.		 	 	 		 	 	 	 . 161
10.852NVALID-ORDER-852 $Z(s) =$	\	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$,		 	 	 		 	 	 	 . 161
10.85\%NVALID-ORDER-853 $Z(s) =$. 161
10.854NVALID-ORDER-854 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}$, $L_L s$	$+R_L + \frac{1}{C_L}$	\overline{s}	 	 	 		 	 	 	 . 161
10.85 NVALID-ORDER-855 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}$, $\frac{1}{C_L s + 1}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L_L s}} \right)$. 161
10.856NVALID-ORDER-856 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{1}{C_5 s}, \ \frac{L_L}{C_L L_L}$	$\frac{s}{s^2+1} + R_L$)	 	 	 		 	 	 	 . 161
10.85 T NVALID-ORDER-857 $Z(s) =$	\	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$			CL° /		 	 	 		 	 	 	 . 161
10.85&NVALID-ORDER-858 $Z(s) =$	($, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$. 162
10.85 9 NVALID-ORDER-859 $Z(s) =$. 162
10.86 0 NVALID-ORDER-860 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{R_5}{C_5R_5s+1}, \overline{C}$	$\frac{R_L}{C_L R_L s + 1}$. 162
10.86INVALID-ORDER-861 $Z(s) =$	($, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$			/		 	 	 	 -	 	 	 	 . 162
10.862NVALID-ORDER-862 $Z(s) =$	\	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$				/	 	 	 		 	 	 	 . 162
10.86\bar{B}NVALID-ORDER-863 $Z(s) =$							 	 	 	 -	 	 	 	 . 162
10.86INVALID-ORDER- 864 $Z(s) = 10.86$ INVALID-ORDER- 865 $Z(s) = 10.86$ INVALID-ORDER- 866 $Z(s) = 10.86$ INVALID-ORDER- $Z(s) = 10.86$ INVALID-ORDER- $Z(s) = 10.86$ INVALID-OR	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{R_5}{C_5R_5s+1}, I$	$L_L s + R_L -$	$+\frac{1}{C_L s}$	 	 	 	 -	 	 	 	 . 162
10.86 NVALID-ORDER-865 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{R_5}{C_5R_5s+1}, \ \overline{C_5R_5s+1}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L^s}$. 162
10.86 ENVALID-ORDER-866 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{R_5}{C_5R_5s+1}, \ \overline{C}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$	 	 	 	 -	 	 	 	 . 163
10.86TNVALID-ORDER-867 $Z(s) =$	$\left(\infty, \infty, \right.$	$R_3\left(L_3s + \frac{1}{C_3s}\right)$	$\frac{1}{2}$, ∞ , $\frac{1}{6}$	$\frac{R_5}{C_5R_5s+1}, \frac{R_5}{C_5R_5s+1}$	$\frac{R_L \left(L_L s + \frac{1}{C_L} L_L s + R_L + \frac{1}{C_L} L_L s + R_L + \frac{1}{C_L} \right)}{L_L s + R_L + \frac{1}{C_L} L_L s + \frac{1}{C_$	$\left(\frac{\overline{z}s}{L^s}\right)$. 163
10.86\ngraphenvalid-Order-868 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{1}{2}$, ∞ , I	$R_5 + \frac{1}{C_5 s},$	R_L)		 	 	 		 	 	 	 . 163
10.86 9 NVALID-ORDER-869 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{1}{2}$, ∞ , I	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s}$.		 	 	 		 	 	 	 . 163
10.866NVALID-ORDER-866 $Z(s) = 10.866$ NVALID-ORDER-867 $Z(s) = 10.86$ NVALID-ORDER-868 $Z(s) = 10.86$ NVALID-ORDER-869 $Z(s) = 10.87$ 0NVALID-ORDER-870 $Z(s) = 10.87$ 1NVALID-ORDER-871 $Z(s) = 10.87$ 2NVALID-ORDER-872 $Z(s) = 10.87$ 2NVALID-0RDER-872 $Z(s) = $	$\left(\infty, \infty, \right.$	$, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{1}{2}$, ∞ , 1	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L}{C_L R_L s + 1}$. 163
10.87INVALID-ORDER-871 $Z(s) =$	$\left(\infty, \infty, \right.$	$R_3\left(L_3s + \frac{1}{C_3s}\right)$ $L_3s + R_3 + \frac{1}{C_3s}$	$\frac{1}{2}$, ∞ , 1	$R_5 + \frac{1}{C_5 s},$	$R_L + \frac{1}{C_L s}$)	 	 	 		 	 	 	 . 163
10.872NVALID-ORDER-872 $Z(s) =$	$\left(\infty, \infty, \right.$	$, \frac{R_3 \left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{2}$, ∞ , 1	$R_5 + \frac{1}{C_5 s},$	$L_L s + \frac{1}{C_L s}$	\bar{s}	 	 	 		 	 	 	 . 163

10.87 B NVALID-ORDER-873 $Z(s) = 1$					 	 	 	 	163
10.874NVALID-ORDER-874 $Z(s) = 1$					 	 	 	 	164
10.87 NVALID-ORDER-875 $Z(s) = 10.87$		3	L	L /					
10.876NVALID-ORDER-876 $Z(s) = 1$					 	 	 	 	164
10.87TNVALID-ORDER-877 $Z(s) = 1$		-3-		$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	 	 	164
10.87\newline\normalfont VALID-ORDER-878 $Z(s) = 10.87$		030	/		 	 	 	 	164
10.87 9 NVALID-ORDER-879 $Z(s) = 0$		033	/		 	 	 	 	164
10.880NVALID-ORDER-880 $Z(s) = 1$		033		/	 	 	 	 	164
10.88INVALID-ORDER-881 $Z(s) = 1$					 	 	 	 	164
10.882NVALID-ORDER-882 $Z(s) = 1$		~ 3 ~		/	 	 	 	 	165
10.88 B NVALID-ORDER-883 $Z(s) = 0$	$\infty, \infty, R_3 \left(L_3 s + L_3 s + R_3 + R_3 s + R_3 $	$\frac{+\frac{1}{C_3s}}{+\frac{1}{C_3s}}$, ∞ , L_{ξ}	$_{5}s + \frac{1}{C_{5}s}, \ \frac{L_{L}s}{C_{L}L_{L}s^{2} + }$	$\overline{1}$)	 	 	 	 	165
10.884NVALID-ORDER-884 $Z(s) = 1$	$\infty, \infty, \frac{R_3 \left(L_3 s + L_3 s + R_3 \right)}{L_3 s + R_3}$	$\frac{\frac{1}{C_3s}}{\frac{1}{C_3s}}$, ∞ , L_5	$_{5}s + \frac{1}{C_{5}s}, \ L_{L}s + R$	$L + \frac{1}{C_L s}$	 	 	 	 	165
10.885NVALID-ORDER-885 $Z(s) = 0$		``	- 12	L /	 	 	 	 	165
10.886NVALID-ORDER-886 $Z(s) = 1$		-3-	,	. /	 	 	 	 	165
10.88¶NVALID-ORDER-887 $Z(s) = 1$		030		$\left(\frac{\overline{C_L}^s}{\overline{C_L}^s}\right)$	 	 	 	 	165
10.88\bigselenergyNVALID-ORDER-888 $Z(s) = 10.88$		· .	/		 	 	 	 	165
10.88 9 NVALID-ORDER-889 $Z(s) = 1$	$\infty, \ \infty, \ \frac{R_3(L_3s+1)}{L_3s+R_3}$	$\frac{\overrightarrow{r}_{\overline{C_3s}}}{\overrightarrow{r}_{\overline{C_3s}}}, \infty, \overline{C_5}$	$\left(\frac{L_5 s}{s L_5 s^2 + 1}, \frac{1}{C_L s}\right)$.		 	 	 	 	165
$10.89 \text{@NVALID-ORDER-890} \ Z(s) = $ $10.89 \text{@NVALID-ORDER-891} \ Z(s) = $ $10.89 \text{@NVALID-ORDER-892} \ Z(s) = $	$\infty, \infty, R_3 \left(L_3 s + R_3 + R_$	$\frac{\overline{C_{3s}}}{\overline{C_{3s}}}, \infty, \overline{C_{5}}$	$\frac{L_5s}{5L_5s^2+1}$, $\frac{R_L}{C_LR_Ls+1}$)	 	 	 	 	166
10.89INVALID-ORDER-891 $Z(s) = 1$	$\infty, \infty, \frac{R_3(L_3s+R_3)}{L_3s+R_3}$	$\frac{\overline{C_{3s}}}{\overline{C_{3s}}}, \infty, \overline{C_{5}}$	$\frac{L_5 s}{s L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}$)	 	 	 	 	166
10.89 2 NVALID-ORDER-892 $Z(s) = 1$	$\infty, \infty, R_3 \left(L_3 s + R_3 + R_$	$\frac{\overline{C_{3s}}}{\overline{C_{3s}}}, \infty, \overline{C_{5}}$	$\frac{L_5 s}{5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L}$	$\frac{1}{s}$	 	 	 	 	166
10.89 B NVALID-ORDER-893 $Z(s) = 0$	$\infty, \infty, \frac{R_3 \left(L_3 s_7\right)}{L_3 s_7 + R_3}$	$\frac{\left(\frac{C_{3s}}{C_{3s}}\right)}{\left(\frac{1}{C_{3s}}\right)}$, ∞ , C_5	$\frac{L_5 s}{5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}$)	 	 	 	 	166
10.894NVALID-ORDER-894 $Z(s) = 1$	$\infty, \infty, \frac{R_3(L_3s)}{L_3s+R_3}$	$\frac{C_{3s}}{C_{3s}}$, ∞ , $\frac{C_{5}}{C_{5}}$	$\frac{L_5s}{5L_5s^2+1}, \ L_Ls + R_L$	$\left(+ \frac{1}{C_L s} \right)$	 	 	 	 	166
10.895NVALID-ORDER-895 $Z(s) = 1$	$\infty, \infty, \frac{R_3(L_3s)}{L_3s+R_3}$	$\frac{C_3s}{C_3s}$, ∞ , $\frac{C_5}{C_5}$	$\frac{L_5 s}{5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\frac{1}{L_L s}$	 	 	 	 	166
10.89 Invalid-order-895 Z(s) = ($10.89 Invalid-order-896 Z(s) = ($ $10.89 Invalid-order-897 Z(s) = ($ $10.89 Invalid-order-898 Z(s) = ($	$\infty, \infty, \frac{R_3(L_3s)}{L_3s+R_3}$ $R_2(L_2s)$	$\frac{C_3s}{+\frac{1}{C_3s}}$, ∞ , $\frac{C_5}{C_5}$	$\frac{L_5s}{5L_5s^2+1}$, $\frac{L_Ls}{C_LL_Ls^2+1}$	$+R_L$	 	 	 	 	166
10.89 T NVALID-ORDER-897 $Z(s) = 1$	$\infty, \infty, R_3 \left(L_3 s + R_3 + R_3 \left(L_2 s + R_3 \left(L_2 s + R_3 + R_3 \left(L_2 s + R_3 + R_3 \left(L_2 s + R_3 + $	$\frac{C_3s}{+\frac{1}{C_3s}}$, ∞ , $\overline{C_5}$	$\frac{L_5s}{5L_5s^2+1}$, $\frac{L_5s}{L_Ls+R_L+1}$	$\left(\frac{C_L s}{C_L s}\right)$	 	 	 	 	166
10.89&NVALID-ORDER-898 $Z(s) = 1$	∞ , ∞ , $\frac{s(3s)}{L_3s+R_3}$	$+\frac{c_{3s}}{c_{3s}}$, ∞ , L_5	$_{5}s + R_{5} + \frac{1}{C_{5}s}, \ R_{L}$)	 	 	 	 	167

10.89 9 NVALID-ORDER-899 $Z(s) =$	\	-3-		/		 	 	 	 	 	. 167
10.90 0 NVALID-ORDER-900 $Z(s) =$	\	030		,	,	 	 	 	 	 	. 167
10.90INVALID-ORDER-901 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$-, \infty, L_5s + R_5 + \frac{1}{6}$	$\frac{1}{C_5 s}$, $R_L + \frac{1}{C_L s}$	$\left(\cdot \right) \cdot \cdot \cdot$. 167
10.902NVALID-ORDER-902 $Z(s) =$	(038			/	 	 	 	 	 	. 167
10.90 & NVALID-ORDER-903 $Z(s) =$. 167
10.904NVALID-ORDER-904 $Z(s) =$	\	3			/	 	 	 	 	 	. 167
10.90\$NVALID-ORDER-905 $Z(s) =$	\	0	$+, \infty, L_5 s + R_5 + \frac{1}{6}$		_ /	 	 	 	 	 	. 167
10.90 6 NVALID-ORDER-906 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$+, \infty, L_5 s + R_5 + \frac{1}{6}$	$\frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$. 168
10.90 T NVALID-ORDER-907 $Z(s) =$	\	030			$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$. 168
10.90&NVALID-ORDER-908 $Z(s) =$. 168
10.90 9 NVALID-ORDER-909 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\left(\frac{1}{C_L s}\right)$. 168
10.91 0 NVALID-ORDER-910 $Z(s) =$	$\left(\infty, \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\frac{R_L}{C_L R_L s + 1}$. 168
10.91 I NVALID-ORDER-911 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$R_L + \frac{1}{C_L s}$. 168
10.912NVALID-ORDER-912 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$L_L s + \frac{1}{C_L s}$. 168
10.91 B NVALID-ORDER-913 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right)$. 168
10.914NVALID-ORDER-914 $Z(s) =$. 169
10.91 5 NVALID-ORDER-915 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$,	 	 	 	 	 	. 169
10.916NVALID-ORDER-916 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\frac{L_L s}{C_L L_L s^2 + 1} + 1$	R_L)	 	 	 	 	 	. 169
10.91 NVALID-ORDER-917 $Z(s) =$ 10.91 NVALID-ORDER-918 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$. 169
10.91&NVALID-ORDER-918 $Z(s) =$	$\left(\infty, \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	R_5, R_L)		 	 	 	 	 	. 169
10.91 9 NVALID-ORDER-919 $Z(s) =$	$\left(\infty, \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{L_5s}{C_5L_5s^2+1} + I$	$R_5, \frac{1}{C_L s}$. 169
10.92 0 NVALID-ORDER-920 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, \frac{R_L}{C_L R_L s + 1}$. 169
10.91 \mathbf{D} NVALID-ORDER-919 $Z(s) =$ 10.92 \mathbf{D} NVALID-ORDER-920 $Z(s) =$ 10.92 \mathbf{D} NVALID-ORDER-921 $Z(s) =$ 10.92 \mathbf{D} NVALID-ORDER-922 $Z(s) =$ 10.92 \mathbf{D} NVALID-ORDER-923 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, R_L + \frac{1}{C_L s}$)	 	 	 	 	 	. 169
10.922NVALID-ORDER-922 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, L_L s + \frac{1}{C_L s}$)	 	 	 	 	 	. 170
10.92\&NVALID-ORDER-923 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, \frac{L_L s}{C_L L_L s^2 + 1}$. 170
10.92#NVALID-ORDER-924 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3 \left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, L_L s + R_L$	$+\frac{1}{C_L s}$. 170

10.925NVALID-ORDER-925 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$C_L s + \frac{1}{R_L} + \frac{1}{L_L s}$	$\left(\frac{1}{2}\right)$	 	 	 	 	 170
10.926NVALID-ORDER-926 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{L_5s}{C_5L_5s^2+1} + R_5$	$\frac{L_L s}{C_L L_L s^2 + 1} + \dots$	R_L)	 	 	 	 	 170
10.92 TNVALID-ORDER-927 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)^{2}$	 	 	 	 	 170
10.928NVALID-ORDER-928 $Z(s) =$	$\left(\infty, \infty, \right.$	$\frac{R_3\left(L_3s+\frac{1}{C_3s}\right)}{L_3s+R_3+\frac{1}{C_3s}}, \ \infty$	$, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	R_L)		 	 	 	 	 170
10.929NVALID-ORDER-929 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{1}{C_L s}$ \cdots		 	 	 	 	 170
10.930NVALID-ORDER-930 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	 	 171
10.93INVALID-ORDER-931 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$R_L + \frac{1}{C_L s}$.		 	 	 	 	 171
10.932NVALID-ORDER-932 $Z(s) =$										
10.932NVALID-ORDER-933 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	 	 171
10.93#NVALID-ORDER-934 $Z(s) =$	$\left(\infty, \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \ \infty$	$, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$L_L s + R_L + \frac{1}{C}$	$\left(\frac{1}{Ls}\right)$	 	 	 	 	 171
10.935NVALID-ORDER-935 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$		 	 	 	 	 171
10.936NVALID-ORDER-936 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R$	$_{L}$)	 	 	 	 	 171
10.93 T NVALID-ORDER-937 $Z(s) =$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$, 	 	 	 	 	 171

 $\textbf{1} \quad \textbf{Examined} \ \ H(z) \ \ \textbf{for TIA some parasitic Z3 Z5 ZL:} \ \ \frac{Z_3Z_5g_mr_o + Z_3Z_5 + 2Z_3Z_Lg_mr_o + Z_5Z_Lg_mr_o + Z_5Z_Lg_mr_o + Z_5Z_L + Z_1r_o}{Z_3Z_5g_mr_o + Z_3Z_5 + 2Z_3Z_Lg_mr_o + 4Z_3Z_L + Z_3r_o + Z_5Z_Lg_mr_o + Z_5Z_L + Z_1r_o}$

$$H(z) = \frac{Z_3 Z_L \left(Z_5 g_m r_o + Z_5 - r_o\right)}{Z_3 Z_5 g_m r_o + Z_3 Z_5 + 2 Z_3 Z_L g_m r_o + 4 Z_3 Z_L + Z_3 r_o + Z_5 Z_L g_m r_o + Z_5 Z_L + Z_L r_o}$$

- 2 HP
- 3 BP

3.1 BP-1
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_L L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_5 s^2 + C_L L_L R_3 r_o s^2 + 2 L_L R_3 g_m r_o s + 4 L_L R_3 s + L_L R_5 g_m r_o s + L_L R_5 s + L_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 + R_3 r_o}$$

Parameters:

Q:
$$\frac{C_L R_3 \sqrt{\frac{1}{C_L L_L}} (R_5 g_m r_o + R_5 + r_o)}{2R_3 g_m r_o + 4R_3 + R_5 g_m r_o + R_5 + r_o}$$
 wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
 bandwidth:
$$\frac{2R_3 g_m r_o + 4R_3 + R_5 g_m r_o + R_5 + r_o}{C_L R_3 (R_5 g_m r_o + R_5 + r_o)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3 (R_5 g_m r_o + R_5 - r_o)}{2R_3 g_m r_o + 4R_3 + R_5 g_m r_o + R_5 + r_o}$$
 Qz: 0 Wz: None

3.2 BP-2
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_L L_L R_3 R_5 R_L g_m r_o s^2 + C_L L_L R_3 R_5 R_L r_o s^2 + L_L R_3 R_5 g_m r_o s + L_L R_3 R_5 s + 2 L_L R_3 R_L g_m r_o s + 4 L_L R_3 r_o s + L_L R_5 R_L g_m r_o$$

Parameters:

3.3 BP-3
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_L R_5 g_m r_o s^2 + C_3 L_L R_5 s^2 + C_4 L_L R_5 g_m r_o s^2 + C_L L_L R_5 s^2 + C_L L_L R_5 s^2 + C_L L_L r_o s^2 + 2 L_L g_m r_o s + 4 L_L s + R_5 g_m r_o + R_5 + r_o}$$

Parameters:

Q:
$$\frac{\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{2(g_mr_o + 2)}$$

wo:
$$\sqrt{\frac{1}{L_L(C_3+C_L)}}$$
 bandwidth: $\frac{2(g_mr_o+2)}{C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_L}$ K-LP: 0 K-HP: 0 K-BP: $\frac{R_5g_mr_o+R_5-r_o}{2(g_mr_o+2)}$ Qz: 0 Wz: None

3.4 BP-4
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 L_L R_5 R_L g_m r_o s^2 + C_3 L_L R_5 R_L s^2 + C_L L_L R_5 R_L g_m r_o s^2 + C_L L_L R_5 R_L s^2 + C_L L_L R_5 R_L s^2 + C_L L_L R_5 r_o s^2 + L_L R_5 g_m r_o s + L_L R_5 s + 2L_L R_L g_m r_o s + 4L_L R_L s + L_L r_o s + R_5 R_L g_m r_o + R_5 R_L + R_L r_o s + R_5 R_L g_m r_o s + R_5 R_L$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_L\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{R_L(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.5 BP-5
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_L R_3 R_5 g_m r_o s^2 + C_3 L_L R_3 R_5 s^2 + C_L L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_5 s^2 + C_L L_L R_3 r_o s^2 + 2L_L R_3 g_m r_o s + 4L_L R_3 s + L_L R_5 g_m r_o s + L_L R_5 s + L_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 + R_3 r_o s^2 + 2L_L R_3 r_o s^2 + 2L$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_3\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}{R_3(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3(R_5g_mr_o + R_5 - r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.6 BP-6
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_L R_3 R_5 R_L g_m r_o s^2 + C_3 L_L R_3 R_5 R_L g^2 + C_L L_L R_$$

Parameters:

$$\begin{aligned} &\text{Q: } \frac{R_3 R_L \sqrt{\frac{1}{L_L(C_3 + C_L)}} (C_3 R_5 g_m r_o + C_3 R_5 + C_3 r_o + C_L R_5 g_m r_o + C_L R_5 + C_L r_o)}{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o} \\ &\text{wo: } \sqrt{\frac{1}{L_L(C_3 + C_L)}} \\ &\text{bandwidth: } \frac{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}{R_3 R_L(C_3 R_5 g_m r_o + C_3 R_5 + C_3 r_o + C_L R_5 g_m r_o + C_L R_5 + C_L r_o)} \end{aligned}$$

```
K-LP: 0
K-HP: 0
K-BP: \frac{R_3R_L(R_5g_mr_o+R_5-r_o)}{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}Qz: 0
Wz: None
```

3.7 BP-7 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, R_L\right)$

$$H(s) = \frac{L_3 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L s^2 + C_3 L_3 R_L r_o s^2 + L_3 R_5 g_m r_o s + L_3 R_5 s + 2 L_3 R_L g_m r_o s + 4 L_3 R_L s + L_3 r_o s + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3R_L\sqrt{\frac{1}{C_3L_3}}(R_5g_mr_o + R_5 + r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{C_3R_L(R_5g_mr_o + R_5 + r_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.8 BP-8 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_{3}s\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{5}s^{2} + C_{L}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}R_{5}s^{2} + C_{L}L_{3}r_{o}s^{2} + 2L_{3}g_{m}r_{o}s + 4L_{3}s + R_{5}g_{m}r_{o} + R_{5} + r_{o}}$$

Parameters:

Q:
$$\frac{\sqrt{\frac{1}{L_{3}(C_{3}+C_{L})}}(C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o})}{2(g_{m}r_{o}+2)}$$
 wo:
$$\sqrt{\frac{1}{L_{3}(C_{3}+C_{L})}}$$
 bandwidth:
$$\frac{2(g_{m}r_{o}+2)}{C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}$$
 Qz: 0 Wz: None

3.9 BP-9 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_3 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L s^2 + C_L L_3 R_5 R_L g_m r_o s^2 + C_L L_3 R_5 R_L s^2 +$$

Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{R_L\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ &\text{wo:} \ \sqrt{\frac{1}{L_3(C_3+C_L)}} \\ &\text{bandwidth:} \ \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{R_L(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)} \\ &\text{K-LP:} \ 0 \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \end{aligned}$$

Qz: 0 Wz: None

3.10 BP-10
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 L_L R_5 g_m r_o s^2 + C_3 L_3 L_L R_5 s^2 + C_L L_3 L_L R_5 g_m r_o s^2 + C_L L_3 L_L R_5 s^2 + C_L L_3 L_L R_5 s^2 + C_L L_3 L_L r_o s^2 + 2 L_3 L_L g_m r_o s + 4 L_3 L_L s + L_3 R_5 g_m r_o + L_3 R_5 g_m r_o + L_L R_5 g_m$$

Parameters:

Q:
$$\frac{\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}} (C_3 R_5 g_m r_o + C_3 R_5 + C_3 r_o + C_L R_5 g_m r_o + C_L R_5 + C_L r_o)}{2(g_m r_o + 2)}$$
 wo:
$$\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}$$
 bandwidth:
$$\frac{2(g_m r_o + 2)}{C_3 R_5 g_m r_o + C_3 R_5 + C_3 r_o + C_L R_5 g_m r_o + C_L R_5 + C_L r_o}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_5 g_m r_o + R_5 - r_o}{2(g_m r_o + 2)}$$
 Qz: 0 Wz: None

3.11 BP-11
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$$

 $H(s) = \frac{L_3 L_L R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 L_L R_5 R_L g_m r_o s^2 + C_3 L_3 L_L R_5 R_L g^2 + C_4 L_3 L_L R_5 R_L g^2 + C_4 L_3 L_L R_5 R_L g^2 + C_4 L_3 L_L R_5 g_m r_o s + L_3 R_5 g_m$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o} \\ \text{Wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{R_L(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.12 BP-12
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, R_L\right)$$

 $H(s) = \frac{L_{3}R_{3}R_{L}s\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{3}R_{5}R_{L}s^{2} + C_{3}L_{3}R_{3}R_{5}g_{m}r_{o}s + L_{3}R_{3}R_{5}s + 2L_{3}R_{3}R_{L}g_{m}r_{o}s + 4L_{3}R_{3}R_{L}s + L_{3}R_{5}R_{L}g_{m}r_{o}s + L_{3}R_{5}R_{L}s + L_{3}R_{L}r_{o}s + R_{3}R_{5}R_{L}g_{m}r_{o}s + R_{3}R_{5}R_{L}g_{m}r_{o}s + L_{3}R_{5}R_{L}s + L_{3}R$

Wz: None

$$\textbf{3.13} \quad \textbf{BP-13} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ R_5, \ \frac{1}{C_L s} \right)$$

$$H(s) = \frac{L_3 R_3 s \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 s^2 + C_L L_3 R_3 R_5 s^2 + C_L L_3 R_3 R_5 s^2 + C_L L_3 R_3 r_o s^2 + 2 L_3 R_3 g_m r_o s + 4 L_3 R_3 s + L_3 R_5 g_m r_o s + L_3 R_5 s + L_3 r_o s + R_3 R_5 g_m r_o s + R_$$

Parameters:

Q:
$$\frac{R_3\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}$$
 wo:
$$\sqrt{\frac{1}{L_3(C_3+C_L)}}$$
 bandwidth:
$$\frac{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}{R_3(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3(R_5g_mr_o + R_5 - r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}$$
 Qz: 0 Wz: None

3.14 BP-14
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{L_{3}R_{3}R_{L}s\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}L_{3}R_{3}R_{5}R_{L}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{3}R_{5}R_{L}s^{2} + C_{L}L_{3}R_{3}R_{5}R_{L}s^{2} + C_{L}L_{3}R_{3}R_{5}R_{L}s^{2} + C_{L}L_{3}R_{3}R_{5}R_{L}s^{2} + C_{L}L_{3}R_{3}R_{5}R_{L}s + L_{3}R_{3}R_{5}g_{m}r_{o}s + L_{3}R_{3}R_{5}s + 2L_{3}R_{3}R_{L}s + L_{3}R_{3}r_{o}s + L_{3}R_{5}R_{L}s +$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}{R_3R_L(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L(R_5g_mr_o+R_5-r_o)}{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.15 BP-15
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_3 L_L R_3 s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 L_L R_3 R_5 g_m r_o s^2 + C_3 L_3 L_L R_3 r_o s^2 + C_L L_3 L_L R_3 R_5 g_m r_o s^2 + C_L L_3 L_L R_3 r_o s^2 + 2 L_3 L_L R_3 g_m r_o s + 4 L_3 L_L R_3 g_m r_o s + 4 L_3 L_L R_5 g_m r_o s + L_3 L_L R_5 g_m r_o + L_3 R_3 R_5 g_m r_o + L_3 R_3 R_5 g_m r_o + L_4 R_5 g_m r_o$

$$\begin{array}{l} \text{Q:} & \frac{R_3\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{wo:} & \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} & \frac{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}{R_3(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)} \\ \text{K-LP:} & 0 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_3(R_5g_mr_o + R_5 - r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

3.16 BP-16
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{L_3 L_L R_3 R_L s \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 L_3 L_L R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 L_L R_3 R_5 R_L g_m r_o s^2 + C_L L_3 L_L R_3 R_5 R_L g_m r_o s^2 + C_L L_3 L_L R_3 R_5 R_L g_m r_o s^2 + L_3 L_L R_3 R_5 g_m r_o s + L_3 L_L R_3 g_m r_o s + L_3 L_L$

Parameters:

$$\begin{array}{l} \text{Q:} \ \, \frac{R_3R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{wo:} \ \, \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \, \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_3R_L(C_3R_5g_mr_o + C_3R_5 + C_3r_o + C_LR_5g_mr_o + C_LR_5 + C_Lr_o)} \\ \text{K-LP:} \ \, 0 \\ \text{K-HP:} \ \, 0 \\ \text{K-BP:} \ \, \frac{R_3R_L(R_5g_mr_o + R_5 - r_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{Qz:} \ \, 0 \\ \text{Wz:} \ \, \text{None} \end{array}$$

4 LP

5 BS

5.1 BS-1
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_3(R_5g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_3(R_5g_mr_o + R_5 + r_o)}{L_L(2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o)} \\ \text{K-LP:} \ \frac{R_3(R_5g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{K-HP:} \ \frac{R_3(R_5g_mr_o + R_5 - r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}$$

5.2 BS-2
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_L g_m r_o s^2 + C_L R_3 R_L g_$$

$$\text{Q:} \ \frac{L_L \sqrt{\frac{1}{C_L L_L}} (R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o)}{R_3 R_L (R_5 g_m r_o + R_5 + r_o)}$$
 wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
 bandwidth:
$$\frac{R_3 R_L (R_5 g_m r_o + R_5 + r_o)}{L_L (R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o)}$$

$$\begin{tabular}{l} \begin{tabular}{l} K-LP: & $R_3R_Lg_mr_o + R_5 - r_o$) \\ \hline K-LP: & $R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o$ \\ \hline K-HP: & $R_3R_L(R_5g_mr_o + R_5 - r_o)$ \\ \hline $R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o$ \\ \hline K-BP: & 0 \\ \hline Qz: & None \\ \hline Wz: & $\sqrt{\frac{1}{C_LL_L}}$ \\ \hline \end{tabular}$$

5.3 BS-3
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, R_L\right)$$

Q:
$$\frac{L_{3}\sqrt{\frac{1}{C_{3}L_{3}}}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}{R_{L}(R_{5}g_{m}r_{o}+R_{5}+r_{o})}$$
wo:
$$\sqrt{\frac{1}{C_{3}L_{3}}}$$
bandwidth:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}+r_{o})}{L_{3}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}$$
K-LP:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}$$
K-HP:
$$\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}$$
K-BP: 0
Qz: None
Wz:
$$\sqrt{\frac{1}{C_{3}L_{3}}}$$

5.4 BS-4
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L g_m r_o s + C_3 R_3 R_5 R_L g_m r_o s + C_3 R_3 R_5 R_L g_m r_o s + R_3 R_5 g_m r_o s^2 + R_3 R_5 g_m r_$$

Parameters:

$$Q \colon \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_3R_L(R_5g_mr_o + R_5 + r_o)}$$
 wo:
$$\sqrt{\frac{1}{C_3L_3}}$$
 bandwidth:
$$\frac{R_3R_L(R_5g_mr_o + R_5 + r_o)}{L_3(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_3R_L(R_5g_mr_o + R_5 - r_o)}$$
 K-LP:
$$\frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_3R_L(R_5g_mr_o + R_5 - r_o)}$$
 K-HP:
$$\frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_3R_5g_mr_o + R_3R_5R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}$$
 K-BP: 0
Qz: None
Wz:
$$\sqrt{\frac{1}{C_3L_3}}$$

6 **GE**

6.1 GE-1
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{2 C_L L_L R_3 g_m r_o s^2 + 4 C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 g^2 + C_L L_L R_5 g_m r_o s + C_L R_3 R_5 g_m r_o s + C_L R_3 R_L g_m r_o s + 4 C_L R_3 r_o s + C_L R_5 R_L g_m r_o s + C_$$

```
\begin{aligned} & \text{Q:} \ \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 + R_5 g_m r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o} \\ & \text{bandwidth:} \ \frac{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}{L_L (2 R_3 g_m r_o + 4 R_3 + R_5 g_m r_o + R_5 + r_o)} \\ & \text{K-LP:} \ \frac{R_3 (R_5 g_m r_o + R_5 - r_o)}{2 R_3 g_m r_o + 4 R_3 + R_5 g_m r_o + R_5 + r_o} \\ & \text{K-HP:} \ \frac{R_3 (R_5 g_m r_o + R_5 - r_o)}{2 R_3 g_m r_o + 4 R_3 R_5 g_m r_o + R_5 - r_o)} \\ & \text{K-BP:} \ \frac{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}{R_2 L_L \sqrt{\frac{1}{C_L L_L}}} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_L L_L}} \end{aligned}
```

6.2 GE-2
$$Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{R_3 \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_L L_L R_1 s^2 + L_L s + R_L \right)}{C_L L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_L g_m r_o s^2 + 4 C_L L_L R_3 r_o s^2 + C_L L_L R_3 r_o s^2 + C_L L_L R_5 R_L g_m r_o s^2 + 2 L_L R_3 g_m r_o s + 4 L_L R_3 s + L_L R_5 g_m r_o s + L_L R_5 s + L_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 g_m r_o + R_3 R_5 g_m r_o + 4 R_3 R_5 g_m r_o s +$$

$$\begin{array}{l} \text{Q:} \ \frac{C_L\sqrt{\frac{1}{C_LL_L}}(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o}{C_L(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)} \\ \text{K-LP:} \ \frac{R_3R_L(R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_3R_L(R_5g_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)} \\ \text{K-HP:} \ \frac{R_3(R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_3(R_5g_mr_o + R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)} \\ \text{K-BP:} \ \frac{R_3(R_5g_mr_o + R_5 - r_o)}{2R_3g_mr_o + 4R_3 + R_5g_mr_o + R_5 + r_o} \\ \text{Qz:} \ C_LR_L\sqrt{\frac{1}{C_LL_L}} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \\ \end{array}$$

6.3 GE-3
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_3 s^2 + C_5 L_5 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_$$

$$\begin{aligned} &\text{Q: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_3g_mr_o + R_3 + R_Lg_mr_o + R_L)}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ &\text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth: } \frac{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o}{L_5(R_3g_mr_o + R_3 + R_Lg_mr_o + R_L)} \\ &\text{K-LP: } \frac{R_3R_L}{R_3 + R_L} \\ &\text{K-HP: } \frac{R_3R_L}{R_3 + R_L} \\ &\text{K-BP: } -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ &\text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(-g_mr_o - 1)}{r_o} \\ &\text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.4 GE-4
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$\begin{aligned} &\text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o)}{R_3g_mr_o + R_3 + R_Lg_mr_o + R_L} \\ &\text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth:} \ \frac{R_3g_mr_o + R_3 + R_Lg_mr_o + R_L}{C_5(2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o)} \\ &\text{K-LP:} \ -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ &\text{K-HP:} \ -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ &\text{K-BP:} \ \frac{R_3R_L}{R_3 + R_L} \\ &\text{Qz:} \ -\frac{C_5r_o\sqrt{\frac{1}{C_5L_5}}}{g_mr_o + 1} \\ &\text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.5 GE-5
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_4 g_m r_o s^2 + C_5 L_5 R_L s^2 + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s + 2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_5 R_L g_m r_o s + C_5 R_5 R_L s + C_5 R_1 r_o s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_2 r_o + R_3 r_o s + R_3 r_$$

Parameters:

$$\begin{array}{c} Q\colon \frac{L_{5}\sqrt{\frac{1}{C_{5}L_{5}}}(R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L})}{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}\\ \text{wo: }\sqrt{\frac{1}{C_{5}L_{5}}}\\ \text{bandwidth: }\frac{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}{L_{5}(R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L})}\\ \text{K-LP: }\frac{R_{3}R_{L}}{R_{3}+R_{L}}\\ \text{K-HP: }\frac{R_{3}R_{L}}{R_{3}+R_{L}}\\ \text{K-BP: }\frac{R_{3}R_{L}}{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}-r_{o})}{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}\\ \text{Qz: }\frac{L_{5}\sqrt{\frac{1}{C_{5}L_{5}}}(g_{m}r_{o}+1)}{R_{5}g_{m}r_{o}+R_{5}-r_{o}}\\ \text{Wz: }\sqrt{\frac{1}{C_{5}L_{5}}}\\ \end{array}$$

6.6 GE-6
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{2 C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 r_o s^2 + C_5 L_5 R_3 R_5 r_o s^2 + L_5 R_3 R_5 g_m r_o s + L_5 R_3 R_5 g_m r_o s + 4 L_5 R_3 r_o s + L_5 R_5 R_L g_m r_o s + L_5 R_5 R_L g_m$

$$\begin{aligned} & \qquad \qquad \text{Q: } \frac{C_5R_5\sqrt{\frac{1}{C_5L_5}}(2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ & \qquad \text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ & \qquad \text{bandwidth: } \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{C_5R_5(2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o)} \\ & \qquad \text{K-LP: } -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ & \qquad \text{K-HP: } -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \\ & \qquad \text{K-BP: } \frac{R_3R_Lr_o}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5r_o)} \\ & \qquad \text{C-BP: } \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_3R_5g_mr_o + R_5r_o} \\ & \qquad \text{Qz: } -\frac{C_5R_5r_o\sqrt{\frac{1}{C_5L_5}}}{R_5g_mr_o + R_5 - r_o} \end{aligned}$$

Wz:
$$\sqrt{\frac{1}{C_5 L_5}}$$

6.7 GE-7
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

 $R_3R_L\left(C_5L_5R_5g_mr_os^2+C_5L_5R_5s^2-C_5L_5r_os^2+L_5g_mr_os+L_5s+R_5g_mr_o+R_5-r_o\right)$

 $H(s) = \frac{1}{C_5 L_5 R_3 R_5 g_m r_o s^2 + C_5 L_5 R_3 R_5 g^2 + 2 C_5 L_5 R_3 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_L g^2 + C_5 L_5 R_3 R_L g^2 + C_5 L_5 R_5 R_L g^2 + C_5 L_5 R_5 R_L g^2 + C_5 L_5 R_5 R_L g^2 + C_5 L_5 R_3 g_m r_o s + L_5 R_L g_m$

Parameters:

$$\begin{array}{l} \text{Q:} \ \, \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_3g_mr_o + R_3 + R_Lg_mr_o + R_L} \\ \text{wo:} \ \, \sqrt{\frac{1}{C_5L_5}} \\ \text{bandwidth:} \ \, \frac{R_3g_mr_o + R_3 + R_Lg_mr_o + R_L}{C_5(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)} \\ \text{K-LP:} \ \, \frac{R_3R_L(R_5g_mr_o + R_5-r_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{K-HP:} \ \, \frac{R_3R_L(R_5g_mr_o + R_5-r_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{K-BP:} \ \, \frac{R_3R_L}{R_3 + R_L} \\ \text{Qz:} \ \, \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_5g_mr_o + R_5 - r_o)}{g_mr_o + 1} \\ \text{Wz:} \ \, \sqrt{\frac{1}{C_5L_5}} \end{array}$$

6.8 GE-8
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

 $H(s) = \frac{R_3 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 L_5 R_3 R_5 g_m r_o s^2 + C_5 L_5 R_5 R_5 g_m r_o s^2$

Parameters:

6.9 GE-9
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L\right)$$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 L_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 g^2 + 2 C_3 L_3 R_L g_m r_o s^2 + 4 C_3 L_3 R_L s^2 + C_3 L_3 r_o s^2 + C_3 R_3 R_5 g_m r_o s + 2 C_3 R_3 R_L g_m r_o s + 4 C_3 R_3 r_o s + C_3 R_5 R_L g_m r_o s + C_3 R_5 R_L$

$$\begin{aligned} & \qquad \qquad \text{Q: } \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ & \text{wo: } \sqrt{\frac{1}{C_3L_3}} \\ & \text{bandwidth: } \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{L_3(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)} \\ & \text{K-LP: } \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \end{aligned}$$

6.10 GE-10
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 - r_o \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L g_m r_o s^2 + L_3 R_5 g_m r_o s + L_3$$

$$\begin{array}{c} Q \colon \frac{C_3\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{wo: } \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth: } \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{C_3(R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o)} \\ \text{K-LP: } \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{K-HP: } \frac{R_3R_5g_mr_o + R_3R_5 + 2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_3R_L + R_3r_o + R_5R_Lg_mr_o + R_5R_L + R_Lr_o} \\ \text{Qz: } C_3R_3\sqrt{\frac{1}{C_3L_3}} \\ \text{Wz: } \sqrt{\frac{1}{C_3L_3}} \\ \end{array}$$

7 AP

8 INVALID-NUMER

8.1 INVALID-NUMER-1 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3 s + g_m r_o + 1}$$

$$\begin{array}{c} C_5C_LR_3r_o\sqrt{\frac{g_mr_o+1}{C_5C_LR_3r_o}}\\ Q\colon \frac{C_5C_R3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}\\ \text{wo: } \sqrt{\frac{g_mr_o+1}{C_5C_LR_3r_o}}\\ \text{bandwidth: } \frac{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5C_LR_3r_o}\\ \text{K-LP: } R_3\\ \text{K-HP: } 0\\ \text{K-BP: } -\frac{C_5R_3r_o}{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}\\ \text{Qz: } 0\\ \text{Wz: None} \end{array}$$

8.2 INVALID-NUMER-2 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_3 R_L r_o s^2 + 2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + C_L R_3 R_L g_m r_o s + C_L R_3 R_L s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_L r_o s + C_L r_o$$

Parameters:

 $\begin{array}{c} Q \colon \frac{C_5C_LR_3R_Lr_o\sqrt{\frac{R_{3}g_mr_o+R_{3}+R_Lg_mr_o+R_L}{C_5C_LR_3R_Lr_o}}}{2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_Lr_o+C_LR_3R_Lg_mr_o+C_LR_3R_L} \\ \text{wo: } \sqrt{\frac{R_{3}g_mr_o+R_{3}+R_Lg_mr_o+R_L}{C_5C_LR_3R_Lr_o}} \\ \text{bandwidth: } \frac{2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_Lr_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}{C_5C_LR_3R_Lr_o} \\ \text{K--LP: } \frac{R_3R_L}{R_3+R_L} \\ \text{K--HP: } 0 \\ \text{K--BP: } -\frac{C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}}{2C_5C_3R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}} \\ \text{Qz: } 0 \\ \text{Wz: None} \end{array}$

8.3 INVALID-NUMER-3 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

Parameters:

$$\begin{array}{c} \text{Q:} \frac{C_5C_LR_3R_5r_o\sqrt{\frac{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}{C_5C_LR_3R_5r_o}}}{2C_5R_3R_5g_mr_o+4C_5R_3R_5+C_5R_5r_o+C_LR_3R_5g_mr_o+C_LR_3R_5+C_LR_3r_o}}\\ \text{wo:} \sqrt{\frac{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}{C_5C_LR_3R_5r_o}}}\\ \text{bandwidth:} \frac{2C_5R_3R_5g_mr_o+4C_5R_3R_5+C_5R_5r_o+C_LR_3R_5g_mr_o+C_LR_3R_5+C_LR_3r_o}{C_5C_LR_3R_5r_o}}\\ \text{K-LP:} \frac{R_3(R_5g_mr_o+R_5-r_o)}{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}}\\ \text{K-HP:} 0\\ \text{K-BP:} -\frac{C_5R_3R_5g_mr_o+4C_5R_3R_5+C_5R_5r_o+C_LR_3R_5+C_LR_3r_o}{2C_5R_3R_5g_mr_o+4C_5R_3R_5+C_LR_3r_o}}\\ \text{Qz:} 0\\ \text{Wz:} \text{None} \end{array}$$

8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

$$Q\colon \frac{C_5C_LR_3R_5R_Lr_o\sqrt{\frac{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}{C_5C_LR_3R_5R_Lr_o}}{C_5C_LR_3R_5R_Lr_o}}{Wo: \sqrt{\frac{R_3R_5g_mr_o+4C_5R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}{C_5C_LR_3R_5R_Lr_o}}}{C_5C_LR_3R_5R_Lr_o}}{Ushadwidth: \frac{2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_5R_3R_5r_o+C_5R_5R_Lr_o+C_LR_3R_5R_Lg_mr_o+C_LR_3R_5R_L+C_LR_3R_Lr_o}{C_5C_LR_3R_5R_Lr_o}}{K-LP: \frac{R_3R_L(R_5g_mr_o+R_5R_L+R_Lr_o}{C_5C_LR_3R_5R_Lg_mr_o+R_5R_L+R_Lr_o}}{R_3R_L(R_5g_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o)}}}{K-BP: -\frac{C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_LR_3R_5R_Lr_o}{C_5C_LR_3R_5R_L+C_5R_3R_5R_Lr_o}}{K-S_6R_Lr_o+C_LR_3R_5R_L+C_LR_3R_Lr_o}}$$
Wz: None

8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_3 R_5 g_m r_o s^2 + C_5 C_L R_3 R_5 s^2 + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3 s + g_m r_o + 1}$$

Parameters:

Q: $\frac{C_5C_LR_3\sqrt{\frac{g_mr_o+1}{C_5C_LR_3(R_5g_mr_o+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{\frac{2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5C_LR_3(R_5g_mr_o+R_5+r_o)}}$ wo: $\sqrt{\frac{g_mr_o+1}{C_5C_LR_3(R_5g_mr_o+R_5+r_o)}}$ bandwidth: $\frac{2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5C_LR_3(R_5g_mr_o+R_5+r_o)}$ K-LP: R_3 K-HP: 0
K-BP: $\frac{C_5R_3(R_5g_mr_o+R_5-r_o)}{2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}$ Qz: 0
Wz: None

8.6 INVALID-NUMER-6 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L R_3 R_5 R_L g_m r_o s^2 + C_5 C_L R_3 R_5 R_L s^2 + C_5 C_L R_3 R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L g_m r_o s + C_5 R_5 R_L g_m r_o s + C_$

Parameters:

Q: $\frac{C_5C_LR_3R_L\sqrt{\frac{R_3g_mr_o+R_3+R_Lg_mr_o+R_L}{C_5C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{C_5R_3R_5g_mr_o+C_5R_3R_5+2C_5R_3R_Lg_mr_o+4C_5R_3r_a+C_5R_5R_Lg_mr_o+C_5R_5R_L+C_5R_Lr_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}$ wo: $\sqrt{\frac{R_3g_mr_o+R_3+R_Lg_mr_o+R_L}{C_5C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}$ bandwidth: $\frac{C_5R_3R_5g_mr_o+C_5R_3R_5+2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_5R_Lg_mr_o+C_5R_5R_L+C_5R_Lr_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}{C_5C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}$ K-LP: $\frac{R_3R_L}{R_3+R_L}$ K-HP: 0

K-BP: $\frac{C_5R_3R_5g_mr_o+C_5R_3R_5+2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_5R_L+C_5R_Lr_o+C_LR_3R_Lg_mr_o+C_LR_3R_L}{C_5C_LR_3R_L(R_5g_mr_o+R_5-r_o)}}$ Qz: 0
Wz: None

8.7 INVALID-NUMER-7 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}R_{L}s + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{L}R_{5}R_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}R_{5}R_{L}s^{2} + C_{3}C_{L}R_{L}r_{o}s^{2} + C_{3}R_{5}g_{m}r_{o}s + C_{3}R_{5}s + C_{3}r_{o}s + C_{L}R_{5}g_{m}r_{o}s + C_{L}R_{5}s + 2C_{L}R_{L}g_{m}r_{o}s + 4C_{L}R_{L}s + C_{L}r_{o}s + 2g_{m}r_{o} + 4C_{L}R_{L}s + C_{L}r_{o}s + 2g_{m}r_{o}s + 2g_{m}r$

Parameters:

8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_3 R_L s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

Parameters:

 $\begin{array}{c} C_3C_5R_Lr_o\sqrt{\frac{g_mr_o+1}{C_3C_5R_Lr_o}}\\ \text{Q:} \ \frac{C_3R_Lg_mr_o+C_3R_L+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_3R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{wo:} \ \sqrt{\frac{g_mr_o+1}{C_3C_5R_Lr_o}}\\ \text{bandwidth:} \ \frac{C_3R_Lg_mr_o+C_3R_L+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_3C_5R_Lr_o}\\ \text{K-LP:} \ R_L\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_5R_Lr_o}{C_3R_Lg_mr_o+C_3R_L+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$

8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_3 R_L s + C_5 C_L R_L r_o s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + C_L R_L g_m r_o s + C_L R_L s + g_m r_o + 1}$$

Parameters:

 $Q \colon \frac{C_5 R_L r_o \sqrt{\frac{g_m r_o + 1}{C_5 R_L r_o (C_3 + C_L)}}(C_3 + C_L)}{C_3 R_L g_m r_o + C_3 R_L + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}$ wo: $\sqrt{\frac{g_m r_o + 1}{C_5 R_L r_o (C_3 + C_L)}}$ bandwidth: $\frac{C_3 R_L g_m r_o + C_3 R_L + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}{C_5 R_L r_o (C_3 + C_L)}$ K-LP: R_L K-HP: 0 K-BP: $-\frac{C_5 R_L r_o}{C_3 R_L g_m r_o + C_3 R_L + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}}{Q_Z: 0}$ Wz: None

8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

Q:
$$\frac{C_3C_5R_5R_Lr_o\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_5R_5R_Lr_o}}}{C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}}$$
 wo:
$$\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_5R_5R_Lr_o}}$$
 bandwidth:
$$\frac{C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}{C_3C_5R_5R_Lr_o}}$$
 K-LP:
$$\frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_5R_Lr_o}{C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}}$$
 Qz:
$$0$$
 Wz: None

8.11 INVALID-NUMER-11
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_3C_5R_5r_os^2 + C_3R_5g_mr_os + C_3R_5s + C_3r_os + C_5C_LR_5r_os^2 + 2C_5R_5g_mr_os + 4C_5R_5s + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_5R_5s + C_LR_5g_mr_os + C_LR_5s + C_LR_$$

$$\begin{array}{c} \sqrt{2}C_{5}R_{5}r_{o}\sqrt{\frac{g_{m}r_{o}+2}{C_{5}R_{5}r_{o}(C_{3}+C_{L})}}}(C_{3}+C_{L})\\ \text{Q:} \ \frac{1}{C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+2C_{5}R_{5}g_{m}r_{o}+4C_{5}R_{5}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}\\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{5}R_{5}r_{o}(C_{3}+C_{L})}}\\ \text{bandwidth:} \ \frac{C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+2C_{5}R_{5}g_{m}r_{o}+4C_{5}R_{5}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}{C_{5}R_{5}r_{o}(C_{3}+C_{L})}\\ \text{K-LP:} \ \frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_{5}R_{5}r_{o}}{C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+2C_{5}R_{5}g_{m}r_{o}+4C_{5}R_{5}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o}}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s+1}, \frac{R_L}{C_L R_L s+1}\right)$

Parameters:

$$Q \colon \frac{C_5 R_5 R_L r_o \sqrt{\frac{R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}{C_5 R_5 R_L r_o (C_3 + C_L)}}}{C_3 R_5 R_L g_m r_o + C_5 R_5 R_L g_m r_o + 4 C_5 R_5 R_L + C_5 R_5 r_o + C_L R_5 R_L g_m r_o + C_L R_5 R_L + C_L R_L r_o}$$

$$\text{wo: } \sqrt{\frac{R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}{C_5 R_5 R_L r_o (C_3 + C_L)}}}$$

$$\text{bandwidth: } \frac{C_3 R_5 R_L g_m r_o + C_3 R_5 R_L + C_3 R_L r_o + 2 C_5 R_5 R_L g_m r_o + 4 C_5 R_5 R_L + C_5 R_5 r_o + C_L R_5 R_L g_m r_o + C_L R_5 R_L + C_L R_L r_o}{C_5 R_5 R_L r_o (C_3 + C_L)}}$$

$$\text{K-LP: } \frac{R_L (R_5 g_m r_o + R_5 - r_o)}{R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}}$$

$$\text{K-HP: } 0$$

$$\text{K-BP: } -\frac{C_5 R_5 R_L r_o}{C_3 R_5 R_L g_m r_o + C_3 R_5 R_L + C_3 R_L r_o + 2 C_5 R_5 R_L g_m r_o + 4 C_5 R_5 r_o + C_L R_5 R_L g_m r_o + C_L R_5 R_L + C_L R_L r_o}}$$

$$\text{Qz: } 0$$

$$\text{Wz: None}$$

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_5 R_L g_m r_o s^2 + C_3 C_5 R_5 R_L s^2 + C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_o s + 4 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_L\sqrt{\frac{g_mr_o+1}{C_3C_5R_L(R_5g_mr_o+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{C_3R_Lg_mr_o+C_3R_L+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{wo:} \ \sqrt{\frac{g_mr_o+1}{C_3C_5R_L(R_5g_mr_o+R_5+r_o)}}\\ \text{bandwidth:} \ \frac{C_3R_Lg_mr_o+C_3R_L+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_3C_5R_L(R_5g_mr_o+R_5+r_o)}\\ \text{K-LP:} \ R_L\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_5R_L(R_5g_mr_o+R_5-r_o)}{C_3R_Lg_mr_o+C_3R_L+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_5 R_L g_m r_o s^2 + C_3 C_5 R_5 R_L s^2 + C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_o s + C_5 R_5 g_m r_$$

Parameters:

$$\begin{array}{c} Q: \frac{C_5R_L\sqrt{\frac{g_mr_o+1}{C_5R_L(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}}{C_3R_Lg_mr_o+C_3R_L+C_5R_5g_mr_o+C_5R_5+C_5R_Lg_m}(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ Wo: \frac{g_mr_o+1}{C_5R_L(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ bandwidth: \frac{G_3R_Lg_mr_o+G_3R_L+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o+C_LR_Lg_mr_o+C_LR_L}{C_5R_L(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ K-LP: R_L\\ K-HP: 0\\ K-BP: \frac{C_5R_L(R_5g_mr_o+C_3R_L+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o+C_LR_Lg_mr_o+C_LR_L}{C_3R_Lg_mr_o+C_3R_L+C_5R_5g_mr_o+C_LR_5r_o+C_LR_Lg_mr_o+C_LR_L}\\ Wz: None \end{array}$$

8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_3 C_L R_3 R_5 R_L s^2 + C_3 C_L R_3 R_5 g_m r_o s + C_L R_5 R_5 g_m r_o$

Parameters:

$$Q \colon \frac{C_3C_LR_3R_L\sqrt{\frac{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{C_3R_3R_5g_mr_o+C_3R_3R_5+C_3R_3r_o+C_LR_3R_5g_mr_o+C_LR_3R_5+2C_LR_3R_Lg_mr_o+4C_LR_3R_L+C_LR_3r_o+C_LR_5R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}}\\ \text{wo: } \sqrt{\frac{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}}\\ \text{bandwidth: } \frac{C_3R_3R_5g_mr_o+C_3R_3R_5+C_3R_3r_o+C_LR_3R_5g_mr_o+C_LR_3R_5+2C_LR_3R_Lg_mr_o+4C_LR_3R_L+C_LR_3r_o+C_LR_5R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}\\ \text{K-LP: } \frac{R_3(R_5g_mr_o+R_5-r_o)}{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}}\\ \text{K-HP: 0} \\ \text{K-BP: } \frac{C_LR_3R_L(R_5g_mr_o+R_5-r_o)}{C_3R_3R_5g_mr_o+C_LR_3R_5g_mr_o+C_LR_3R_5+2C_LR_3R_Lg_mr_o+R_5-r_o)}}{C_3R_3R_2g_mr_o+4C_LR_3R_5+C_LR_3R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}}\\ \text{Wz: None}$$

8.16 INVALID-NUMER-16 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_3 R_L r_o s^2 + C_3 R_3 R_L g_m r_o s + C_3 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_L g$$

8.17 INVALID-NUMER-17
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_3 r_o s^2 + C_3 R_3 g_m r_o s + C_3 R_3 s + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3 s + g_m r_o + 1}$$

$$\begin{array}{c} C_5R_3r_o\sqrt{\frac{g_mr_o+1}{C_5R_3r_o(C_3+C_L)}}(C_3+C_L)\\ \text{Q:} \ \frac{G_3R_3g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5R_3r_o(C_3+C_L)}\\ \text{wo:} \ \sqrt{\frac{g_mr_o+1}{C_5R_3r_o(C_3+C_L)}}\\ \text{bandwidth:} \ \frac{C_3R_3g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5R_3r_o(C_3+C_L)}\\ \text{K-LP:} \ R_3\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_5R_3r_o}{C_3R_3g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_3 R_L r_o s^2 + C_3 R_3 R_L g_m r_o s + C_5 R_1 R_L r_o s^2 + 2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + C_L R_3 R_L g_m r_o s + C_L R_3 R_L s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_L r_o s + C_L r_o s$$

Parameters:

$$C_{5}R_{3}R_{L}r_{o}\sqrt{\frac{R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L}}{C_{5}R_{3}R_{L}r_{o}(C_{3}+C_{L})}}}(C_{3}+C_{L})$$
 Q:
$$\frac{C_{3}R_{3}R_{L}g_{m}r_{o}+C_{3}R_{3}R_{L}+2C_{5}R_{3}R_{L}g_{m}r_{o}+4C_{5}R_{3}R_{L}+C_{5}R_{3}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{3}R_{L}g_{m}r_{o}+C_{L}R_{3}R_{L}}}{C_{5}R_{3}R_{L}r_{o}(C_{3}+C_{L})}$$
 wo:
$$\sqrt{\frac{R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L}}{C_{5}R_{3}R_{L}r_{o}(C_{3}+C_{L})}}$$
 bandwidth:
$$\frac{C_{3}R_{3}R_{L}g_{m}r_{o}+C_{3}R_{3}R_{L}+2C_{5}R_{3}R_{L}g_{m}r_{o}+4C_{5}R_{3}R_{L}+C_{5}R_{3}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{3}R_{L}g_{m}r_{o}+C_{L}R_{3}R_{L}}{C_{5}R_{3}R_{L}r_{o}(C_{3}+C_{L})}}$$
 K-LP:
$$\frac{R_{3}R_{L}}{R_{3}+R_{L}}$$
 K-HP: 0
$$K-BP: -\frac{C_{5}R_{3}R_{L}r_{o}}{C_{3}R_{3}R_{L}g_{m}r_{o}+C_{3}R_{3}R_{L}+2C_{5}R_{3}R_{L}g_{m}r_{o}+4C_{5}R_{3}R_{L}+C_{5}R_{3}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{3}R_{L}g_{m}r_{o}+C_{L}R_{3}R_{L}}}{C_{3}R_{3}R_{L}+2C_{5}R_{3}R_{L}g_{m}r_{o}+4C_{5}R_{3}R_{L}+C_{5}R_{3}r_{o}+C_{5}R_{L}r_{o}+C_{L}R_{3}R_{L}g_{m}r_{o}+C_{L}R_{3}R_{L}}}$$
 Qz: 0 Wz: None

8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 R_3 R_5 R_L r_o s^2 + C_3 R_3 R_5 R_L g_m r_o s + C_3 R_3 R_5 R_L s + C_5 R_3 R_5 R_L g_m r_o s + 4 C_5 R_3 R_5 R_L s + C_5 R_3 R_5 r_o s + R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o r_o + R_5 R_L r_o s + R_5 R_L r_o$$

Parameters:
$$\frac{C_3C_5R_3R_5R_Lr_o\sqrt{\frac{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}{C_3C_5R_3R_5R_Lr_o}}{C_3R_3R_5R_Lg_mr_o+C_3R_3R_5R_L+C_3R_3R_Lr_o+2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_5R_3R_5r_o+C_5R_5R_Lr_o}}$$
 wo:
$$\sqrt{\frac{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o}{C_3C_5R_3R_5R_Lr_o}}}$$
 bandwidth:
$$\frac{C_3R_3R_5R_Lg_mr_o+C_3R_3R_5R_L+C_3R_3R_Lr_o+2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_5R_3R_5r_o+C_5R_5R_Lr_o}{C_3C_5R_3R_5R_Lr_o}}{K-LP: \frac{R_3R_L(R_5g_mr_o+R_5-r_o)}{R_3R_L(R_5g_mr_o+4R_3R_L+R_3r_o+R_5R_L+R_Lr_o)}}$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_3R_5R_Lr_o}{C_3R_3R_5R_Lg_mr_o+C_3R_3R_5R_L+C_3R_3R_Lr_o+2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5r_o+C_5R_5R_Lr_o}{C_3R_3R_5R_Lg_mr_o+C_3R_3R_5R_L+C_3R_3R_Lr_o+2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_5R_3R_5r_o+C_5R_5R_Lr_o}}{C_3R_3R_5R_Lg_mr_o+C_3R_3R_5R_L+C_3R_3R_Lr_o+2C_5R_3R_5R_Lg_mr_o+4C_5R_3R_5R_L+C_5R_3R_5r_o+C_5R_5R_Lr_o}}$$
 Wz: None

8.20 INVALID-NUMER-20
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

 $C_{5}R_{3}R_{5}r_{o}\sqrt{\frac{2R_{3}g_{m}r_{o}+4R_{3}+R_{5}g_{m}r_{o}+R_{5}+r_{o}}{C_{5}R_{3}R_{5}r_{o}(C_{3}+C_{L})}}}(C_{3}+C_{L})$ Q: $\frac{1}{C_{3}R_{3}R_{5}g_{m}r_{o}+C_{3}R_{3}R_{5}+C_{3}R_{3}r_{o}+2C_{5}R_{3}R_{5}g_{m}r_{o}+4C_{5}R_{3}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{3}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{5}+C_{L}R_{3}r_{o}}}$ wo: $\sqrt{\frac{2R_{3}g_{m}r_{o}+4R_{3}+R_{5}g_{m}r_{o}+R_{5}+r_{o}}{C_{5}R_{3}R_{5}r_{o}(C_{3}+C_{L})}}}$ bandwidth: $\frac{C_{3}R_{3}R_{5}g_{m}r_{o}+C_{3}R_{3}R_{5}+C_{3}R_{3}r_{o}+2C_{5}R_{3}R_{5}g_{m}r_{o}+4C_{5}R_{3}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{3}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{5}+C_{L}R_{3}r_{o}}{C_{5}R_{3}R_{5}r_{o}(C_{3}+C_{L})}}$ K-LP: $\frac{R_{3}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{2R_{3}g_{m}r_{o}+4R_{3}+R_{5}g_{m}r_{o}+R_{5}+r_{o}}}{C_{5}R_{3}R_{5}r_{o}}$ K-BP: $-\frac{C_{5}R_{3}R_{5}r_{o}}{C_{3}R_{3}R_{5}g_{m}r_{o}+C_{2}R_{3}R_{5}+C_{2$

8.21 INVALID-NUMER-21 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 R_3 R_5 R_L r_o s^2 + C_3 R_3 R_5 R_L g_m r_o s + C_3 R_3 R_5 R_L s + C_3 R_3 R_5 R_L r_o s^2 + 2 C_5 R_3 R_5 R_L g_m r_o s + 4 C_5 R_3 R_5 R_L s + C_5 R_3 R_5 R_L g_m r_o s + C_L R_3 R_5 R_L g_m r_o s + C_L$

Parameters:

$$C_{5}R_{3}R_{5}R_{L}r_{o}\sqrt{\frac{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}{C_{5}R_{3}R_{5}R_{L}r_{o}(C_{3}+C_{L})}}(C_{3}+C_{L})}}$$
Q:
$$\frac{C_{5}R_{3}R_{5}R_{L}g_{m}r_{o}+C_{3}R_{3}R_{5}R_{L}+C_{3}R_{3}R_{5}R_{L}+C_{5}R_{3}R_{5}R_{L}+C_{5}R_{3}R_{5}R_{L}+C_{5}R_{3}R_{5}R_{L}+C_{L}R_{3}R_{5}R_{L}+C_{L}R_{3}$$

8.22 INVALID-NUMER-22 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_3 R_5 R_L g_m r_o s^2 + C_3 C_5 R_3 R_5 R_L s^2 + C_3 C_5 R_3 R_L g_m r_o s + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_L g_m r_o s + C_5 R_3 R_L g_m r_o s + C_5 R_5 R_L g_m r_o s + C_5$

```
Q \colon \frac{C_3C_5R_3R_L\sqrt{\frac{R_3gm^ro+R_3+R_Lgm^ro+R_L}{C_3C_5C_3R_3R_L(R_5gm^ro+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{C_3R_3R_Lg_mr_o+C_5R_3R_5L_cS_3R_5L_cS_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_5R_Lg_mr_o+C_5R_5R_L+C_5R_Lr_o}\\ \text{wo: } \sqrt{\frac{R_3g_mr_o+R_3+R_Lg_mr_o+R_L}{C_3C_5R_3R_L(R_5g_mr_o+R_5+r_o)}}\\ \text{bandwidth: } \frac{C_3R_3R_Lg_mr_o+R_5+r_o}{C_3C_5R_3R_Lg_mr_o+C_5R_3R_5g_mr_o+C_5R_3R_5+2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_5R_Lg_mr_o+C_5R_5R_L+C_5R_Lr_o}{C_3C_5R_3R_L(R_5g_mr_o+R_5+r_o)}\\ \text{K-LP: } \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP: } 0\\ \text{K-BP: } \frac{C_5R_3R_L(R_5g_mr_o+R_5-r_o)}{C_3R_3R_Lg_mr_o+C_3R_3R_L+C_5R_3R_5g_mr_o+C_5R_3R_5+2C_5R_3R_Lg_mr_o+4C_5R_3R_L+C_5R_3r_o+C_5R_5R_Lg_mr_o+C_5R_5R_L+C_5R_Lr_o}\\ \text{Vz: None}
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8.23 INVALID-NUMER-23 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 R_3 R_5 g_m r_o s^2 + C_3 C_5 R_3 R_5 s^2 + C_3 C_5 R_3 r_o s^2 + C_3 R_3 g_m r_o s + C_5 R_4 g_m r_o s^2 + C_5 C_L R_3 R_5 s^2 + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3$$

Parameters:

$$\begin{array}{c} C_5R_3\sqrt{\frac{g_mr_o+1}{C_5R_3(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}}(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ Q\colon \frac{C_3R_3g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5R_3(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ \text{bandwidth:} \frac{g_mr_o+1}{C_5R_3(C_3R_5g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}{C_5R_3(C_3R_5g_mr_o+C_3R_5+C_3r_o+C_LR_5g_mr_o+C_LR_5+C_Lr_o)}\\ \text{K-LP: }R_3\\ \text{K-HP: }0\\ \text{K-BP: }\frac{C_5R_3(R_5g_mr_o+R_5-r_o)}{C_3R_3g_mr_o+C_3R_3+2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3}\\ \text{Qz: }0\\ \text{Wz: None} \end{array}$$

8.24 INVALID-NUMER-24 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 R_3 R_5 R_L g_m r_o s^2 + C_3 C_5 R_3 R_5 R_L s^2 + C_5 C_L R_3 R_5 R_L g_m r_o s^2 + C_5 C_L R_3 R_5 R_L s^2 + C_5 C_L R_3 R_5 g_m r_o s + C_5 R_5 R_5 g_m r_o s + C_5 R_5 g_m r_$

Parameters:

$$\begin{array}{c} C_{5}R_{3}R_{L}\sqrt{\frac{R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L}}{C_{5}R_{3}R_{L}(C_{3}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{L}}\\ \text{Wo:} \sqrt{\frac{R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+R_{L}}{C_{5}R_{3}R_{L}(C_{3}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}r_{o})}}\\ \text{bandwidth:} \frac{R_{3}g_{m}r_{o}+R_{3}+R_{L}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{L}}\\ C_{5}R_{3}R_{L}(C_{3}R_{5}g_{m}r_{o}+C_{5}R_{3}R_{L}+C_{5}R_{3}R_{$$

8.25 INVALID-NUMER-25 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}r_{o}s^{2}+2C_{3}R_{3}g_{m}r_{o}s+4C_{3}R_{3}s+C_{3}R_{5}g_{m}r_{o}s+C_{L}R_{5}g_{m}r_{o}s+C_{L}R_{5}g_{m}r_{o}s+C_{L}R_{5}s+C_{L}r_{o}s+2g_{m}r_{o}+4C_{L}R_{5}g_{m}r_{o}s+C_$$

8.26 INVALID-NUMER-26 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_3 C_L R_3 R_5 R_L s^2 + C_3 C_L R_3 R_5 g_m r_o s + C_3 R_3 R_5 g_m r_o s + C_3 R_3 R_5 g_m r_o s + C_3 R_5 R_L g_m r_o s + C_4 R_5 R_L g_m r_o$

Parameters:

 $Q \colon \frac{C_3C_LR_3R_L\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}(R_5g_mr_o+R_5+r_o)}{C_3R_3R_5g_mr_o+C_3R_3R_5+2C_3R_3R_Lg_mr_o+4C_3R_3R_c+C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+C_LR_5R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}}\\ \text{wo: } \sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}}\\ \text{bandwidth: } \frac{C_3R_3R_5g_mr_o+C_3R_3R_5+2C_3R_3R_Lg_mr_o+4C_3R_3R_L+C_3R_3r_o+C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+C_LR_5R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}}{C_3C_LR_3R_L(R_5g_mr_o+R_5+r_o)}}\\ \text{K-LP: } \frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}}{C_3R_3R_L(R_5g_mr_o+R_5-r_o)}\\ \text{K-BP: } \frac{C_3R_3R_5g_mr_o+C_3R_3R_5+2C_3R_3R_Lg_mr_o+4C_3R_3R_L+C_3R_3r_o+C_3R_5R_L+C_3R_Lr_o+C_LR_5R_Lg_mr_o+C_LR_5R_L+C_LR_Lr_o}{C_3R_3R_L(R_5g_mr_o+R_5-r_o)}\\ \text{Wz: None}$

9 INVALID-WZ

9.1 INVALID-WZ-1 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L R_3 R_L g_m r_o s^2 + 4 C_5 C_L R_3 R_L s^2 + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3 s + C_L R_4 g_m r_o s + C_L R_4 s + g_m r_o + 1}$

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_5C_L\sqrt{\frac{g_mr_o+1}{C_5C_L(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}}(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3+C_LR_Lg_mr_o+C_LR_L} \\ & \text{wo:} \ \sqrt{\frac{g_mr_o+1}{C_5C_L(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}} \\ & \text{bandwidth:} \ \frac{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_3+C_LR_Lg_mr_o+C_LR_L}{C_5C_L(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)} \\ & \text{K-LP:} \ R_3 \\ & \text{K-HP:} \ -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o}}{R_3(-C_5r_o+C_LR_Lg_mr_o+C_LR_L)} \\ & \text{K-BP:} \ \frac{R_3(-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}{2C_5R_3g_mr_o+4C_5R_3+C_5r_o+C_LR_3g_mr_o+C_LR_L} \\ & \text{Qz:} \ \frac{C_5C_LR_Lr_o\sqrt{\frac{g_mr_o+1}{C_5C_L(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}}{C_5r_o-C_LR_Lg_mr_o-C_LR_L} \\ & \text{Wz:} \ \sqrt{\frac{-g_mr_o-1}{C_5C_LR_Lr_o}} \end{aligned}$$

9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $\frac{R_{3}\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{2C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{2}+4C_{5}C_{L}R_{3}R_{5}r_{o}s^{2}+C_{5}C_{L}R_{5}R_{L}r_{o}s^{2}+2C_{5}R_{3}R_{5}g_{m}r_{o}s+4C_{5}R_{3}R_{5}s+C_{L}R_{3}R_{5}g_{m}r_{o}s+4C_{L}R_{3}R_{L}s+C_{L}R_{3}r_{o}s+C_{L}R_{3}R_{L}s+C_{L}R_{3}r_{o}s+C_{L}R_{5}R_{L}g_{m}r_{o}s+C_{L}R_{5}R_{L}s+C_{L}R_{5}R_{$

Parameters:

 $C_{5}C_{L}R_{5}\sqrt{\frac{2R_{3}g_{m}r_{o}+4R_{3}+R_{5}g_{m}r_{o}+R_{5}+r_{o}}{C_{5}C_{L}R_{5}(2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o})}}}(2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o}})$ Q: $\frac{2C_{5}R_{3}R_{5}g_{m}r_{o}+4C_{5}R_{3}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{3}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{5}+2C_{L}R_{3}R_{L}g_{m}r_{o}+4C_{L}R_{3}R_{L}+C_{L}R_{3}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{5}C_{L}R_{5}(2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o})}$ bandwidth: $\frac{2C_{5}R_{3}R_{5}g_{m}r_{o}+4C_{5}R_{3}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{3}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{5}+2C_{L}R_{3}R_{L}g_{m}r_{o}+4C_{L}R_{3}R_{L}+C_{L}R_{3}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{5}C_{L}R_{5}(2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o})}$ K-LP: $\frac{R_{3}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{2R_{3}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o}}$ K-HP: $-\frac{R_{3}R_{L}r_{o}}{2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{L}r_{o}}{R_{3}(C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{L}r_{o})}$ K-BP: $\frac{R_{3}(-C_{5}R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{L}r_{o})}{2C_{5}R_{3}R_{5}g_{m}r_{o}+4C_{5}R_{3}R_{5}+C_{5}R_{5}r_{o}+C_{L}R_{3}R_{5}g_{m}r_{o}+C_{L}R_{3}R_{L}+C_{L}R_{3}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L}+C_{L}R_{5}r_{c}+C_{L}R_{5}R_{L$

$$\begin{aligned} &\text{Qz:} \ \frac{C_5C_LR_5R_Lr_o\sqrt{\frac{2R_3g_mr_o+4R_3+R_5g_mr_o+R_5+r_o}{C_5C_LR_5(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}}}{C_5R_5r_o-C_LR_5}\\ &\text{Wz:} \ \sqrt{\frac{-R_5g_mr_o-R_5+r_o}{C_5C_LR_5R_Lr_o}} \end{aligned}$$

9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $\frac{R_{3}\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{5}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}R_{3}R_{L}s^{2}+C_{5}C_{L}R_{3}R_{L}s^{2}+C_{5}C_{L}R_{3}R_{c}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{c}s^{2}+C_{5}C_{L}R_{3}r_{o}s+C_{5}R_{5}g_{m}r_{$

Parameters:

$$Q: \frac{C_5C_L\sqrt{\frac{g_mr_o+1}{C_5C_L(R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+R_5R_Lg_mr_o+R_5R_L+R_Lr_o)}}{2C_5R_3g_mr_o+4R_3R_L+R_3r_o+R_5R_Lg_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3+C_LR_Lg_mr_o+C_LR_L}}{2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_3+C_LR_Lg_mr_o+C_LR_L}} \\ wo: \sqrt{\frac{g_mr_o+1}{C_5C_L(R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+R_5R_L+R_Lr_o)}}{C_5C_L(R_3R_5g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_L}} \\ bandwidth: \frac{2C_5R_3g_mr_o+4C_5R_3+C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_3g_mr_o+C_LR_L}{C_5C_L(R_3R_5g_mr_o+R_5R_2+R_Lr_o)}} \\ K-LP: R_3 \\ K-HP: \frac{R_3R_L(R_5g_mr_o+R_5-r_o)}{R_3R_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+R_5R_L+R_Lr_o}} \\ K-BP: \frac{R_3R_L(R_5g_mr_o+R_5-r_o)}{R_3(C_5R_5g_mr_o+C_5R_5+C_5r_o+C_LR_2g_mr_o+C_LR_L)} \\ \frac{C_5C_LR_L\sqrt{\frac{g_mr_o+1}{C_5C_LR_3g_5g_mr_o+R_3R_5+2R_3R_Lg_mr_o+R_5R_L+R_Lr_o)}}}{C_5C_LR_2g_mr_o+R_3R_5+2R_3R_Lg_mr_o+R_5R_L+R_Lr_o)}} \\ Qz: \frac{C_5C_5C_LR_L\sqrt{\frac{g_mr_o+1}{C_5C_LR_2g_mr_o+R_5R_5+C_5r_o+C_LR_2g_mr_o+C_LR_L}}}{C_5C_LR_L(R_5g_mr_o+R_5R_5+C_5r_o+C_LR_2g_mr_o+R_5R_L+R_Lr_o)}} \\ (R_5g_mr_o+R_5-r_o)} \\ Wz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L)}} \\ Vz: \sqrt{\frac{g_mr_o+1}{C_5C_LR_L(R_5g_mr_o+R_5-C_5r_o+C_LR_Lg_mr_o+C_LR_L}}{C_$$

9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $\frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}R_{L}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{c}s^{2}+C_{3}C_{L}R_{5}R_{L}s^{2}+C_{3}C_{L}R_{5}$

Parameters:

$$\begin{array}{c} \sqrt{2}C_{3}C_{L}\sqrt{\frac{g_{m}r_{o}+2}{C_{3}C_{L}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o})}}}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o})}\\ 2C_{3}R_{3}g_{m}r_{o}+4C_{3}R_{3}+C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}\\ wo: \sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{3}C_{L}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o})}}\\ bandwidth: \frac{2C_{3}R_{3}g_{m}r_{o}+4C_{3}R_{3}+C_{3}R_{5}g_{m}r_{o}+C_{3}R_{5}+C_{3}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}{C_{3}C_{L}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+4R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o})}\\ K-LP: \frac{R_{5}g_{m}r_{o}+R_{5}-r_{o}}{2(g_{m}r_{o}+2)}\\ K-HP: \frac{R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}{2C_{3}R_{3}R_{5}g_{m}r_{o}+C_{3}R_{3}R_{5}+C_{3}R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}}\\ K-BP: \frac{C_{3}R_{3}R_{5}g_{m}r_{o}+C_{3}R_{3}R_{5}+2R_{3}R_{L}g_{m}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}}{2C_{3}R_{3}R_{3}g_{m}r_{o}+C_{3}R_{3}R_{5}+C_{3}R_{3}R_{5}+C_{3}R_{3}g_{m}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}R_{L}-R_{L}r_{o}}}\\ Qz: \frac{\sqrt{2}C_{3}C_{L}R_{3}R_{L}\sqrt{C_{3}C_{L}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o}})}{C_{3}R_{3}C_{L}R_{3}R_{L}\sqrt{C_{3}C_{L}(R_{3}R_{5}g_{m}r_{o}+R_{3}R_{5}+R_{3}R_{L}+R_{3}r_{o}+R_{5}R_{L}g_{m}r_{o}+R_{5}R_{L}+R_{L}r_{o})}}\\ Wz: \sqrt{\frac{1}{C_{3}C_{L}R_{3}R_{L}}}} \\ Wz: \sqrt{\frac{1}{C_{3}C_{L}R_{3}R_{L}}}} \\ \frac{\sqrt{2}C_{3}C_{L}R_{3}R_{L}}{C_{3}C_{L}R_{3}R_{L}}}{C_{3}C_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}r_{o}+R_{5}R_{L}R_{m}r_{o}+R_{5}R_{L}R_{L}r_{o})}}\\ \frac{\sqrt{2}C_{3}C_{L}R_{3}R_{L}}{C_{3}C_{L}R_{3}R_{L}}}{C_{3}C_{L}R_{3}R_{L}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}R_{L}R_{3}$$

9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$

$$Q: \frac{C_3C_5\sqrt{\frac{g_mr_o+1}{C_3C_5\left(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o\right)}}(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}{C_3R_3g_mr_o+C_3R_3+C_3R_Lg_mr_o+C_3R_L+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ \text{WO: } \sqrt{\frac{g_mr_o+1}{C_3C_5\left(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o\right)}}$$

```
bandwidth: \frac{C_3R_3g_mr_o + C_3R_3 + C_3R_Lg_mr_o + C_3R_L + 2C_5R_Lg_mr_o + 4C_5R_L + C_5r_o}{C_3C_5(2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o)}
                K-LP: R_L
              \begin{array}{l} \text{K-H-}: R_L \\ \text{K-HP:} - \frac{R_3 R_L r_o}{2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_L r_o} \\ \text{K-BP:} \quad \frac{R_L (C_3 R_3 g_m r_o + C_3 R_3 - C_5 r_o)}{C_3 R_3 g_m r_o + C_3 R_3 + C_3 R_L g_m r_o + C_3 R_L + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o} \end{array} 
                                                   \frac{C_3C_5R_3r_o\sqrt{\frac{g_mr_o+1}{C_3C_5\left(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o\right)}}}{C_3R_3g_mr_o+C_3R_3-C_5r_o}
                 Wz: \sqrt{\frac{-g_m r_o - 1}{C_3 C_5 R_3 r_o}}
9.6 INVALID-WZ-6 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)
                                                  \frac{1}{2C_3C_5R_3R_5R_Lq_mr_os^2 + 4C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_5R_Lr_os^2 + C_3R_3R_5q_mr_os + C_3R_3R_5q_mr_os + 4C_3R_3R_Ls + C_3R_5R_Lq_mr_os + 4C_5R_5R_Ls + C_5R_5r_os + R_5q_mr_os + C_5R_5R_Ls + C_5R_5r_os + C_5R_5R_Ls + C_5R_5r_os + C_5R_5R_Ls + C_5R_5r_os +
       Parameters:
```

```
Q\colon \frac{C_3C_5R_5\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_5R_5(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}}(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o)}{C_3R_3R_5g_mr_o+C_3R_3R_5+2C_3R_3R_Lg_mr_o+4C_3R_3R_L+C_3R_3r_o+C_3R_5R_Lg_mr_o+C_3R_5R_L+C_3R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}
 \begin{array}{l} \text{K-LP: } \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{K-HP: } -\frac{R_3R_Lr_o}{2R_3R_Lg_mr_o + 4R_3R_L + R_3r_o + R_Lr_o} \end{array}
\text{K-BP:} \ \frac{R_L(C_3R_3R_5g_mr_o + C_3R_3r_o - C_5R_5r_o)}{C_3R_3R_5g_mr_o + C_3R_3R_5 + 2C_3R_3R_Lg_mr_o + 4C_3R_3R_L + C_3R_3R_5 - C_3R_5R_Lg_mr_o + C_3R_5R_Lr_o + 2C_5R_5R_Lg_mr_o + 4C_5R_5R_L + C_5R_5r_o}
              \frac{C_3C_5R_3R_5r_o\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_3C_5R_5\left(2R_3R_Lg_mr_o+4R_3R_L+R_3r_o+R_Lr_o\right)}}{C_3R_3R_5g_mr_o+C_3R_3R_5-C_3R_3r_o-C_5R_5r_o}
```

9.7 INVALID-WZ-7 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

```
R_L(C_3R_3s+1)(C_5R_5g_mr_os+C_5R_5s-C_5r_os+g_mr_o+1)
```

 $R_L (C_3 R_3 s + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)$

 $H(s) = \frac{1}{C_3C_5R_3R_5g_mr_os^2 + C_3C_5R_3R_5s^2 + 2C_3C_5R_3R_Lg_mr_os^2 + 4C_3C_5R_3r_os^2 + C_3C_5R_3r_os^2 + C_3C_5R_5R_Lg_mr_os^2 + C_3C_5R_5R_Lg_mr_os^2 + C_3C_5R_3r_os^2 + C_3C_5R_5R_Lg_mr_os^2 + C_3C_5R_3r_os^2 + C_$

Parameters:

```
\frac{\frac{g_m r_o + 1}{C_3 C_5 \left(R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o\right)}{\left(R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o\right)}}
 wo: \sqrt{\frac{g_m r_o + 1}{C_3 C_5 (R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o)}}bandwidth: \frac{C_3 R_3 g_m r_o + C_3 R_3 + C_3 R_L g_m r_o + C_3 R_1 + C_5 R_5 g_m r_o + C_5 R_5 + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o}{C_3 C_5 (R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o)}
     K-LP: R_L
 \begin{aligned} & \text{K-LP: } R_L \\ & \text{K-HP: } \frac{R_3 R_L (R_5 g_m r_o + R_5 - r_o)}{R_3 R_5 g_m r_o + R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o} \\ & \text{K-BP: } \frac{R_L (C_3 R_3 g_m r_o + C_3 R_3 + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o)}{C_3 R_3 g_m r_o + C_3 R_4 - C_3 R_L + C_5 R_5 g_m r_o + C_5 R_5 + 2 C_5 R_L g_m r_o + 4 C_5 R_L + C_5 r_o} \\ & Q_Z: \frac{C_3 C_5 R_3 \sqrt{\frac{C_3 C_5 (R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_5 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o)}}{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 - C_5 r_o} \\ & \frac{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 - C_5 r_o}{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 - C_5 r_o} \\ & \frac{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 - C_5 r_o}{C_3 R_3 g_m r_o + C_5 R_5 - C_5 r_o} \\ & \frac{C_3 R_3 g_m r_o + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o}{C_3 R_3 g_m r_o + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o} \\ & \frac{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o}{C_3 R_3 g_m r_o + C_5 R_5 g_m r_o + C_5 R_5 - C_5 r_o} \\ & \frac{C_3 R_3 g_m r_o + C_3 R_3 R_5 g_m r_o + C_5 R_5 g_m r_o + R_5 R_L g_m r_o + R
     Wz: \sqrt{\frac{g_m r_o + 1}{C_3 C_5 R_3 (R_5 g_m r_o + R_5 - r_o)}}
```

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (\infty, \infty, R_3, \infty, R_5, R_L)$

$$H(s) = \frac{R_3 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{1}{C_{Ls}}\right)$

$$H(s) = \frac{R_3 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L R_3 R_5 g_m r_o s + C_L R_3 R_5 s + C_L R_3 r_o s + 2R_3 g_m r_o + 4R_3 + R_5 g_m r_o + R_5 + r_o}$$

10.3 INVALID-ORDER-3 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L R_3 R_5 R_L g_m r_o s + C_L R_3 R_5 R_L s + C_L R_3 R_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}$$

10.4 INVALID-ORDER-4 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_L R_3 R_5 g_m r_o s + C_L R_3 R_5 s + 2 C_L R_3 R_L g_m r_o s + 4 C_L R_3 R_L s + C_L R_3 r_o s + C_L R_5 R_L g_m r_o s + C_L R_5 R_L s + C_L R_1 r_o s + 2 R_3 g_m r_o + 4 R_3 + R_5 g_m r_o + R_5 + r_o r_o}$$

10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_L}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2C_5 C_L L_L R_3 g_m r_o s^3 + 4C_5 C_L L_L R_3 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_3 r_o s^2 + 2C_5 R_3 g_m r_o s + 4C_5 R_3 s + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L s^2 + C_L R_3 g_m r_o s + C_L R_3 s + g_m r_o + 1}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_3 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_L R_3 r_o s^3 + 2 C_5 L_L R_3 g_m r_o s^2 + 4 C_5 L_L R_3 s^2 + C_5 L_L r_o s^2 + C_5 R_3 r_o s + C_L L_L R_3 g_m r_o s^2 + C_L L_L R_3 s^2 + L_L g_m r_o s + L_L s + R_3 g_m r_o + R_3 r_o s + C_L R_3 r_o s + C$$

10.8 INVALID-ORDER-8 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2C_5 C_L L_L R_3 g_m r_o s^3 + 4C_5 C_L L_L r_o s^3 + 2C_5 C_L R_3 R_L g_m r_o s^2 + 4C_5 C_L R_3 r_o s^2 + C_5 C_L R_3 r_o s^2 + 2C_5 R_3 g_m r_o s + 4C_5 R_3 s + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L g_m r_o s^2 + C_L R_3 g_m r_o s + C_L R$$

10.9 INVALID-ORDER-9 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_L R_3 R_L r_o s^3 + 2 C_5 L_L R_3 R_L g_m r_o s^2 + 4 C_5 L_L R_3 R_L s^2 + C_5 L_L R_3 r_o s^2 + C_5 L_L R_1 r_o s^2 + C_5 L_L R_3 R_L g_m r_o s^2 + C_L L_L R_3 R_L g_m r_o s + L_L R_3 g_m r_o s + L_L$$

10.10 INVALID-ORDER-10 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L R_L s^2 + L_L s + R_L \right)}{2 C_5 C_L L_L R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_L R_3 r_o s^3 + C_5 C_L L_L R_3 r_o s^3 + 2 C_5 L_L R_3 g_m r_o s^2 + 4 C_5 L_L R_3 s^2 + C_5 L_L R_3 r_o s^3 + 2 C_5 L_L R_3 g_m r_o s^2 + 4 C_5 L_L R_3 r_o s^3 + 2 C_5 L_L R_3 r_o s^3 +$

10.11 INVALID-ORDER-11 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_L R_3 r_o s^3 + C_5 C_L L_L R_1 r_o s^3 + C_5 C_L L_R R_3 R_L r_o s^2 + 2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + C_L L_L R_3 g_m r_o s^2 + C_L R_3 g_m r_o s$

10.12 INVALID-ORDER-12 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{2 C_5 R_3 R_5 R_L g_m r_o s + 4 C_5 R_3 R_5 R_L s + C_5 R_3 R_5 r_o s + C_5 R_5 R_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}$

10.13 INVALID-ORDER-13 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{2C_5 C_L L_L R_3 R_5 g_m r_o s^3 + 4C_5 C_L L_L R_5 r_o s^3 + C_5 C_L L_L R_5 r_o s^3 + C_5 C_L R_3 R_5 r_o s^2 + 2C_5 R_3 R_5 g_m r_o s + 4C_5 R_3 R_5 s + C_5 R_5 r_o s + 2C_L L_L R_3 g_m r_o s^2 + 4C_L L_L R_5 g_m r_o s^2 + C_L R_3 R_5 g_m r_o s^2 + C_L R_5 g_m r_o s^2 + C$

10.14 INVALID-ORDER-14 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_3 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_L R_3 R_5 r_o s^3 + 2 C_5 L_L R_3 R_5 g_m r_o s^2 + 4 C_5 L_L R_3 R_5 s^2 + C_5 L_L R_5 r_o s^2 + C_5 L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_5 g_m r_o s^2 + 2 L_L R_3 g_m r_o s + 4 L_L R_3 s + L_L R_5 g_m r_o s + L_L R_5 s + L_L r_o s + R_3 R_5 g_m r_o s + R_3 R_5 r_o s +$

10.15 INVALID-ORDER-15 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{2 C_5 C_L L_L R_3 R_5 g_m r_o s^3 + 4 C_5 C_L L_L R_3 R_5 s^3 + C_5 C_L L_L R_3 r_o s^2 + 2 C_5 C_L R_3 R_5 R_L s^2 + C_5 C_L R_3 R_5 r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s + 4 C_5 R_3 R_5 s + C_5 R_5 r_o s + 2 C_L L_L R_3 g_m r_o s^2 + 4 C_L L_L R_3 g_m r_o s^2 + C_L L_L R_3 g_m r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s + 4 C_5 R_3 R_5 r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s^2 + 4 C_5 R_4 R_5 r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s^2 + 4 C_5 R_5 r_o s^2 + 2 C_5$

10.16 INVALID-ORDER-16 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_5 C_L L_L R_3 R_5 R_L r_o s^3 + 2 C_5 L_L R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_L R_3 R_5 R_L s^2 + C_5 L_L R_3 R_5 R_L r_o s^2 + C_5 L_L R_3 R_5 R_L r_o s^2 + C_L L_L R_3 R_5 R_L r_o s^2 + C_L L_L R_3 R_5 R_L r_o s^2 + L_L R_3 R_5 R_L$

10.17 INVALID-ORDER-17 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L R_1 S^2 + L_L S + R_1 S^2 + L_L S + R_2 S^2 + C_2 L_L R_3 R_5 R_L S^3 + C_5 C_L L_L R_5 R_L S^3 + C_5$

10.18 INVALID-ORDER-18 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

 $R_3R_L\left(C_LL_Ls^2+1\right)\left(C_5R_5r_os-R_5g_mr_o-1\right)$

 $-\frac{R_3R_L\left(C_LL_Ls + 1\right)\left(C_5R_5r_os - R_5g_mr_o - 2C_5C_LL_LR_3R_5R_Lg_mr_os^3 + 4C_5C_LL_LR_3R_5R_Ls^3 + C_5C_LL_LR_3R_5r_os^3 + C_5C_LL_LR_3R_5R_Lr_os^2 + 2C_5R_3R_5R_Lg_mr_os + 4C_5R_3R_5r_os + C_5R_3R_5r_os + C_5R_3$

10.19 INVALID-ORDER-19 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_5 s + 2 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_5 R_L g_m r_o s + C_5 R_5 R_L s + C_5 R_L r_o s + R_3 g_m r_o + R_3 + R_L g_m r_o + R_L g_m r_o s + C_5 R_5 R_L g_m r_o s + C_5 R_$

10.20 INVALID-ORDER-20 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L L_L r_o s^3 + C_5 C_L R_3 R_5 g_m r_o s^2 + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L R_3 g_m r_o s + C_L R_3 g_m r_$

10.21 INVALID-ORDER-21 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_3 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_L R_3 R_5 g_m r_o s^3 + C_5 C_L L_L R_3 r_o s^3 + 2 C_5 L_L R_3 g_m r_o s^2 + 4 C_5 L_L R_3 s^2 + C_5 L_L R_5 g_m r_o s^2 + C_5 L_L R_5 s^2 + C_5 L_L R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s + C_5 R_3 R_5 g_m r_o s^2 + C_L L_L R_3 g_m r_o s^2 + L_L g_m r_o s + L_L s + R_3 g_m r_o s +$

10.22 INVALID-ORDER-22 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $R_{3}\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)$ $H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{2 C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_5 g^3 + C_5 C_L R_3 R_5 g^2 + 2 C_5 C_L R_3 R_L g^2 + C_5 C_L R_L g^2 + C_5$

10.23 INVALID-ORDER-23 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_F} + \frac{1}{L_L s}} \right)$

 $H(s) = \frac{L_L R_3 R_5 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_5 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_5 R_L g_m r_o s^2 + C_5 L_L R_3 R_5 g_m r_o s^2 + C_5 L_L R_5 g_m$

10.24 INVALID-ORDER-24 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.25 INVALID-ORDER-25 $Z(s) = \left(\infty, \infty, R_3, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$

 $R_3R_L\left(C_LL_Ls^2+1\right)\left(C_5R_5g_mr_os+C_5R_5s-\right)$ $H(s) = \frac{1}{C_5C_LL_LR_3R_5g_mr_os^3 + C_5C_LL_LR_3R_5g_mr_os^3 + C_5C_LL_Rg_mr_os^3 + C_5C$ **10.26** INVALID-ORDER-26 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_3 s^3 + C_5 C_L R_3 r_o s^2 + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 r_o s + C_L R_3 g_m r_o s + C_L R_3 s + g_m r_o + 1}$$

10.27 INVALID-ORDER-27 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_3 R_L g_m r_o s^3 + C_5 C_L L_5 R_3 R_L s^3 + C_5 C_L R_3 R_L r_o s^2 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_L g_m r_o s + 4 C_5 R_3 R_L s + C_5 R_3 r_o s + C_5 R_L r_o s + C_L R_3 R_L g_m r_o s + C_L R_3 R_L g_m$$

10.28 INVALID-ORDER-28 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^2 + 2 C_5 C_L R_3 R_L g_m r_o s^2 + 2 C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_3 r_o s^2 + C_5 C_L R_3 r_o s^2 + C_5 L_5 g_m r_o s^2 + C_5 L_5 g_m r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 r_o s + C_L R_3 g_m r_$$

10.29 INVALID-ORDER-29 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 L_L g_m r_o s^4 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_3 s^3 + 2 C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_3 s^3 + C_5 C_L L_L R_3 r_o s^2 + C_5 L_5 g_m r_o s^$$

10.30 INVALID-ORDER-30 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 s^4 + C_5 C_L L_L R_3 r_o s^3 + C_5 L_5 L_L g_m r_o s^3 + C_5 L_5 L_L s^3 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_L R_$$

10.31 INVALID-ORDER-31 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 L_L g_m r_o s^4 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_2 g_m r_o s^3 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L R_5 g_m$$

10.32 INVALID-ORDER-32 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_5 C_L L_5 L_L R_3 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_L r_o s^3 + C_5 L_5 L_L R_3 g_m r_o s^3 + C_5 L_5 L_L R_3 r_o s^3 + C_5 L_5 R_3 r_o s^3 + C_5 L_$$

10.33 INVALID-ORDER-33 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{R_3 \left(C_L L_L R_L s^2 + L_L s + R_L \right) \left(C_5 L_5 g_m r_o s^2 + C_5 C_L L_L R_3 r_o s^3 + C_5 L_L L_R r_o s^3 + C_5 L_L r_$$

10.34 INVALID-ORDER-34
$$Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $R_3 R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 \right)$

 $H(s) = \frac{R_3R_L \left(C_L L_L s + 1 \right) \left(C_5 L_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 R_3 R_L g_m r_o s^3 + C_5 C_L L_5 R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 r_o$

10.35 INVALID-ORDER-35 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

10.36 INVALID-ORDER-36 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_5 C_L L_5 R_3 R_L r_o s^3 + 2 C_5 L_5 R_3 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_L s^2 + C_5 L_5 R_3 r_o s^2 + C_5 L_5 R_3 R_L g_m r_o s^2 + C_L L_5 R_3 R_L g_m r_o s^2 + C_L L_5 R_3 R_L r_o s + L_5 R_3 g_m r_o s + L$

10.37 INVALID-ORDER-37 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_5 C_L L_5 R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L L_5 R_4 r_o s^3 + 2 C_5 L_5 R_3 g_m r_o s^2 + 4 C_5 L_5 R_3 s^2 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_4 g_m r_o s^2 + C_L L_5 R_5 g_m r_o s^2 +$

10.38 INVALID-ORDER-38 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_5 C_L L_5 L_L R_3 g_m r_o s^4 + 4 C_5 C_L L_5 L_L r_o s^4 + C_5 C_L L_5 R_3 r_o s^3 + 2 C_5 L_5 R_3 g_m r_o s^2 + 4 C_5 L_5 R_3 s^2 + C_L L_5 L_L g_m r_o s^3 + C_L L_5 L_L g_m r_o s^3 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^2 + 4 C_L L_L R_3 g_m r_o s^2 + 4 C_L L_L R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o$

10.39 INVALID-ORDER-39 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_3 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_5 C_L L_5 L_L R_3 r_o s^4 + 2 C_5 L_5 L_L R_3 g_m r_o s^3 + 4 C_5 L_5 L_L R_3 s^3 + C_5 L_5 L_L r_o s^3 + C_5 L_5 L_L R_3 g_m r_o s^3 + C_L L_5 L_L R_3 g_m r_o s^3 + C_L L_5 L_L R_3 r_o s^2 + L_5 L_L g_m r_o s^2$

10.40 INVALID-ORDER-40 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_{Ls}}\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{2 C_5 C_L L_5 L_L R_3 g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_3 s^4 + C_5 C_L L_5 R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_3 R_L s^3 + C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + 2 C_5 L_5 R_3 g_m r_o s^2 + 4 C_5 L_5 R_3 g_m r_o s^3 + C_L L_5 L_L g_m r_o s^3 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^3 + C_L L_5 R_3 g_m r_o s^3$

10.41 INVALID-ORDER-41 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_5 C_L L_5 L_L R_3 R_L r_o s^4 + 2 C_5 L_5 L_L R_3 R_L g_m r_o s^3 + 4 C_5 L_5 L_L R_3 r_o s^3 + C_5 L_5 L_L R_3 r_o s^3 + C_5 L_5 L_L R_3 R_L r_o s^3 + C_5 L_5 L_L R_3$

10.42 INVALID-ORDER-42 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $R_3 \left(C_L L_L R_L s^2 + L_L s + L_L s \right)$

 $H(s) = -\frac{1.3 \left(C_L L_L L_R R_3 R_L g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_3 R_L s^4 + C_5 C_L L_5 L_L R_3 r_o s^4 + 2 C_5 L_5 L_L R_3 g_m r_o s^3 + 4 C_5 L_L L_R R_3 r_o s^3 + 2 C_5 L_5 L_L R_3 g_m r_o s^3 + 4 C_5 L_L R_3 R_L g_m r_o s^3 + 4 C_5 L_L R_3 R$

10.43 INVALID-ORDER-43 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $\frac{1}{2C_5C_LL_5L_LR_3R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_3R_Ls^4 + C_5C_LL_5L_LR_3r_os^4 + C_5C_LL_5L_LR_2r_os^4 + C_5C_LL_5R_3R_Lr_os^3 + 2C_5L_5R_3R_Lg_mr_os^2 + 4C_5L_5R_3R_Ls^2 + C_5L_5R_3r_os^2 + C_5L_5R_3r_os^2 + C_5L_5L_LR_3g_mr_os^3 + C_LL_5L_LR_3g_mr_os^3 + C_LL_5L_LR_3g_mr_os^3 + C_LL_5L_LR_3g_mr_os^3 + C_LL_5L_LR_3g_mr_os^3 + C_LL_5L_Rg_mr_os^3 + C_LL_5L_Rg$

10.44 INVALID-ORDER-44 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_3 s^3 + C_5 C_L R_3 R_5 g_m r_o s^2 + C_5 C_L R_3 r_o s^2 + C_5 L_5 g_m r_o s^2 + C_5 L_5 g_m r_o s^2 + C_5 L_5 g_m r_o s + 4 C_5 R_3 g_m r_o s + C_5 R_5 g_m r_o s + C_$

10.45 INVALID-ORDER-45 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $R_3R_L\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)$ $H(s) = \frac{R_3R_L\left(C_5L_5g_mr_os + C_5L_5s + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)}{C_5C_LL_5R_3R_Lg_mr_os^3 + C_5L_Lt_5R_3R_Lg_mr_os^2 + C_5L_5R_3g_mr_os + C_5L_5R_3g_mr_os + C_5R_3R_5g_mr_os + C_5R_3R_5g_mr_os + C_5R_3R_Lg_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os + C_5R_3R_5g_mr_os + C_5R_5g_mr_os + C_5R_5g_mr_os$

10.46 INVALID-ORDER-46 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right)$

 $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L R_3 R_5 g_m r_o s^2 + C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_$

10.47 INVALID-ORDER-47 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $R_3\left(C_L L_L s^2 + 1\right)\left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)$ $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 L_L g_m r_o s^4 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L L_L R_3 g_m r_o s^3 + C_5 C_L R_3 R_5 g_m r_o s^3 + C_5 C_L R_3 R_5 g_m r_o s^3 + C_5 C_L R_3 r_o$

10.48 INVALID-ORDER-48 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_{5,8}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_L R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)$ $H(s) = \frac{L_L R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 R_5 g_m r_o s + C_5 r_o s + g_m r_o + 1 \right)}{C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_L R_3 R_5 g_m r_o s^3 + C_5 L_L L_R R_3 r_o s^3 + C_5 L_L L_R R_3 g_m r_o s^3 + C_5 L_L L_R R_3 g_m r_o s^2 + C_5 L_L R_3 g_m r_o$

10.49 INVALID-ORDER-49 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_5 g_m r \right)$ $H(s) = \frac{1}{C_5C_LL_5L_Lq_mr_os^4 + C_5C_LL_5R_3q_mr_os^3 + C_5C_LL_5R_3g_mr_os^3 + C_5C_LL_5R_3g_mr$

10.50 INVALID-ORDER-50
$$Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $L_L R_3 R_L s \left(C_5 L_5 g_m r_o s \right)$

 $H(s) = \frac{L_L R_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L L_R R_3 R_L g_m r_o s^3 + C_5 L_L R_3 R_L$

10.51 INVALID-ORDER-51 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_3g_mr_os^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_2g_mr_os^4 + C_5C_LL_LR_3R_5g_mr_os^3 + C_5C_LL_LR_3R_5g_mr_os^3 + C_5C_LL_LR_3R_Lg_mr_os^3 + C_5C_LL_LR_3R$

10.52 INVALID-ORDER-52 $Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_3g_mr_os^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_2g_mr_os^4 + C_5C_LL_5R_3R_Lg_mr_os^3 + C_5C_LL_5R_3R_Lg_mr_os^3 + C_5C_LL_LR_3R_5g_mr_os^3 + C_5C_LLR_3R_5g_mr_os^3 + C_5C_LLR_3R_5g_mr_os^3 + C_5C_LLR_3R_5g_mr_os^3 + C_5C_LLR_3R_5g_mr_o$

10.53 INVALID-ORDER-53 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_5 C_L L_5 R_3 R_5 r_o s^3 + 2 C_5 L_5 R_3 R_5 g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 s^2 + C_L L_5 R_3 R_5 g_m r_o s^2 + C_L L_5 R_3 R_5 r_o s^2 + C_L L_5 R_3 R_5 r_o s^2 + C_L L_5 R_3 r_o s^2 + C_L L_5 R_3 r_o s^2 + C_L R_3 R_5 r_o s + 2 L_5 R_3 g_m r_o s + L_5 R_5 g_m r_o$

10.54 INVALID-ORDER-54 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $R_3R_L\left(-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o\right)$

 $H(s) = \frac{R_3R_L\left(-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o\right)}{C_5C_LL_5R_3R_5R_Lr_os^3 + 2C_5L_5R_3R_5R_Lg_mr_os^2 + 4C_5L_5R_3R_5r_os^2 + C_5L_5R_3R_5r_os^2 + C_LL_5R_3R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2 + C_LL_5R_5R_Lr_os^2$

10.55 INVALID-ORDER-55 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, R_L + \frac{1}{C_L s}\right)$

 $R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 R_5 r_o s^2 - L_5 R_5 g_m r_o s - L_5 R_5 s + L_5 r_o s^2 \right)$

 $\frac{R_3 \left(C_L R_L S + I\right) \left(C_5 L_5 R_3 R_5 R_L g_m r_o S^3 + 4 C_5 C_L L_5 R_3 R_5 r_o S^3 + C_5 L_L F_{R_3} R_5 r_o S^2 + C_L L_5 R_3 R_5 r_o S^2 + C_L L_5 R_5 R_5 r_o S^2 + C_L L_5 R_5$

10.56 INVALID-ORDER-56 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, L_L s + \frac{1}{C_L s}\right)$

 $R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 r_o s^2 - L_5 R_5 g_m r_o s - L_5 R_5 s + L_5 r_o s^2 \right)$

 $\frac{113\left(C_L L_L s + 1\right)\left(C_5 L_5 L_1 R_3 R_5 q_m r_o s^4 + 4 C_5 C_L L_5 L_L R_3 R_5 s^4 + C_5 C_L L_5 L_L R_5 r_o s^4 + C_5 C_L L_5 R_3 R_5 r_o s^3 + 2 C_5 L_5 R_3 R_5 q_m r_o s^3 + 4 C_L L_5 L_L R_3 q_m r_o s^3 + 4 C_L L_5 L_L R_3 q_m r_o s^3 + C_L L_5 L_L R_5 q_m r_o s^3$

10.57 INVALID-ORDER-57 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_L R_3 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)$

 $H(s) = \frac{L_L r_3 s \left(-C_5 L_5 r_5 r_o s + L_5 r_5 g_m r_o s + L_5 r_5 g_m r_o s + L_5 r_5 s - L_5 r_o s - r_{15} r_o s \right)}{C_5 C_L L_5 L_L R_3 R_5 r_o s^4 + 2 C_5 L_5 L_L R_3 R_5 r_o s^3 + C_5 L_5 L_L R_3 R_5 r_o s^3 + C_5 L_5 L_L R_3 r_o s^3 + C_5 L_5 r_o s^3 + C_5 r_o s$

- **10.58** INVALID-ORDER-58 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_5C_LL_5L_LR_3R_5g_mr_os^4 + 4C_5C_LL_5L_LR_3R_5s^4 + C_5C_LL_5L_LR_5r_os^4 + 2C_5C_LL_5R_3R_5R_Lg_mr_os^3 + 4C_5C_LL_5R_3R_5r_os^3 + C_5C_LL_5R_3R_5r_os^3 + C_5C_LL_5R_5r_os^3 + C_5C_$
- 10.59 INVALID-ORDER-59 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_1 L_2 R_3 R_5 R_L r_o s^4 + 2 C_5 L_5 L_1 R_3 R_5 R_L g_m r_o s^3 + 4 C_5 L_5 L_1 R_3 R_5 R_L s^3 + C_5 L_5 L_1 R_3 R_5 R_L r_o s^3 + C_5 L_5 L_1 R_3 R_5 R_L$

- 10.60 INVALID-ORDER-60 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_5C_LL_5L_LR_3R_5R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_3R_5r_os^4 + C_5C_LL_5L_LR_3R_5r_os^4 + C_5C_LL_5L_LR_3R_5g_mr_os^3 + 4C_5L_5L_LR_3R_5s^3 + C_5L_5L_LR_3R_5s^3 +$
- 10.61 INVALID-ORDER-61 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_5C_LL_5L_LR_3R_5R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_3R_5R_Ls^4 + C_5C_LL_5L_LR_3R_5r_os^4 + C_5C_LL_5L_LR_3R_5r_os^4 + C_5C_LL_5L_LR_3R_5R_Lr_os^4 + C_5C_LL_5R_3R_5R_Lr_os^3 + 2C_5L_5R_3R_5R_Lg_mr_os^2 + 4C_5L_5R_3R_5r_os^2 + C_5L_5R_3R_5r_os^2 + C_5L_5R_5R_5r_os^2 + C_$
- **10.62** INVALID-ORDER-62 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 r_o \right)}{C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + 2 C_5 L_5 R_3 g_m r_o s^2 + 4 C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_L L_5 R_3 g_m r_o s^2 + C_L L_5 R_3 r_o s + L_5 g_m r_o s$
- **10.63** INVALID-ORDER-63 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_3 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 r_o s^2 + L_5 r_o s$
- **10.64** INVALID-ORDER-64 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_3 r_o s^3 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_$
- **10.65** INVALID-ORDER-65 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + C_5 L_5 R_3 r_o s^3 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 L_L R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 +$

10.66 INVALID-ORDER-66 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1} + R_5, \frac{L_{Ls}}{C_1 L_{Ls}^2 + 1}\right)$

 $L_L R_3 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s^2 \right)$ $H(s) = \frac{L_L R_3 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s^2 + C_5 L_5 L_2 R_3 r_o s^4 + C_5 L_4 L_2 R_3 r_o s^4 + C_5 L_5 L_4 R_3 r_o s^3 + C_5 L_5 R_5 r_o s^3 + C_5 L$

10.67 INVALID-ORDER-67 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{2C_5C_LL_5L_LR_3g_mr_os^4 + 4C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_5g_mr_os^4 + C_5C_LL_5L_LR_5s^4 + C_5C_LL_5R_3R_5g_mr_os^3 + C_5C_LL_5R_3R_5g_mr_os^3 + C_5C_LL_5R_3R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3 +$

10.68 INVALID-ORDER-68 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_3R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_3R_5R_Ls^4 + C_5C_LL_5L_LR_3R_Lr_os^4 + C_5L_5L_LR_3R_5g_mr_os^3 + C_5L_5L_LR_3R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_Lg_mr_os^3 + C_5L_5L_LR_3R_Lg_mr_os^3 +$

10.69 INVALID-ORDER-69 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_3R_5q_mr_os^4 + C_5C_LL_5L_LR_3R_5s^4 + 2C_5C_LL_5L_LR_3R_Lq_mr_os^4 + 4C_5C_LL_5L_LR_3r_os^4 + C_5C_LL_5L_LR_5R_Lq_mr_os^4 + C_5C_LL_5L_LR_5R_Ls^4 + C_5C_LL_5L_LR_5R_Ls^4 + C_5C_LL_5L_LR_3r_os^4 + C_5C_LL_5L_LR_3r_os^$

10.70 INVALID-ORDER-70 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_5 C_L L_5 L_L R_3 R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 s^4 + 2 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_3 R_L s^4 + C_5 C_L L_5 L_L R_3 R_L s^4 + C_5 C_L L_5 L_L R_5 R_L g_m r_o s^4 +$

10.71 INVALID-ORDER-71 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L R_3 R_5 r_o s^2 + 2 C_5 L_5 R_3 g_m r_o s^2 + 4 C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 r_o s^2 + 2 C_5 R_3 R_5 g_m r_o s + 4 C_5 R_3 R_5 g_m r_o s + C_L R_3 R_5 g_m r_o s + C_L$

10.72 INVALID-ORDER-72 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $R_3R_L\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 - C_5L_5r_os^2 - C_5R_5r_os + R_5g_mr_o + R_5g$

 $H(s) = \frac{R_3R_L(C_5L_5R_5g_mr_os^3 + C_5L_5R_5s - C_5L_5r_os^3 - C_5R_5r_os^3 + C_5L_5r_os^3 - C_5R_5r_os^3 -$

10.73 INVALID-ORDER-73 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

10.74 INVALID-ORDER-74
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

$$R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r^2 \right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5$$

10.75 INVALID-ORDER-75
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$L_L R_3 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o s^2 \right)$$

$$H(s) = \frac{L_L R_3 s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^2 - C_5 R_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o s^2 + C_5 L_5 R_3 R_5 g_m r_o s^4 + C_5 C_L L_5 L_4 R_3 R_5 r_o s^3 + 2 C_5 L_5 L_4 R_3 g_m r_o s^3 + 4 C_5 L_5 L_4 R_3 g_m r_o s^3 + C_5 L_5 R_5 g_m r_o s$$

10.76 INVALID-ORDER-76
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_5C_LL_5L_LR_3g_mr_os^4 + 4C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_5g_mr_os^4 + C_5C_LL_5L_LR_5s^4 + C_5C_LL_5R_3R_5g_mr_os^3 + C_5C_LL_5R_3R_5g_mr_os^3 + C_5C_LL_5R_3R_Lg_mr_os^3 + 4C_5C_LL_5R_3R_Lg_mr_os^3 + C_5C_LL_5R_3R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3 + C_5C_LL_5R_Lg_mr_os^3$$

10.77 INVALID-ORDER-77
$$Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_5C_LL_5L_LR_3R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_3R_5R_Ls^4 + C_5C_LL_5L_LR_3R_5R_Lr_os^4 + C_5C_LL_5L_LR_3R_5g_mr_os^3 + C_5L_5L_LR_3R_5g_mr_os^3 + C_5L_5L_RR_3R_5g_mr_os^3 + C_5L_5L_RR_3R_5g_mr_os$$

10.78 INVALID-ORDER-78
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_5 C_L L_5 L_L R_3 R_5 g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 s^4 + 2 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^4 + 4 C_5 C_L L_5 L_L R_3 r_o s^4 + C_5 C_L L_5 L_L R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_5 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_5 R_L g_m r_o s^4 +$$

10.79 INVALID-ORDER-79
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_5C_LL_5L_LR_3R_5g_mr_os^4 + C_5C_LL_5L_LR_3R_5s^4 + 2C_5C_LL_5L_LR_3R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_3r_os^4 + C_5C_LL_5L_LR_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_3R_5R_Lg_mr_os^4 + C_5C_LL_5L_Rg_mr_os^4 + C_5C_LL_5L_Rg_mr_$$

10.80 INVALID-ORDER-80
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_L (R_5 g_m r_o + R_5 - r_o)}{C_3 R_5 R_L g_m r_o s + C_3 R_5 R_L s + C_3 R_L r_o s + R_5 g_m r_o + R_5 + 2R_L g_m r_o + 4R_L + r_o}$$

10.81 INVALID-ORDER-81
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_5 g_m r_o + R_5 - r_o}{C_3 R_5 q_m r_o s + C_3 R_5 s + C_3 r_o s + C_L R_5 q_m r_o s + C_L R_5 s + C_L r_o s + 2 q_m r_o + 4}$$

10.82 INVALID-ORDER-82 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 R_5 R_L g_m r_o s + C_3 R_5 R_L s + C_3 R_L r_o s + C_L R_5 R_L g_m r_o s + C_L R_5 R_L s +$$

10.83 INVALID-ORDER-83 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}r_{o}s^{3} + C_{3}R_{5}g_{m}r_{o}s + C_{3}R_{5}s + C_{3}r_{o}s + 2C_{L}L_{L}g_{m}r_{o}s^{2} + 4C_{L}L_{L}s^{2} + C_{L}R_{5}g_{m}r_{o}s + C_{L}R_{5}s + C_{L}r_{o}s + 2g_{m}r_{o} + 4C_{L}R_{5}g_{m}r_{o}s + C_{L}R_{5}g_{m}r_{o}s + C_{L}R_{5}g_{m$$

10.84 INVALID-ORDER-84 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}r_{o}s^{3} + C_{3}C_{L}R_{5}R_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}R_{5}r_{o}s^{2} + C_{3}R_{5}g_{m}r_{o}s + C_{3}R_{5}s + C_{3}r_{o}s + 2C_{L}L_{L}g_{m}r_{o}s^{2} + 4C_{L}L_{L}s^{2} + C_{L}R_{5}g_{m}r_{o}s + C_{L}R_{5}s + 2C_{L}R_{L}g_{m}r_{o}s + 4C_{L}R_{L}s + C_{L}r_{o}s + 2g_{m}r_{o}s + 2C_{L}R_{L}s + C_{L}r_{o}s + 2G_{L}R_{L}s + C_{L}r_{o}s + 2G_{L}R_{L}s + C_{L}r_{o}s + 2G_{L}R_{L}s + G_{L}r_{o}s + 2G_{L}r_{o}s + 2G_{L}R_{L}s + G_{L}r_{o}s + 2G_{L}R_{L}s + G_{L}r_{o}s + 2G_{L}R_{L}s + G_{L}r_{o}s + 2G_{L}r_{o}s + 2G$$

10.85 INVALID-ORDER-85 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)}{C_{3}C_{L}L_{L}R_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{L}R_{5}g^{2} + C_{3}L_{L}R_{5}s^{2} + C_{3}L_{L}R_{5}s^{2} + C_{3}L_{L}R_{5}s^{2} + C_{3}L_{L}R_{5}s^{2} + C_{L}L_{L}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{L}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{L}R_{5}s^{2} + C_{L}L_{L}R_{5}s$$

10.86 INVALID-ORDER-86 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_L R_5 R_L g_m r_o s^3 + C_3 C_L L_L R_5 R_L g_m r_o s + C_3 R_5 R_L g_m r_o s + C_3 R_5 R_L g_m r_o s + C_L L_L R_5 g_m r_o s^2 + C_L R_5 R_L g_m r_$$

10.87 INVALID-ORDER-87 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5 r_o s + g_m r_o + 1}{s \left(C_3 C_5 r_o s + C_3 g_m r_o + C_3 + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L \right)}$$

10.88 INVALID-ORDER-88 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{s \left(C_3 C_5 C_L R_L r_o s^2 + C_3 C_5 r_o s + C_3 C_L R_L g_m r_o s + C_3 C_L R_L s + C_3 q_m r_o + C_3 + 2 C_5 C_L R_L g_m r_o s + 4 C_5 C_L R_L s + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L\right)}$$

10.89 INVALID-ORDER-89 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_{L}L_{L}s^{2} + 1\right)\left(-C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{L}r_{o}s^{3} + C_{3}C_{5}r_{o}s + C_{3}C_{L}L_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}L_{L}s^{2} + C_{3}g_{m}r_{o} + C_{3} + 2C_{5}C_{L}L_{L}g_{m}r_{o}s^{2} + 4C_{5}C_{L}L_{L}s^{2} + C_{5}C_{L}r_{o}s + 2C_{5}g_{m}r_{o} + 4C_{5} + C_{L}g_{m}r_{o} + C_{L}\right)}$$

10.90 INVALID-ORDER-90 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L r_o s^3 + C_3 L_L g_m r_o s^2 + C_3 L_L s^2 + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L s^2 + g_m r_o + 1}$$

10.91 INVALID-ORDER-91 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L L_L s^2 + C_L R_L s + 1\right)}{s \left(C_3 C_5 C_L L_L r_o s^3 + C_3 C_5 C_L R_L r_o s^2 + C_3 C_5 r_o s + C_3 C_L L_L g_m r_o s^2 + C_3 C_L R_L g_m r_o s + C_3 C_L R_L g_m r_o s + C_3 C_L R_L g_m r_o s^2 + 4 C_5 C_L L_L g_m r_o s^2 + 4 C_5 C_L R_L g_m r_o s + 4 C_5$

10.92 INVALID-ORDER-92 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_L r_o s^3 + C_3 L_L R_L g_m r_o s^2 + C_5 L_L R_L r_o s^3 + 2 C_5 L_L R_L g_m r_o s^2 + 4 C_5 L_L R_L s^2 + C_5 L_L r_o s^2 + C_5 R_L r_o s + C_L L_L R_L g_m r_o s^2 + C_L L_L R_L g_m r_o s + L_L s + R_L g_m r_o + R_L r_o s^2 + C_5 R_L$

10.93 INVALID-ORDER-93 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{C_3 C_5 C_L L_L R_L r_o s^4 + C_3 C_5 L_L r_o s^3 + C_3 C_5 L_L R_L g_m r_o s^3 + C_3 C_L L_L R_L g_m r_o s^3 + C_3 C_L L_L R_L g_m r_o s^3 + C_5 C_L R_L g_m r_o s$

10.94 INVALID-ORDER-94 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_L R_L r_o s^4 + C_3 C_5 R_L r_o s^2 + C_3 C_L L_L R_L g_m r_o s^3 + C_3 C_L L_L R_L g_m r_o s^3 + C_5 C_L R_L r_o s^3 + C_5 C$

10.95 INVALID-ORDER-95 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}R_{5}R_{L}r_{o}s^{3}+C_{3}C_{5}R_{5}r_{o}s^{2}+C_{3}C_{L}R_{5}R_{L}s^{2}+C_{3}C_{L}R_{5}r_{o}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}R_{L}s^{2}+C_{5}C_{L}R_{5}r_{o}s^{2}+C_{5}C_$

10.96 INVALID-ORDER-96 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_{L}L_{s}^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4}+C_{3}C_{5}R_{5}r_{o}s^{2}+C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{5}C_{L}L_{L}R_{5}g_{m}r_{o}s^{2}+2C_{5}R_{5}g_{m}r_{o}s^{2}+4C_{L}L_{L}s^{2}+C_{L}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{L}R_{5}r_{$

10.97 INVALID-ORDER-97 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_L R_5 r_o s^3 + C_3 L_L R_5 g_m r_o s^2 + C_3 L_L R_5 s^2 + C_5 L_L R_5 r_o s^3 + 2 C_5 L_L R_5 g_m r_o s^2 + 4 C_5 L_L R_5 g_m r_o s^2 + C_L R_5$

10.98 INVALID-ORDER-98 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}R_{5}r_{o}s - R_{5}g_{m}r_{o} - R_{5} + r_{o}\right)}{C_{3}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{3}C_{5}L_{L}R_{5}s^{3} + C_{3}C_{L}L_{L}R_{5}s^{3} +$

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10.99 INVALID-ORDER-99 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
H(s) = \frac{L_L R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_L R_5 R_L r_o s^3 + C_3 L_L R_5 R_L g_m r_o s^2 + C_5 L_L R_5 R_L r_o s^3 + 2 C_5 L_L R_5 R_L g_m r_o s^2 + 4 C_5 L_L R_5 R_L r_o s^2 + C_5 L_L R_5 R_L r_o s^2 + C_L L_L R_5 R_L g_m r_o s^2 + C_L L_L R_5 R_L r_o s^2 + C_L R_5 R_L r_o s^2 + C
10.100 INVALID-ORDER-100 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (C_LL_LR_Ls^2 + L_Ls + R_L)(C_5R_5)
                                                -\frac{1}{C_{3}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{L}R_{5}r_{o}s^{3}+C_{3}C_{5}R_{L}r_{o}s^{2}+C_{3}C_{L}L_{L}R_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{L}R_{5}g_{m}r_{o}s^{2
10.101 INVALID-ORDER-101 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R_L (C_L L_L s^2 + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)
H(s) = -\frac{\frac{1}{C_3C_5C_LL_LR_5R_Lr_os^4 + C_3C_5R_5R_Lr_os^4 + C_3C_5R
10.102 INVALID-ORDER-102 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                           H(s) = \frac{C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1}{s \left( C_3 C_5 R_5 q_m r_o s + C_3 C_5 R_5 s + C_3 C_5 r_o s + C_3 q_m r_o + C_3 + C_5 C_L R_5 q_m r_o s + C_5 C_L R_5 s + C_5 C_L R_5 s + C_5 C_L R_5 r_o s + 2 C_5 q_m r_o + 4 C_5 + C_L q_m r_o + C_L \right)}
10.103 INVALID-ORDER-103 Z(s) = \left(\infty, \infty, \frac{1}{C_{3}s}, \infty, R_5 + \frac{1}{C_{5}s}, R_L + \frac{1}{C_{L}s}\right)
H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}R_{5}R_{L}g_{m}r_{o}s^{2}+C_{3}C_{5}C_{L}R_{L}r_{o}s^{2}+C_{3}C_{5}R_{5}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s
10.104 INVALID-ORDER-104 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{5}L_{L}L_{r}os^{3}+C_{3}C_{5}R_{5}g_{m}r_{o}s+C_{3}C_{5}R_{5}s+C_{3}C_{5}L_{L}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{L}s^{2}+C_{3}C_{L}L_{L}s^{2}+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_
10.105 INVALID-ORDER-105 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
               H(s) = \frac{L_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_5 g_m r_o s^3 + C_3 C_5 L_L R_5 s^3 + C_3 C_5 L_L r_o s^3 + C_3 L_L g_m r_o s^2 + C_5 L_L L_R s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L s^2 + g_m r_o s + C_5 R_5 g_m r_o s 
10.106 INVALID-ORDER-106 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}L_{L}L_{r}s^{3} + C_{3}C_{5}L_{L}L_{r}s^{3} + C_{3}C_{5}L_{L}L_{r}s^{3} + C_{3}C_{5}L_{L}L_{r}s^{3} + C_{3}C_{5}L_{L}L_{r}s^{2} + C_{3}C_{5}L_{r}s^{2} +
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10.107 INVALID-ORDER-107 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_5 R_L g_m r_o s^3 + C_3 C_5 L_L R_5 R_L g_m r_o s^3 + C_5 C_L L_L R_5 R_L g_m r_o s^3 + C_5 C_L L_L R_5 R_L g_m r_o s^3 + C_5 L_L R_5 g_m r_o s^2 + C_5 L_L$

10.108 INVALID-ORDER-108 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $(C_L L_L R_L s^2 + L_L s + R_L) (C_5 R_5 g_m r_o s + C_5 r_o s^2 + C_5$

 $H(s) = \frac{(\bigcirc LLLLR_1S + LLS + ILL) (\bigcirc 5 LLS_2 + C_3C_5L_LR_5 + C_$

10.109 INVALID-ORDER-109 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $R_L (C_L L_L s^2 + 1) (C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o s + G_5 r_o s$

10.110 INVALID-ORDER-110 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_L s^3 + C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_3 R_L s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.111 INVALID-ORDER-111 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1}{s\left(C_3C_5L_5g_mr_os^2 + C_3C_5L_5s^2 + C_3C_5r_os + C_3g_mr_o + C_3 + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.112 INVALID-ORDER-112 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_3 R_L s + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L s^3 + C_5 C_L R_L r_o s^2 + C_5 L_5 g_m r_o s^2$

10.113 INVALID-ORDER-113 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_3 C_5 C_L L_5 R_L g_m r_o s^3 + C_3 C_5 L_L g_m r_o s^2 + C_3 C_5 L_5 g_m r_o s^2 + C_5 C_L L_5 g_m$

10.114 INVALID-ORDER-114 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}L_{s}^{2}+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4}+C_{3}C_{5}L_{L}L_{r}s^{3}+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{L}L_{2}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{5}g_{m}r_{$

10.115 INVALID-ORDER-115 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_5 L_L g_m r_o s^4 + C_3 C_5 L_L s^4 + C_3 C_5 L_L r_o s^3 + C_3 L_L g_m r_o s^2 + C_5 L_L L_5 L_L g_m r_o s^4 + C_5 C_L L_L L_1 r_o s^3 + C_5 L_5 g_m r_o s^2 + C_5 g_m r_$

10.116 INVALID-ORDER-116 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{5}r_{o}s^{2} + C_{3}C_{5}L_{5}g_{m}r_{o}s^{2} + C_{3}C_{5}L_{5}g_{m}r_{o}s^{2} + C_{3}C_{5}L_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}L_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}L_{L}$

10.117 INVALID-ORDER-117 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_5 L_L R_L g_m r_o s^4 + C_3 C_5 L_L R_L r_o s^3 + C_3 L_L R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_L g_m r_o s^3 + C_5 L_5 L_L g_m r_o s^3 + C_5 L_5 L_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^$

10.118 INVALID-ORDER-118 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{c}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{c}R_{c}s^{2} + C_{5}L_{c$

10.119 INVALID-ORDER-119 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_r r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 + C_5 r_o s + g_r r_o s^2 + C_5 r_$

10.120 INVALID-ORDER-120 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

10.121 INVALID-ORDER-121 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

10.122 INVALID-ORDER-122 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = -\frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_3 C_5 C_L L_5 R_L r_o s^4 + C_3 C_5 L_5 r_o s^3 + C_3 C_L L_5 R_L g_m r_o s^3 + C_3 C_L L_5 R_L g_m r_o s^2 + C_3 L_5 g^2 + C_5 L$ **10.124** INVALID-ORDER-124 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = -\frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{5}L_{5}r_{o}s^{2}-L_{5}g_{m}r_{o}s-L_{5}s+r_{o}\right)}{C_{3}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5}+C_{3}C_{5}L_{5}r_{o}s^{3}+C_{3}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{5}L_{L}s^{4}+C_{3}C_{L}L_{5}r_{o}s^{3}+C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}g_{m$ 10.125 INVALID-ORDER-125 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_5 L_L r_o s^4 + C_3 L_5 L_L g_m r_o s^3 + C_3 L_5 L_L s^3 + C_3 L_L r_o s^2 + C_5 C_L L_5 L_L r_o s^4 + 2 C_5 L_5 L_L g_m r_o s^3 + 4 C_5 L_5 L_L s^3 + C_5 L_5 L_L g_m r_o s^3 + C_L L_5 L_L g_m r_o s$ **10.126** INVALID-ORDER-126 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = -\frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}L_{5}r_{o}s^{2} - L_{5}g_{m}r_{o}s - L_{5}s + r_{o}\right)}{C_{3}C_{5}C_{L}L_{5}L_{L}r_{o}s^{5} + C_{3}C_{5}L_{L}t_{5}L_{L}s^{4} + C_{3}C_{L}L_{5}L_{L}s^{4} + C_{3}C_{L}L_{5}L_{L}s^{3} + C_{3}C_{L}L_{5}L_{L}s^{3} + C_{3}C_{L}L_{5}L_{L}s^{3} + C_{3}C_{L}L_{5}L_{L}s^{4} + C_{5}C_{L}L_{5}L_{L}s^{4} + C_{5}C_{L}L_{5}L$ 10.127 INVALID-ORDER-127 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{L_L R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_5 L_L R_L r_o s^4 + C_3 L_5 L_L R_L g_m r_o s^3 + C_3 L_5 L_L R_L r_o s^2 + C_5 C_L L_5 L_L R_L r_o s^4 + 2 C_5 L_5 L_L R_L g_m r_o s^3 + 4 C_5 L_5 L_L R_L r_o s^3 + C_5 L_5 L_L R_L g_m r_o s^3$ 10.128 INVALID-ORDER-128 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = -\frac{(C_L L_L L_S + L_L L_S +$ 10.129 INVALID-ORDER-129 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$ $H(s) = -\frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_3 C_5 C_L L_5 L_L R_L r_o s^5 + C_3 C_5 L_5 L_L R_L r_o s^4 + C_3 C_L L_5 L_L R_L r_o s^4 + C_5 C_L L_5 L_L r_o s$ **10.130** INVALID-ORDER-130 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$ $H(s) = \frac{R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_L g_m r_o s^2 + C_3 C_5 R_5 R_L g^2 + C_3 C_5 R_L r_o s^2 + C_3 R_L g_m r_o s + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 g_m$

10.123 INVALID-ORDER-123 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

10.131 INVALID-ORDER-131 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_1 s} \right)$ $H(s) = \frac{C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1}{s \left(C_3 C_5 L_5 g_m r_o s^2 + C_3 C_5 R_5 g_m r_o s + C_3 C_5 R_5 s + C_3 C_5 r_o s + C_5 R_5 g_m r_o s^2 + C_5 C_1 L_5 g_m r_o s^2 + C_5 C_1 L_5 g^2 + C_5 C_1 R_5 g_m r_o s + C_5 R_5 g_m r_o s$

10.134 INVALID-ORDER-134 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4}+C_{3}C_{5}L_{L}L_{5}s^{4}+C_{3}C_{5}L_{L}L_{5}s^{3}+C_{3}C_{5}L_{L}L_{5}s^{3}+C_{3}C_{5}L_{L}L_{5}s^{3}+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}R_{5}g_{m}r_{o}s+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{5}C_{5}L_{$

10.135 INVALID-ORDER-135 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_{LS}\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)\\ =\frac{C_{3}C_{5}L_{5}L_{L}g_{m}r_{o}s^{4}+C_{3}C_{5}L_{L}S^{4}+C_{5}C_{L}L_{L}S_{5}s^{2}+C_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}S^{2}+C_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}S^{2}+C_$

10.136 INVALID-ORDER-136 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_5 L_L s^2 + C_L R_L s + 1\right) \left(C_5 L_L s^2 + C_4 R_L s + 1\right) \left(C_5 L_L s^2 + C_4 R_L s + 1\right) \left(C_5 L_L s^2 + C_5 R_L s^2 + C$

10.137 INVALID-ORDER-137 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 L_4 R_4 g_m r_o s^4 + C_3 C_5 L_4 R_5 R_4 g_m r_o s^3 + C_3 C_5 L_4 R_5 R_4 g_m r_o s^3 + C_3 C_5 L_4 R_5 R_4 g_m r_o s^3 + C_5 C_4 L_4 R_5 R_4 g_m r_o s^3 + C_5 C_4 L_4 R_5 R_4 g_m r_o s^3 + C_5 C_4 L_4 R_5 R_4 g_m r_o s^3 + C_5 C_4 L_4 R_5 R_4 g_m r_o s^3 + C_5 C_4 L_5 R_5 g_m r_o s^3 + C_5 C_5 R_5 g_m r_o s^3 + C$

10.138 INVALID-ORDER-138 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Ls^4 + C_3C_5L_LL_Rs^4 + C_3C_5L_LL_Rs^4$

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10.139 INVALID-ORDER-139 Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
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$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Ls^4 + C_3C_5C_LL_LR_Lr_os^4 + C_3C_5L_5R_Lg_mr_os^3 + C_3C_5R_5R_Lg_mr_os^3 + C_3C_5R_5R_Lg_mr_os^2 + C_3C_5R_5R_Lg_mr_os^3 + C_3C_5R_Lg_mr_os^3 + C_3C_5R_Lg_mr_os^3$$

10.140 INVALID-ORDER-140
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_3 C_5 L_5 R_5 R_L r_o s^3 + C_3 L_5 R_5 R_L g_m r_o s^2 + C_3 L_5 R_5 R_L r_o s^2 + C_3 R_5 R_L r_o s^2 + 2 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L s^2 + C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s + 2 L_5 R_L g_m r_o s + 4 L_5 R_L s + L_5 r_o s + 2 R_5 R_L g_m r_o s + 4 R_5 R_L r_o s^2 + 2 R_5 R_L g_m r_o s^2 + 2 R_5 R_L g_m r_o s^2 + 2 R_5 R_L g_m r_o s + 2 R_5 R_L$$

10.141 INVALID-ORDER-141
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o}{C_3C_5L_5R_5r_os^3 + C_3L_5R_5g_mr_os^2 + C_3L_5R_5s^2 + C_3L_5r_os^2 + C_3L_5r_os^2 + C_5L_5R_5r_os^3 + 2C_5L_5R_5g_mr_os^2 + 4C_5L_5R_5g_mr_os^2 + C_LL_5R_5s^2 + C_LL_5r_os^2 + C_LL_5r_$$

10.142 INVALID-ORDER-142
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$R_L\left(-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o\right)$$

$$H(s) = \frac{R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_3 C_5 L_5 R_5 R_L r_o s^3 + C_3 L_5 R_5 R_L r_o s^2 + C_3 L_5 R_5 R_L r_o s^2 + C_5 L_5 R_5 R_L r_o s^3 + 2 C_5 L_5 R_5 R_L r_o s^2 + 4 C_5 L_5 R_5 R_L r_o s^2 + C_L L_5 R_5 R_L r$$

10.143 INVALID-ORDER-143
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_{L}R_{L}s+1\right)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_{o}s$$

10.144 INVALID-ORDER-144
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{5}L_{5}R_{5}r_{o}s^{2}-L_{5}R_{5}g_{m}r_{o}s-L_{5}R_{5}s+L_{5}r_{o}s+R_{5}r_{o}s+L_{5}r_{$$

10.145 INVALID-ORDER-145
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{C_3 C_5 L_5 L_L R_5 r_o s^4 + C_3 L_5 L_L R_5 g_m r_o s^3 + C_3 L_5 L_L R_5 s^3 + C_3 L_5 L_L R_5 r_o s^2 + C_5 L_5 L_L R_5 g_m r_o s^3 + 4 C_5 L_5 L_L R_5 g_m r_o s^3 + C_5 L_5 L$$

10.146 INVALID-ORDER-146
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5r_os^5 + C_3C_5L_LS_RS_Lr_os^4 + C_3C_LL_5L_RS_gmr_os^4 + C_3C_LL_5L_LR_5s^4 + C_3C_LL_5L_LS_s^4 + C_3C_LL_5R_5R_Lgmr_os^3 + C_3C_LL_5R_5R_Ls^3 + C_3C_LL_5R_Ls^3 + C$$

10.147 INVALID-ORDER-147 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $L_L R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s^2 \right)$

 $H(s) = \frac{L_L R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s +$

10.148 INVALID-ORDER-148 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5R_Lr_os^5 + C_3C_5L_5L_LR_5r_os^4 + C_3C_5L_5R_5R_Lr_os^3 + C_3L_LL_5L_LR_5R_Lr_os^4 + C_3C_LL_5L_LR_5R_Lr_os^4 + C_3C_LL_5L_Rr_os^4 + C_3C_LL_5L_Rr_o$

10.149 INVALID-ORDER-149 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$

 $-\frac{1}{C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{5}+C_{3}C_{5}L_{5}R_{5}R_{L}r_{o}s^{3}+C_{3}C_{L}L_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{5}L_{L}R_{5}R_{L}s^{4}+C_{3}C_{L}L_{5}L_{L}R_{5}R_{L}r_{o}s^{4}+C_{3}C_{L}L_{5}L_{L}R_{5}R_{L$

10.150 INVALID-ORDER-150 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L s^3 + C_3 C_5 L_5 R_5 R_L r_o s^3 + C_3 L_5 R_L g_m r_o s^2 + C_3 L_5 R_L g_m r_o s + C_3 R_5 R_L s + C_3 R_5 R_L s + C_3 R_5 R_L s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_$

10.151 INVALID-ORDER-151 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 - C_5L_5r_os^2 + L_5g_mr_os + L_5s + R_5g_mr_o + R_5 - r_o}{C_3C_5L_5R_5g_mr_os^3 + C_3C_5L_5R_5s^3 + C_3C_5L_5r_os^3 + C_3C_5L_5r_os^3 + C_3C_5L_5r_os^3 + C_5C_LL_5R_5g_mr_os^3 + C_5C_LL_5R_5g_mr_os^3 + C_5C_LL_5r_os^3 + 2C_5L_5g_mr_os^2 + 4C_5L_5s^2 + C_LL_5g_mr_os^2 + C_LL_5s^2 + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_os^3 + C_5C_LL_5r_os^3 + C_5C_LL_5r_o$

10.152 INVALID-ORDER-152 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_5 C_L L_$

10.153 INVALID-ORDER-153 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$

10.154 INVALID-ORDER-154 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \frac{L_{5s}}{C_{5}L_{5s}^2+1} + R_5, L_L s + \frac{1}{C_{Ls}}\right)$

 $(C_L L_L s^2 + 1) (C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2)$ $\frac{(C_L L_L S_L + I_L)(C_5 L_5 I_4 S_2 m_r o^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L L_L R_5 g_m r_o s^5 + C_3 C_5 L_L R_5 g_m r_o$ 10.155 INVALID-ORDER-155 $Z(s) = \left(\infty, \infty, \frac{1}{C_{2s}}, \infty, \frac{L_{5s}}{C_{5}L_{5s}^2+1} + R_5, \frac{L_{Ls}}{C_{1}L_{1}s^2+1}\right)$

 $L_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)$ $H(s) = \frac{L_L s \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_5 L_L R_5 g_m r_o s^4 + C_3 C_5 L_5 L_L R_5 s^4 + C_3 C_5 L_5 L_L R_5 s^4 + C_3 C_5 L_5 L_L R_5 s^4 + C_5 C_L L_5 L_L R_5 s^4 + C_5 C_L$

10.156 INVALID-ORDER-156 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5g_mr_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_LL_5R_Ls^4 + C_3C$

10.157 INVALID-ORDER-157 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

10.158 INVALID-ORDER-158 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L_LR_5g_mr_os^4 + C_3C_5L_5L_LR_5s^4 + C_3C_5L_5L_Lr_os^4 + C_3C_5L_5R_5R_Lg_mr_os^3 + C_3C_5L_5R_5R_Ls^3 + C_3C_5L_5R_Lr_os^3 + C_3C_5L_5L_LR_Lg_mr_os^4 + C_3C_5L_5L_LR_5s^4 + C_3C_5L_5L_LR_5s^4 + C_3C_5L_5R_5R_Lg_mr_os^3 + C_3C_5L_5R_5R_Ls^3 + C_3C_5L_5R_LR_ss^4 + C_3C_5L_5R_LR_ss^4 + C_3C_5L_5R_Lr_os^4 + C_3C_5L_5R_Lr$

10.159 INVALID-ORDER-159 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L_LR_Lr_os^5 + C_3C_5L_5R_5R_Lg_mr_os^3 + C_3C_5L_5R_Lr_os^3 + C_3C_5L_5R_Lr_os^3 + C_3C_LL_5L_LR_Lg_mr_os^4 + C_3C_LL_5L_LR_Ls^4 + C_3C_LL_LR_5R_Lg_mr_os^3 + C_3C_LL_LR_Lr_os^3 + C_3C_LL_LR_Lr_os$

10.160 INVALID-ORDER-160 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L s^3 + C_3 C_5 L_5 R_5 R_L r_o s^3 + C_3 C_5 L_5 R_5 R_L r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5$

10.161 INVALID-ORDER-161 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o}{C_3 C_5 L_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 s^3 + C_3 C_5 L_5 r_o s^3 + C_3 C_5 L_5 r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 r_o s^2 + 2 C_5 L_5 g_m r_o s^2 + 2 C_$

10.162 INVALID-ORDER-162 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_5 R_L r_o s^3 + C_5 C_L L_5 R_5 R_L$

10.163 INVALID-ORDER-163
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_3 C_L L_5 R_5 R_L g_m r_o s^4 + C_3 C_5 L_4 R_5 R_L g_m r_o s^4 + C_3 C_5 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_5 R_5 g_m r_o s^3 + C_5 C_5 L_5 R_5$

10.164 INVALID-ORDER-164
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}L_{5}R_{$

10.165 INVALID-ORDER-165
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_{L}s\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}R_{5}s^{2} - C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}L_{$

10.166 INVALID-ORDER-166
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5g_mr_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_5R_Ls^4 + C_3C_5C_LL_5R_5r_os^4 + C_3C$$

10.167 INVALID-ORDER-167
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5L_5L_LR_5R_Lg_mr_os^4 + C_3C_5L_5L_LR_5R_Ls^4 + C_3C_5L_LR_5R_Lr_os^4 + C_3C_5L_LR_5R_Lr_os^4 + C_3C_5L_LR_5R_Lg_mr_os^2 + C_3L_LR_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_5R_Ls^4 + C_5C_LL_5L_LR_5R_Lr_os^4 + C_5C_LL_5L_Rr_os^4 + C_5C_LL_5L_Rr_os$$

10.168 INVALID-ORDER-168
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.169 INVALID-ORDER-169
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L_LR_5r_os^5 + C_3C_5C_LL_5R_5R_Lg_mr_os^4 + C_3C_5L_5R_5R_Lg_mr_os^3 + C_3C_5L_5R_5R_Ls^3 + C_3C_5L_5R_5R_Lr_os^3 + C_3C_5L_5R_5R_Lr_os$$

10.170 INVALID-ORDER-170
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 R_3 R_5 R_L g_m r_o + C_3 R_3 R_5 R_L s + C_3 R_3 R_L r_o s + R_3 R_5 g_m r_o + R_3 R_5 + 2 R_3 R_L g_m r_o + 4 R_3 R_L + R_3 r_o + R_5 R_L g_m r_o + R_5 R_L + R_L r_o}$$

10.171 INVALID-ORDER-171 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{1}{C_L s}\right)$ $H(s) = \frac{R_3 \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 R_3 R_5 g_m r_o s + C_3 R_3 R_5 s + C_L R_3 R_5 g_m r_o s + C_L R_3 R_5 s + C_L R_3 r_o s + 2 R_3 g_m r_o + 4 R_3 + R_5 g_m r_o + R_5 + r_o}$ 10.172 INVALID-ORDER-172 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$ $H(s) = \frac{R_3 R_L \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 R_3 R_5 R_L g_m r_o s + C_3 R_3 R_5 R_L s + C_2 R_3 R_5 R_L g_m r_o s + C_L R_3 R_5 R_L s +$ **10.173** INVALID-ORDER-173 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_L R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_3 r_o s^3 + C_3 C_L L_L R_3 r_o s^3 + C_3 R_3 R_5 g_m r_o s + C_3 R_3 R_5 g_m r_o s^2 + 4 C_L L_L R_3 g^2 + C_L L_L R_5 g^2 + C_L$ 10.174 INVALID-ORDER-174 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_L R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_3 r_o s^2 + C_3 C_L R_3 R_5 R_L s^2 + C_3 C_L R_3 R_5 R_L s^2 + C_3 C_L R_3 R_5 r_o s + C_3 R_3 R_5 s + C_3 R_3 r_o s + 2 C_L L_L R_3 r_o s^2 + C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 r_o s^2 + C_L R_5 r_o s^2 + C_L$ 10.175 INVALID-ORDER-175 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{R_3 \left(R_5 g_m r_o + R_5 - r_o \right) \left(\bigcirc_L L_L R_1 R_5 + L_L R_2 R_5 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_3 R_5 g_m r_o s^2 + C_3 L_L R_3 R_5 g_m r_o s^2 + C_4 L_L R_3 R_$ 10.176 INVALID-ORDER-176 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$ $\frac{R_{3}R_{L}\left(C_{L}L_{L}s^{2}+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{2}+C_{L}L_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+C_{L}L_{L}R_{3$ 10.177 INVALID-ORDER-177 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L R_3 R_L r_o s^3 + C_3 C_5 R_3 r_o s^2 + C_3 C_L R_3 R_L g_m r_o s^2 + C_3 C_L R_3 R_L g_m r_o s + C_3 R_3 g_m r_o s + C_3 R_3 g_m r_o s + C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_3 R_L g_m r_o s^2 + C_5 C_L R_3 r_o s^2 + C$ **10.178** INVALID-ORDER-178 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_L R_3 r_o s^4 + C_3 C_5 R_3 r_o s^2 + C_3 C_L L_L R_3 g_m r_o s^3 + C_3 C_L L_L R_3 g_m r_o s + C_3 R_3 g_m r_o s + C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_3 g_m r_o s^3 + 4 C_5 C_L L_L R_3 g_m r_o s^3 + C_5 C_L R_3 g_m r_o s^3 + C_5 C_L$

$$H(s) = \frac{L_L R_3 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_3 r_o s^3 + C_3 L_L R_3 g_m r_o s^2 + C_5 L_L R_3 r_o s^3 + 2 C_5 L_L R_3 g_m r_o s^2 + 4 C_5 L_L R_3 s^2 + C_5 L_L r_o s^2 + C_5 L_L R_3 g_m r_o s^2 + C_L L_L R_3 g_m r_o s^2 + L_L g_m r_o s + L_L s + R_3 g_m r_o + R_3 r_o s^2 + C_5 r_o s^2 + C$$

10.179 INVALID-ORDER-179 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.180 INVALID-ORDER-180 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{C_3 C_5 C_L L_L R_3 r_o s^4 + C_3 C_5 C_L R_3 R_L r_o s^3 + C_3 C_L L_L R_3 g_m r_o s^3 + C_3 C_L L_L R_3 g_m r_o s^2 + C_3 C_L L_L R_3 g_m r_o s^2 + C_3 C_L L_L R_3 g_m r_o s^3 + C_5 C_L R_3 R_L g_m r_o s^3 + C_5 C_L R_3 R_L$

10.181 INVALID-ORDER-181 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_3 R_L r_o s^3 + C_3 L_L R_3 R_L g_m r_o s^2 + C_5 L_L R_3 R_L r_o s^3 + 2 C_5 L_L R_3 R_L g_m r_o s^2 + 4 C_5 L_L R_3 R_L r_o s^2 + C_5 L_L R_3 R_L r_o s^2 +$

10.182 INVALID-ORDER-182 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{R_3 \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_L L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 r_o s^3 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_3 L_L R_3 r_o s^3 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L R_3 R_L g_m r_o s^3 + C_5 C$

10.183 INVALID-ORDER-183 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_L R_3 R_L r_o s^4 + C_3 C_5 R_3 R_L r_o s^4 + C_3 C_5 R_3 R_L r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L g_m r_o s^3 + C_5 C_L L_L R_3 R_L r_o s^3 + C_5 C_L R_3$

10.184 INVALID-ORDER-184 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L R_L s + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{C_3 C_5 C_L R_3 R_5 R_L r_o s^3 + C_3 C_5 R_3 R_5 r_o s^2 + C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 C$

10.185 INVALID-ORDER-185 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o \right)}{C_3 C_5 C_L L_L R_3 R_5 r_o s^4 + C_3 C_5 R_3 R_5 r_o s^2 + C_3 C_L L_L R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_3 r_o s^3 + C_5 C_L R_3 r_o s^3$

10.186 INVALID-ORDER-186 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3R_3s+1}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_L R_3 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_L R_3 R_5 r_o s^3 + C_3 L_L R_3 R_5 g_m r_o s^2 + C_3 L_L R_3 r_o s^2 + C_5 L_L R_3 R_5 g_m r_o s^2 + 4 C_5 L_L R_3 R_5 g_m r_o s^2 + C_5 L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 R_5 g_m r_o s^2 + C_L L_L R_3 r_o$

10.187 INVALID-ORDER-187 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5r_os^4 + C_3C_5C_LR_3R_5R_Lr_os^3 + C_3C_5R_3R_5r_os^2 + C_3C_LL_LR_3R_5g_mr_os^3 + C_3C_LL_LR_3r_os^3 + C_3C_LR_3R_5R_Lg_mr_os^2 + C_3C_LR_3R_5R_Ls^2 + C_3C_LR_3R_5$

10.188 INVALID-ORDER-188 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_L R_3 R_5 R_L r_o s^3 + C_3 L_L R_3 R_5 R_L r_o s^2 + C_3 L_L R_3 R_5 R_L r_o s^2 + C_5 L_L R_3 R_5 R_L r$

- **10.189** INVALID-ORDER-189 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $-\frac{1}{C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{L}R_{3}R_{5}r_{o}s^{3}+C_{3}C_{5}R_{3}R_{5}R_{L}r_{o}s^{2}+C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{L}R_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{L}R_{3}R_{5}r_{o}s^{2}+C_{3}L_{L}R_{3}R_{5}s^{2}+C_{3}L_{L}R_{3}r_{o}s^{2}+C_{3}L_{L}R_{3}r_{$
- 10.190 INVALID-ORDER-190 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5R_Lr_os^4 + C_3C_5R_3R_5R_Lr_os^2 + C_3C_LL_LR_3R_5R_Lg_mr_os^3 + C_3C_LL_LR_3R_5R_Lg_mr_os^3 + C_3R_3R_5R_Lg_mr_os + C_3R_3R_5R_Lg_mr_os + C_3R_3R_5R_Lg_mr_os^3 + C_3C_LL_LR_3R_5R_Lg_mr_os^3 + C_3C_LL_LR_3R_5R_Lg$
- **10.191** INVALID-ORDER-191 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $R_3 (C_L R_L s + 1) (C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + C_5 r_o s + c$ $H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 R_5 g_m r_o s^3 + C_3 C_5 R_1 R_5 r_o s^3 + C_5 r_o s + G_5 r_o s^3 + G_$
- **10.192** INVALID-ORDER-192 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + C_5 R_5 r_o s +$
- **10.193** INVALID-ORDER-193 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_L R_3 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_L R_3 R_5 g_m r_o s^3 + C_3 C_5 L_L R_3 R_5 g_m r_o s^3 + C_5 C_L L_L R_3 R_5 g_m r_o s^3 + C_5 C_L L_L R_3 R_5 g_m r_o s^3 + C_5 C_L L_L R_3 g_m r_o s^3 + C_5 C_L L_R g_m r_o s^3 + C_5 C_L L_R g_m r_o s^3 + C_5 C_L R_3 g_m r_o s^3 + C_5 C_L R_5 g_m r_o$
- **10.194** INVALID-ORDER-194 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $\frac{1}{C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{5}C_{L}L_{L}R_{3}r_{o}s^{4}+C_{3}C_{5}C_{L}L_{L}R_{3}r_{o}s^{4}+C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{5}L_{R}R_{3}R_{5}r_{o}s^{2}+C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{$
- 10.195 INVALID-ORDER-195 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_5} + \frac{1}{L_5 s}}\right)$
- $H(s) = \frac{\frac{L_L v_3 v_4 v_5}{C_3 C_5 L_L R_3 R_5 R_L q_m r_o s^3 + C_3 C_5 L_L R_3 R_5 R_L s^3 + C_3 C_5 L_L R_3 R_5 R_L s^3 + C_5 C_L L_L R_3 R_L s^3$

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10.196 INVALID-ORDER-196 Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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10.197 INVALID-ORDER-197
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_Lr_os^4 + C_3C_5R_3R_5R_Lg_mr_os^2 + C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_Lr_os^2 + C_3C_LL_LR_3R_Lg_mr_os^3 + C_3C_LL_LR_3R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_Lg_mr_os^4 + C_3C_5C_LLR_3R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_Lg_mr_os^4 + C_3$$

10.198 INVALID-ORDER-198
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_L s^3 + C_3 C_5 R_3 R_L r_o s^2 + C_3 R_3 R_L g_m r_o s^2 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^2 + C_$$

10.199 INVALID-ORDER-199
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_3 s^3 + C_3 C_5 R_3 r_o s^2 + C_3 R_3 g_m r_o s + C_3 R_3 s + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_3 r_o s^2 + C_5 L_5 g_m r_o s^2$$

10.200 INVALID-ORDER-200
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_L g_m r_o s^2 + C_$$

10.201 INVALID-ORDER-201
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 R_3 R_L g_m r_o s^4 + C_3 C_5 L_5 R_3 R_L g_m r_o s^4 + C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_5 C_L L_5 R_3 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L$$

10.202 INVALID-ORDER-202
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o r_o s^2 + C_5 L_5 r_o s^2 + C_5 r_$$

10.203 INVALID-ORDER-203
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_5 L_L R_3 g_m r_o s^4 + C_3 C_5 L_L R_3 r_o s^3 + C_5 L_L R_3 g_m r_o s^4 + C_5 C_L L_L R_3 g_m r_o s^4 + C_5 C_L L_L R_3 r_o s^3 + C_5 L_5 L_L g_m r_o s^3 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_L R_3 g_m r_o s^2 + C_5 L_L R_3 g_m r_o s^3 + C_5 L_5 R_5 g_m r_o s^3$$

10.204 INVALID-ORDER-204 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_5R_3R_Lr_os^4 + C_3C_5C_LR_3R_Lr_os^3 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s$

10.205 INVALID-ORDER-205 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{\frac{L_L L_1 3 L_L S}{C_3 C_5 L_5 L_L R_3 R_L g_m r_o s^4 + C_3 C_5 L_5 L_L R_3 R_L s^4 + C_3 C_5 L_L R_3 R_L r_o s^3 + C_5 L_5 L_L R_3 R_L g_m r_o s^4 + C_5 C_L L_5 L_L R_3 R_L r_o s^3 + C_5 L_5 L_L R_3 R_L$

10.206 INVALID-ORDER-206 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5C_LL_LR_3R_Lr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4 + C_3C_5L_5R_3R_Lg_mr_os^3 + C_3C_5L_5R_3R_Ls^3 + C$

10.207 INVALID-ORDER-207 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + C_3 C_5 C_L L_5 L_L R_3 R_L s^5 + C_3 C_5 C_L L_L R_3 R_L r_o s^4 + C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_L r_o s^2 + C_3 C_L L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_$

10.208 INVALID-ORDER-208 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_3 C_5 L_5 R_3 R_L r_o s^3 + C_3 L_5 R_3 R_L g_m r_o s^2 + C_3 L_5 R_3 R_L s^2 + C_3 L_5 R_3 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_L s^2 + C_5 L_5 R_3 r_o s^2 + C_5 L_5 R_3 r_o s^2 + L_5 R_3 g_m r_o s + L_5 R_3 s + L_5 R_L g_m r_o s + L_5 R_L s + 2 R_3 R_L g_m r_o s + 4 R_3 R_L + R_3 r_o + R_L r_o s^2 + R_5 R_2 r_o s^2 + R_5 R_3 r_o s^2 + R_5 R_5 r_o s^2$

10.209 INVALID-ORDER-209 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

10.210 INVALID-ORDER-210 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{C_3 C_5 L_5 R_3 R_L r_o s^3 + C_3 L_5 R_3 R_L g_m r_o s^2 + C_3 L_5 R_3 R_L g_m r_o s^2 + C_5 L_5 R_3 R_L g_m r_o$

10.211 INVALID-ORDER-211 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)$ $-\frac{1}{C_{3}C_{5}C_{L}L_{5}R_{3}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{5}R_{3}r_{o}s^{3}+C_{3}C_{L}L_{5}R_{3}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{5}R_{3}R_{L}s^{3}+C_{3}C_{L}L_{5}R_{3}R_{L}s^{3}+C_{5}C_{L}L_{5}R_{3}R_{L}s^{3}+C_{5}C_{L}L_{5}R_{3}r_{o}s^{2}+C_{3}L_{5}R_{3}g_{m}r_{o}s^{2}+C_{3}L_{5}R_{3}g_{m}r_{o}s^{2}+C_{3}L_{5}R_{3}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{3}r_{o}s^{3}+C_{5}C_{$ 10.212 INVALID-ORDER-212 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)$ $H(s) = -\frac{K_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 r_o s^3 - L_5 g_m r_o s - L_5 s + r_o \right)}{C_3 C_5 C_L L_5 L_L R_3 r_o s^5 + C_3 C_5 L_5 L_L R_3 r_o s^3 + C_3 C_L L_5 L_L R_3 r_o s^3 + C$

10.213 INVALID-ORDER-213 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L R_3 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_5 L_L R_3 r_o s^4 + C_3 L_5 L_L R_3 r_o s^3 + C_3 L_5 L_L R_3 r_o s^4 + 2 C_5 L_5 L_L R_3 g_m r_o s^3 + 4 C_5 L_5 L_L R_3 r_o s^3 + C_5 L_5 L_L$

10.214 INVALID-ORDER-214 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5L_Ls_Rs_RL_ros^4 + C_3C_5L_5R_3r_os^3 + C_3C_LL_5L_LR_3g_mr_os^4 + C_3C_LL_5R_3R_Lg_mr_os^3 + C_3C_LL_5R_3R_Ls^3 + C_3C_LL_5R_3R_$

10.215 INVALID-ORDER-215 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{L_L R_3 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_5 L_L R_3 R_L r_o s^4 + C_3 L_5 L_L R_3 R_L r_o s^3 + C_5 L_5 L_L R_3$

10.216 INVALID-ORDER-216 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_Lr_os^5 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5R_3R_Lr_os^3 + C_3L_LL_RR_3R_Ls^4 + C_3C_LL_LR_3R_Lr_os^3 + C_3L_5L_LR_3g_mr_os^3 + C_3L_5L_LR_3g_mr_os^3 + C_3L_5L_LR_3s^3 + C_3L_5R_3R_Lg_mr_os^2 + C_3L_5R_3R_Ls^2 + C_3L_5R_3R_Lr_os^3 + C_3L_5L_LR_3r_os^3 + C_3L_5L_LR_3r_os^3 + C_3L_5L_LR_3r_os^3 + C_3L_5L_LR_3r_os^3 + C_3L_5L_LR_3r_os^3 + C_3L_5L_R_3r_os^3 + C_3L_5L_RR_3r_os^3 + C_3L_5L_RR_3r_os$

10.217 INVALID-ORDER-217 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_Lr_os^5 + C_3C_5L_5R_3R_Lr_os^3 + C_3C_LL_5L_LR_3R_Lg_mr_os^4 + C_3C_LL_5L_Rg_mr_os^4 + C_3C_LL_5$

10.218 INVALID-ORDER-218 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 R_3 R_L g_m r_o s^2 + C_3 R_5 R_L g_m r_o s^2 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_3 g_m r_o s^2 + C_5 L_5 R_1 g_m r_o s^2 + C_5 L_5 R_1 g_m r_o s^2 + C_5 R_3 R_5 g_m r_o s + C_5 R_5 g_m r_o s + C_5$

10.219 INVALID-ORDER-219 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $R_3\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)$ 10.220 INVALID-ORDER-220 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

- $R_3R_L\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5$
- $H(s) = \frac{R_3R_L\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5g_mr_os$
- 10.221 INVALID-ORDER-221 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LR_3R_5R_Lg_mr_os^3 + C_3C_5C_LR_3R_5R_Ls^3 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5R_3R_5g_mr_os^3 + C_3C_5R_5g_mr_os^3 + C_3C_5R_5g_mr_os^3 + C_3C_5R_5g_mr_os^3 + C_3C_5R_5g_mr_os^3 + C_3C_5R_5g_mr_os$
- 10.222 INVALID-ORDER-222 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_LR_3R_5g_mr_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5L_LR_3r_os^4 + C_3C_5L_LR_3r$
- 10.223 INVALID-ORDER-223 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_L R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 L_4 R_3 g_m r_o s^4 + C_5 C_L L_4 R_3 g_m r_o s^4 + C_5 C_4 L_5 R_5 g_m r_o s^4 + C_5 C_5 R_5 g_m r_o$
- 10.224 INVALID-ORDER-224 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_LR_3R_5g_mr_os^4 + C_3C_5C_LL_LR_3R_5s^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 + C_3C_5C_LR_3R_5R_Ls^3 + C_3C_5C_LR_3R_5R_Ls^3$
- 10.225 INVALID-ORDER-225 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- 10.226 INVALID-ORDER-226 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $\overline{C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}r_{o}s^{5}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}s^{5}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}s^{4}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{L}L_{R}R_{3}R_{L}s^{4}+C$
- 10.227 INVALID-ORDER-227 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$
- $\overline{C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}r_{o}s^{5}+C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}s^{5}+C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{4}+C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}R_{L}s^{4}+C_{3}C_{5}L_{L}R_{3}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{5}R_{3}R_{L}s^{3}+C_{3}C_{5}R_{$

10.228 INVALID-ORDER-228 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_3 C_5 L_5 R_3 R_5 R_L r_o s^3 + C_3 L_5 R_3 R_5 R_L g_m r_o s^2 + C_3 L_5 R_3 R_5 R_L r_o s^2 + C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 R_L r_o s^2 + C_5 L_5 R_3 R_5 g_m r_o s + L_5 R_3 R_5 g_m r_o s + L_5 R_3 R_5 g_m r_o s + 4 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + C_5 L_5 R_3 R_5 g_m r_o s + L_5 R_3 R_5 g_m r_o s + L_5 R_3 R_5 g_m r_o s + 4 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + C_5 L_5 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L$

10.229 INVALID-ORDER-229 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{C_3 C_5 L_5 R_3 R_5 r_o s^3 + C_3 L_5 R_3 R_5 g_m r_o s^2 + C_3 L_5 R_3 R_5 r_o s^2 + C_5 L_5 R_3 R_5 r_o s^3 + 2 C_5 L_5 R_3 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o$

10.230 INVALID-ORDER-230 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - L_5 r_o s - L_5 R_5 R_5 R_L r_o s^3 + C_5 L_5 R_3 R_5 R_L r_o s^3 + C_5 L_5 R_3 R_5 R_L r_o s^2 + C_5 L_5 R_$

10.231 INVALID-ORDER-231 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5R_3R_5R_Lr_os^4 + C_3C_5L_5R_3R_5r_os^3 + C_3C_LL_5R_3R_5R_Lg_mr_os^3 + C_3C_LL_5R_3R_5R_Lr_os^3 + C_3C_LR_3R_5R_Lr_os^3 +$

10.232 INVALID-ORDER-232 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5L_5R_3R_5r_os^3 + C_3C_LL_5L_LR_3R_5g_mr_os^4 + C_3C_LL_5L_LR_3R_5r_os^4 + C_3C_LL_5L_LR_3R_5g_mr_os^4 + C_3C_LL_5L_LR_3R_5r_os^4 + C_3C_LL_5L_5L_2R_5r_os^4 +$

10.233 INVALID-ORDER-233 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L \kappa_3 s \left(-C_5 L_5 \kappa_5 r_o s^2 + L_5 \kappa_5 g_m r_o s^3 + C_5 L_5 L_L R_3 R_5 r_o s^4 + C_5 L_5 L_L R_3 R_5 r_o s^4 + C_5 L_5 L_L R_3 R_5 r_o s^3 + C_5 L_5 L_L R$

10.234 INVALID-ORDER-234 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5L_Ls_Rs_Rs_Lr_os^4 + C_3C_5L_5R_3R_5r_os^3 + C_3C_LLs_Ls_Rs_ss_+ + C_3C_LLs_Ls_Rs_ss_+ + C_3C_LLs_Rs_Rs_ss_+ + C_3C_LLs_Rs_ss_+ + C_3C_LLs_$

10.235 INVALID-ORDER-235 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $\overline{C_3C_5L_5L_LR_3R_5R_Lr_os^4 + C_3L_5L_LR_3R_5R_Lg_mr_os^3 + C_3L_5L_LR_3R_5R_Lr_os^3 + C_3L_5L_LR_3R_5R_Lr_os^4 + 2C_5L_5L_LR_3R_5R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_5R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_5R_Lg_mr_os^3 + C_5L_5L_LR_3R_5R_Lr_os^4 + 2C_5L_5L_LR_3R_5R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_5R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_5R_Lg_mr_os^3 + C_5L_5L_LR_3R_5R_Lr_os^4 + 2C_5L_5L_LR_3R_5R_Lg_mr_os^3 + 4C_5L_5L_LR_3R_5R_Lg_mr_os^3 + C_5L_5L_LR_3R_5R_Lg_mr_os^3 + C_5L_5L_Rg_mr_os^3 + C_5L_5L_LR_3R_5R_Lg_mr_os^3 + C_5L_5L_Rg_mr_os^3 + C_5L_5L_Rg_mr_o$

- **10.236** INVALID-ORDER-236 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_5L_LR_3R_5r_os^4 + C_3C_5L_5R_3R_5R_Lr_os^3 + C_3C_LL_5L_LR_3R_5R_Lr_os^4 + C_3C_LL_5L_RR_3R_5R_Lr_os^4 + C_3C_LL_5L_RR_3R_5R_Lr_o$
- 10.237 INVALID-ORDER-237 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_5R_3R_5R_Lr_os^3 + C_3C_LL_5L_LR_3R_5R_Lg_mr_os^4 + C_3C_LL_5L_LR_3R_5R_Lr_os^4 + C_3C_LL_5L_LR_3R_5R_Lr_os^4 + C_3C_LL_5L_LR_3R_5R_Lr_os^4 + C_3C_LL_5R_3R_5R_Lr_os^4 + C_3C_LL_5R_5R_5R_Lr_os^4 + C_3C_LL_5R_5R_5R_Lr_os^4 + C_3C_LL_5R_5R_Lr_os^4 + C_3C_LL_5R_5R_Lr_os^4 + C_3C_LL_5R_5R_Lr_o$
- 10.238 INVALID-ORDER-238 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_3 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s^2 +$
- 10.239 INVALID-ORDER-239 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 r_o \right)}{C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 + C_$
- 10.240 INVALID-ORDER-240 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_5R_3R_5R_Lg_mr_os^3 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_5L_5R_3R_Lr_os^3 + C_3L_5R_3R_Lg_mr_os^2 + C_3L_5R_3R_Lg_mr_os + C_3R_3R_5R_Lg_mr_os + C_3R_3R_5R_Lg_mr_os^3 + C_5C_LL_5R_3R_5R_Ls^3 + C_5C_LL_5R_3R_5R_Lr_os^3 + C_5C_LL_5R_3R_Lr_os^3 +$
- 10.241 INVALID-ORDER-241 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5L_Ls_Rg_mr_os^4 + C_3C_5L_5R_3R_5g_mr_os^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5L_5R_5R_5s^3 + C_3C_5L_5R_5s^3 + C_3C_5L$
- 10.242 INVALID-ORDER-242 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- 10.243 INVALID-ORDER-243 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_5L_LR_3R_5g_mr_os^4 + C_3C_5L_5L_LR_3R_5s^4 + C_3C_5L_5L_LR_3r_os^4 + C_3L_5L_LR_3g_mr_os^3 + C_3L_LR_3s^3 + C_3L_LR_3R_5g_mr_os^2 + C_3L_LR_3r_os^2 + C_5L_LL_LR_3R_5g_mr_os^4 + C_5C_LL_5L_LR_3R_5s^4 + C_5C_LL_5L_LR_3r_os^4 + C_5C_LL_5L_LR_3r_os^4$

- **10.244** INVALID-ORDER-244 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5L_5R_3R_5g_mr_os^4 + C_3C_5L_5R_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R$
- 10.245 INVALID-ORDER-245 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + C_3C_5L_5L_LR_3R_5R_Lg^4 + C_3C_5L_5L_LR_3R_Lg_mr_os^3 + C_3L_LR_3R_Lg_mr_os^3 + C_3L_LR_3R_Lg_mr_os^2 + C_3L_LR_3R_Lg_mr_os^2$
- **10.246** INVALID-ORDER-246 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- 10.247 INVALID-ORDER-247 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_Lr_os^5 + C_3C_5L_5R_3R_5R_Lg_mr_os^3 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_5L_5R_3R_Lr_os^3 + C_3C_5L_5L_LR_3R_Lg_mr_os^4 + C_3C_LL_5L_LR_3R_Lg_mr_os^4 + C_3C_LL_5L_LR_3R_Lg_mr_os^4$
- 10.248 INVALID-ORDER-248 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{R_3 R_L \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 C_5 R_5 r_o s + R_5 g_m r_o + R_5 g_m r_o + R_5 g_m r_o s^2 + C_5 L_5 R_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 R_L r_o s^3 + C_3 C_5 R_3 R_5 R_L r_o s^2 + C_5 L_5 R_3 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r$
- 10.249 INVALID-ORDER-249 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 C_5 R_5 r_o s + R_5 g_m r_o + R_5 r_o \right)}{C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 R_5 g_m r_o s^3 + C_5 C_L L_5 R_3 R_5 r_o s^3 + C_5 C_L L_5 R_5 R_5 r_o s^3 + C_5 C_L L_5 R_5 R_5 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 +$
- 10.250 INVALID-ORDER-250 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_3}{C_3C_5L_5R_3R_5R_Lg_mr_os^3 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_5L_5R_3R_5R_Lr_os^3 + C_3C_5L_5R_3R_5R_Lr_os^3 + C_3C_5L_5R_3R_5R_Lr_os^3 + C_5C_LL_5R_3R_5R_Ls^3 + C_5C_LL_5R_3R_5R_Lr_os^3 + C_5C_LL_5R_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_Lr_os^3 + C_5C_LL_5R_5R_Lr_$
- 10.251 INVALID-ORDER-251 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3 C_5 C_L L_5 R_3 R_5 R_L q_m r_o s^4 + C_3 C_5 C_L L_5 R_3 R_5 R_L r_o s^4 + C_3 C_5 C_L L_5 R_3 R_5 R_L r_o s^4 + C_3 C_5 C_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_5 R_3 R_5 q_m r_o s^3 + C_3 C_5 L_5 R_3 R_5 r_o s^3 + C_3 C_5 L_5 R_5 r_o s^3 + C_5 L_5 R_5$

- 10.252 INVALID-ORDER-252 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5L_LR_3R_5r_os^4 + C_3C_5L_5R_3R_5g_mr_os^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5L_5R_5R_5s^3 + C_3C$
- 10.253 INVALID-ORDER-253 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- **10.254** INVALID-ORDER-254 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_RR_3r_os^5 + C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Lr_os^4 + C_3C_5C_LL_5R_3R_5r_os^4 + C_3C_5C_LL_5R_5r_os^4 + C_3C_5C_LL_5R_5r_os^4 + C_3C_5C_LL_5R_5r_os^4 + C_3C_5C_LL_5R_5r_os^4 + C_3C_5C_LL_5R_5r_os^5 + C_3C_5C_LL_5R_5r_os^5 + C_3C_5C_LL_5R_5r_os^5 + C_3C_5C_LL_5R$
- 10.255 INVALID-ORDER-255 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + C_3C_5L_5L_LR_3R_5R_Ls^4 + C_3C_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_LR_3R_5R_Lg_mr_os^2 + C_3L_LR_3R_5R_Ls^2 + C_3L_LR_3R_5R_Lg_mr_os^2 + C_5L_LL_RR_3R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_3R_5R_Ls^4 + C_5C_LL_5L_LR_3R_5R_Lr_os^4 + C_5C_LL_5L_RR_3R_5R_Ls^2 + C_3L_LR_3R_5R_Ls^2 + C_3L_LR_3R$
- 10.256 INVALID-ORDER-256 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_5L_LR_3R_5g_mr_os^4 + C_3C_5L_5L_LR_3R_5s^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_RR_3r_os^4 + C_3C_5L_5R_3r_os^4 + C_3C_5L_5R$
- 10.257 INVALID-ORDER-257 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- 10.258 INVALID-ORDER-258 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ R_L\right)$
- **10.259** INVALID-ORDER-259 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{3}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}r_{o}s^{2}+2C_{3}R_{3}g_{m}r_{o}s+4C_{3}R_{3}s+C_{3}R_{5}g_{m}r_{o}s+C_{3}R_{5}s+C_{3}r_{o}s+2C_{L}L_{L}g_{m}r_{o}s^{2}+4C_{L}L_{L}s^{2}+C_{L}R_{5}g_{m}r_{o}s+C_{3}R_{5}s^{2}+C_{3}R_{5}g_{m}r_{o}s+C_{3}R$

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10.262 INVALID-ORDER-262 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)
H(s) = \frac{L_L R_L s \left(C_3 R_3 s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_L R_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_5 g_m r_o s^2 + C_3 L_L R_3 R_5 
10.263 INVALID-ORDER-263 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{(C_3\kappa_3s + 1)\left(\kappa_5g_mr_o + \kappa_5 - \frac{(C_3\kappa_3s + 1)\kappa_5g_mr_o + \kappa_5g_mr_o + \kappa_5 - \frac{(C_3\kappa_3s + 1)\kappa_5g_mr_o + \kappa_5g_mr_o + \kappa
10.264 INVALID-ORDER-264 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
H(s) = \frac{RL\left(\text{C}_{3}R_{3}S + \text{C}_{3}C_{L}L_{L}R_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{3}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{3}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{3}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{5}R_{L}g_{m}r_{
10.265 INVALID-ORDER-265 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                 H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{5}r_{o}s+C_{3}C_{L}R_{3}g_{m}r_{o}s+C_{3}C_{L}R_{3}s+C_{3}g_{m}r_{o}+C_{3}+C_{5}C_{L}r_{o}s+2C_{5}g_{m}r_{o}+4C_{5}+C_{L}g_{m}r_{o}+C_{L}\right)}
10.266 INVALID-ORDER-266 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_3 R_3 s + 1 \right) \left( -C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L R_3 R_L r_o s^3 + 2 C_3 C_5 R_3 R_L g_m r_o s^2 + 4 C_3 C_5 R_3 R_L s^2 + C_3 C_5 R_3 r_o s^2 + C_3 C_L R_3 R_L g_m r_o s^2 + C_3 C_L R_3 R_L g_m r_o s + C_3 R_L s + C_5 C_L R_L r_o s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + C_L R_L g_m r_o s + C_L R_L g_m
10.267 INVALID-ORDER-267 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)
H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}R_{L}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+4C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{5}C_{L}R_{1}r_{o}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{L}R_{3}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_
10.268 INVALID-ORDER-268 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{1}{C_{5s}}, L_L s + \frac{1}{C_{Ls}}\right)
H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{3}C_{5}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{5}L_{L}L_{r}os^{3}+C_{3}C_{5}L_{L}R_{3}r_{o}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{L}L_{L}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{L}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s+C_{3}C_{L}L_{L}g_{m}r_{o}s
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 $H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_L R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_3 r_o s^3 + 2 C_3 L_L R_3 g_m r_o s^2 + 4 C_3 L_L R_5 g_m r_o s^2 + C_3 L_L R_5 g^2 + C_4 L_L R_5$

 $H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{3}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{L}L_{L}r_{o}s^{3}+C_{3}C_{L}R_{3}R_{5}s^{2}+2C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{L}R_{5}R_{L}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{5}R_{L}s^{2}+C_{3}$

10.260 INVALID-ORDER-260 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.261 INVALID-ORDER-261 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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10.271 INVALID-ORDER-271 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)
H(s) = \frac{L_L R_L s \left(C_3 R_3 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_L R_3 R_L r_o s^4 + 2 C_3 C_5 L_L R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r_o s^3 + C_3 C_5 L_L R_3 R_L g_m r
10.272 INVALID-ORDER-272 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{(C_3R_3s + 1)(-C_5)}{2C_3C_5C_LL_LR_3R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + 2C_3C_5L_LR_3g_mr_os^3 + 4C_3C_5L_LR_3s^3 + C_3C_5L_Lr_os^3 + 2C_3C_5R_3R_Lg_mr_os^2 + 4C_3C_5R_3r_os^2 + C_3C_5R_3r_os^2 + C_3C_5R_3r
10.273 INVALID-ORDER-273 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
H(s) = \frac{1}{2C_3C_5C_LL_LR_3R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LR_3R_Lr_os^3 + 2C_3C_5R_3R_Lg_mr_os^2 + 4C_3C_5R_3r_os^2 + C_3C_5R_Lr_os^2 + C_3C_5R_Lr_os^2 + C_3C_LL_RR_3g_mr_os^3 + C_3C_LLR_3g_mr_os^3 + C_3C_LLR_3g_mr_os^3 + C_3C_LLR_3g_mr_os^3 + C_3C_L
10.274 INVALID-ORDER-274 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
                                                          \frac{\left(C_{3}R_{3}s+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3}+2C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2}+4C_{3}C_{5}R_{5}r_{o}s^{2}+C_{3}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}r_{o}s^{2}+2C_{3}R_{3}g_{m}r_{o}s+4C_{3}R_{5}s+C_{3}r_{o}s+C_{5}C_{L}R_{5}r_{o}s^{2}+2C_{5}R_{5}g_{m}r_{o}s+4C_{5}R_{5}s+C_{L}R_{5}g_{m}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}s+C_{L}R_{5}r_{o}
10.275 INVALID-ORDER-275 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R_L (C_3 R_3 s + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)
H(s) = -\frac{1}{C_3C_5C_LR_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lg_mr_os^2 + 4C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5R_Ls^2 + C_3C_4R_3R_5R_Lg_mr_os^2 + C_3C_4R_3R_5R_Ls^2 + C_3C_4R_5R_5R_Ls^2 + C_3C_4R_5R_5R_Ls^2 + C_3C_4R_5R_Ls^2 + C_3C_4R_5R_Ls^2 + C_3C_4R_5R_Ls^2 + C_3C
10.276 INVALID-ORDER-276 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                                          \frac{(\cup_{3}\kappa_{3}s+1)(\cup_{L}\kappa_{L}s+1)}{2C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{3}+4C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}s^{3}+C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3}+2C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2}+4C_{3}C_{5}R_{3}R_{5}s^{2}+C_{3}C_{L}R_{3}R_{5}s^{2}+2C_{3}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+4C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3}R_{L}
10.277 INVALID-ORDER-277 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_{3s}}, \infty, \frac{R_5}{C_5 R_{5s} + 1}, L_L s + \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (C_3R_3s+1)(C_LL_Ls^2+1)
H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}q_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3} + 2C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2} + 4C_{3}C_{5}R_{5}r_{o}s^{2} + 2C_{3}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3} + 4C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L
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 $H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_L R_3 r_o s^4 + 2 C_3 C_5 L_L R_3 g_m r_o s^3 + 4 C_3 C_5 L_L R_3 s^3 + C_3 C_5 L_L r_o s^3 + C_3 C_L L_L R_3 g_m r_o s^3 + C_3 L_L L_R g_m r_o s^3 + C_3 L_L L_R g_m r_o s^2 + C_3 L_L g_m r_o s^2 + C_3 L_L g_m r_o s^2 + C_3 L_L g_m r_o s^2 + C_5 L_L g$

 $H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)}{s\left(2C_{3}C_{5}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{5}C_{L}L_{L}R_{3}s^{3}+C_{3}C_{5}C_{L}L_{L}r_{o}s^{3}+2C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+4C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+C_{3}$

10.269 INVALID-ORDER-269 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.270 INVALID-ORDER-270 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.278 INVALID-ORDER-278 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$L_{LS}(C_{3}R_{3}s+1)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right) \\ -\frac{L_{LS}(C_{3}R_{3}s+1)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}L_{L}R_{3}R_{5}r_{o}s^{4}+2C_{3}C_{L}L_{R}_{3}R_{5}g_{m}r_{o}s^{3}+4C_{3}C_{L}L_{R}_{3}R_{5}g_{m}r_{o}s^{3}+4C_{3}C_{L}L_{R}_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{3}r_{o}s^{3}+2C_{3}L_{L}R_{3}g_{m}r_{o}s^{2}+4C_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C$$

10.279 INVALID-ORDER-279
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{L}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 2C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3} + C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3} + 2C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2} + 4C_{3}C_{5}R_{3}R_{5}s^{2} + C_{3}C_{5}R_{5}r_{o}s^{2} + 2C_{3}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}R_{3}R_{5}r_{o}s^{3} + 2C_{3}C_{5}R_{3}R_{5}g_{m}r_{o}s^{2} + 4C_{3}C_{5}R_{3}R_{5}s^{2} + C_{3}C_{5}R_{5}r_{o}s^{2} + 2C_{3}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{L}R_{3}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{L}R_{3}R_{5}r_{o}s^{2} + 4C_{3}C_{5}R_{3}R_{5}r_{o}s^{2} + 4C_{3}C_{5}R_{5}R_{5}r_{o}s^{2} + 4C_{3}C_{5}R_{5}R_{5}r_{o}s^{2}$$

10.280 INVALID-ORDER-280
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5R_Lr_os^4 + 2C_3C_5L_LR_3R_5R_Lg_mr_os^3 + 4C_3C_5L_LR_3R_5r_os^3 + C_3C_5L_LR_3R_5r_os^3 + C_3C_5L_LR_3R_5R_Lr_os^3 + C_3C$$

10.281 INVALID-ORDER-281
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3R_5r_os^4 + C_3C_5C_LL_LR_3R_5r_os^4 + 2C_3C_5L_LR_3R_5g_mr_os^3 + 4C_3C_5L_LR_3R_5s^3 + C_3C_5L_LR_3R_5r_os^3 + 2C_3C_5R_3R_5R_Lg_mr_os^2 + 4C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5$$

10.282 INVALID-ORDER-282
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5r_os^4 + C_3C_5C_LL_LR_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lg_mr_os^2 + 4C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Ls^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_3R_5R_Lr_os^3 + 2C_3C_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3 + 2C_3C_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3 + 2C_3C_5R_5R_5R_Lr_os^3$$

10.283 INVALID-ORDER-283
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3 R_3 s + 1)(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1)}{(C_3 R_3 s + 1)(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1)}$$

$$H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{5}g_{m}r_{o}s+C_{3}C_{5}R_{5}s+C_{3}C_{5}r_{o}s+C_{3}C_{L}R_{3}g_{m}r_{o}s+C_{3}C_{L}R_{3}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r_{o}s+C_{5}C_$$

10.284 INVALID-ORDER-284
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o s + C_5 R_5 r_o$$

10.285 INVALID-ORDER-285
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}R_{L}s+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+C_{3}C_{5}C_{L}R_{3}R_{c}s^{2}+C_{3}C_{5}C_{L}R_{3}R_{$$

10.286 INVALID-ORDER-286
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{3}C_{5}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{5}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{5}C_{L}L_{L}R_{5}s^{3}+C_{3}C_{5}C_{L}L_$$

10.287 INVALID-ORDER-287 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_L s (C_3 R_3 s + 1) (C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o$

 $H(s) = \frac{L_L s \left(\cup_3 R_3 s + 1 \right) \left(\cup_5 R_5 g_m r_o s^4 + \cup_5 R_5 s - \cup_5 r_o s + g_m r_o s^4 + C_3 C_5 L_L R_3 g_m r_o s^3 + C_3 C_5 L_L R_3 g_m r_o s^$

- 10.288 INVALID-ORDER-288 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s \cdot (2C_3C_5C_LL_LR_3g_mr_os^3 + 4C_3C_5C_LL_LR_3s^3 + C_3C_5C_LL_LR_5g_mr_os^3 + C_3C_5C_LL_Rs^3 + C_3C_5C_LR_3R_5g_mr_os^2 + C_3C_5C_LR_3R_5g_mr_os^2 + C_3C_5C_LR_3R_Lg_mr_os^2 + C_3C_5C_LR_3R_L$
- 10.289 INVALID-ORDER-289 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + C_3C_5L_LR_3R_5R_Ls^4 + C_3C_5L_LR_3R_Lr_os^4 + C_3C_5L_LR_3R_5g_mr_os^3 + C_3C_5L_LR_3R_Lg_mr_os^3 + C_3C_5L_LR_3R_Ls^3 + C_3C_5L$
- 10.290 INVALID-ORDER-290 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5g_mr_os^4 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5C_LL_LR_3R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_Rr_os^4 + C_$
- 10.291 INVALID-ORDER-291 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5g_mr_os^4 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5C_LL_LR_3R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_Lg_mr_os^4 + C_3C_5C_LLR$
- **10.292** INVALID-ORDER-292 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_1 g_m r_o s^3 + C_3 C_5 L_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_L g_m r_o s^3 + C_3 C_5 R_1 g_m r_o s^2 + 4 C_3 C_5 R_3 R_L s^2 + C_3 C_5 R_3 r_o s^2 + C_3 R_3 g_m r_o s + C_3 R_L s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s}$
- 10.293 INVALID-ORDER-293 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3}+C_{3}C_{5}L_{L}S_{3}s^{3}+C_{3}C_{5}L_{L}S_{3}s^{2}+C_{3}C_{5}L_{5}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{5}r_{o}s+C_{3}C_{L}R_{3}$
- 10.294 INVALID-ORDER-294 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $R_L (C_3 R_3 s + 1) (C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + C_5 L_5 s^2 C_5 r_o s + c_5 L_5 r_o s +$ $H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 C_5 R_3 R_L g_m r_$

10.295 INVALID-ORDER-295 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_3R_3s+1)\left(C_LR_Ls+1\right)\left(C_5L_5g_mr_os^2+C_5L_5s^2-C_5r_os+g_mr_o+1\right)}{s\left(C_3C_5C_LL_5R_3g_mr_os^3+C_3C_5L_Lt$

 $s\left(C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3}+C_{3}C_{5}C_{L}L_{5}R_{3}s^{3}+C_{3}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{5}C_{L}L_{5}R_{L}s^{3}+2C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+4C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s^{4}+4C_{3}C_{5}R_{3}s+C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+4C_{3}C_{5}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{5}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{5}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{5}C_{L}R_{3}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+2C_{3}C_{5}R_{3}g_{m}r_{o}s+4C_{3}C_{5}R_{3}s+C_{3}C_{5}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{5}C_{L}R_{3}R_{L}s$

10.296 INVALID-ORDER-296 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_3R_3s+1)\left(C_LL_Ls^2+1\right)\left(C_5L_5g_mr_os^2+C_5L_5s^2-C_5r_os+g_mr_o+1\right)}{s\left(C_3C_5C_LL_5L_Lg_mr_os^4+C_3C_5C_LL_5R_3g_mr_os^3+C_3C_5C_LL_5R_3g_mr_os^3+C_3C_5C_LL_Rs^3+C_5C_LL_Rs^3+C_5$

10.297 INVALID-ORDER-297 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.298 INVALID-ORDER-298 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{2}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{$

10.299 INVALID-ORDER-299 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5C_LL_LR_3R_Lr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4 + C_3C_5L_5L_LR_2g_mr_os^4 + C_3C_5L_5L_LR_2g_mr_os^4 + C_3C_5L_5L_LR_2g_mr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4 + C_3C_5L_5L_RR_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5R_3g_mr_os^4 + C_3C_5R_3g_mr_os^4$

10.300 INVALID-ORDER-300 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_RL_gmr_os^5 + C_3C_5C_LL_LR_3R_Lgmr_os^4 + 4C_3C_5C_LL_LR_3R_Lgmr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_Rr_os^4 + C_3C_5C_LL_Rr_o$

10.301 INVALID-ORDER-301 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3q_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_1q_mr_os^5 + C_3C_5C_LL_5R_3R_Lq_mr_os^4 + C_3C_5C_LL_5R_3R_Lq_mr_os^4 + C_3C_5C_LL_4R_3R_Lq_mr_os^4 + C_3C_5C_LL_4R_3R_Ls^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL$

10.302 INVALID-ORDER-302 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o \right)}{2 C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_5 R_3 R_L s^3 + C_3 C_5 L_5 R_3 r_o s^3 + C_3 L_5 R_3 g_m r_o s^2 + C_3 L_5 R_3 g_m r_o s^2 + C_3 L_5 R_L g_m r_o s^2 + C_3 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_L g_m r_o s^2 + C_5 L_5 R_L g_m$

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10.303 INVALID-ORDER-303 Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)
```

$$H(s) = -\frac{\left(C_{3}R_{3}s+1\right)\left(C_{5}L_{5}r_{o}s^{2}-L_{5}g_{m}r_{o}s-L_{5}s+r_{o}\right)}{C_{3}C_{5}C_{L}L_{5}R_{3}r_{o}s^{4}+2C_{3}C_{5}L_{5}R_{3}s^{3}+C_{3}C_{5}L_{5}r_{o}s^{3}+C_{3}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{5}R_{3}g_{m}r_{o}s^{2}+C_{3}L_{5}g_{m}r_{o}s^{2}+C_{3}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{3}+2C_{5}L_{5}g_{m}r_{o}s^{2}+4C_{5}L_{5}s^{2}+C_{L}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{3$$

10.304 INVALID-ORDER-304
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{R_L \left(C_3 R_3 s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_3 C_5 C_L L_5 R_3 R_L r_o s^4 + 2 C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_5 R_3 R_L s^3 + C_3 C_L L_5 R_3 R_L g_m r_o$$

10.305 INVALID-ORDER-305
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{(C_3R_3s + 1)\left(C_LR_Ls + 1\right)}{2C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3r_os^4 + C_3C_5C_LL_5R_3r_os^4 + 2C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5R_3g_mr_os^3 + C_3C_LL_5R_3g_mr_os^3 + C_$$

10.306 INVALID-ORDER-306
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{(C_3R_3s + 1)\left(C_LL_Ls^2 + 1\right)}{2C_3C_5C_LL_5L_LR_3g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5R_3r_os^4 + 2C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5R_3s^3 + C_3C_LL_5L_Lg_mr_os^4 + C_3C_LL_5L_Ls^4 + C_3C_LL_5R_3g_mr_os^3 + 4C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5R_3$$

10.307 INVALID-ORDER-307
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_3 C_5 C_L L_5 L_L R_3 r_o s^5 + 2 C_3 C_5 L_5 L_L R_3 g_m r_o s^4 + 4 C_3 C_5 L_5 L_L R_3 r_o s^3 + C_3 L_L L_2 R_3 r_o s^3 + C_3 L_5 L_L R_3 r_o s^3 + C_3 L_5 R_3$$

10.308 INVALID-ORDER-308
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_Lr_os^5 + 2C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_5R_3r_os^4 + C_3C_5C_LL_5R_3g_mr_os^3 + 4C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s^3 + C_3C_5L$$

10.309 INVALID-ORDER-309
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_Lr_os^5 + 2C_3C_5L_5L_LR_3R_Lg_mr_os^4 + 4C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_5L_5L_LR_3R_Lr_os^4 + C_3C_5L_5L_RR_3R_Lr_os^4 + C_3C_5L$$

10.310 INVALID-ORDER-310
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{L}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}r_{o}s^{5} + 2C_{3}C_{5}L_{5}L_{L}R_{3}g_{m}r_{o}s^{4} + 4C_{3}C_{5}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{5}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{5}L_{5}R_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{3}R_{L}s^{3} + C_{3}C_{5}L_{5}R_{3}r_{o}s^{3} + C_{3}C_{5}L_{5}L_{L}R_{3}r_{o}s^{5} + C_{3}C_{5}L_{L}R_{3}r_{o}s^{5} + C_{3$$

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10.311 INVALID-ORDER-311 Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)
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$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5$$

10.312 INVALID-ORDER-312
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_3 s^3 + C_3 C_5 L_5 R_1 g_m r_o s^3 + C_3 C_5 R_3 R_5 g_m r_o s^2 + C_3 C_5 R_3 R_5 g_m r_o s^2 + 2 C_3 C_5 R_3 R_1 g_m r_o s^2 + 2 C_3 C_5 R_3 R_1 g_m r_o s^2 + C_3 C_5 R_5 R_1 g_m r_o s^2 + C_3 C_5 R_3 R_1 g_m r_o s^$$

10.313 INVALID-ORDER-313
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{3}R_{3}s+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3}+C_{3}C_{5}L_{L}_{5}R_{3}s^{3}+C_{3}C_{5}L_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{R}_{3}r_{o}s^{2}+C_{3}C_{5}L_{5}g_{m}r_{o}s^{2}+C_{3}C_{5}L_{5}s^{2}+C_{5}C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}g_{m}r$$

10.314 INVALID-ORDER-314
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LR_3R_5R_Lg_mr_os^3 + C_3C_5L_Rg_mr_os^3 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5R_3g_mr_os^3 + C_3C$$

10.315 INVALID-ORDER-315
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s + 1)(C_3R_3s + 1)(C_3R_3$$

10.316 INVALID-ORDER-316
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s^4 + C_3C_5C_LL_5L_Lg_mr_os^4 + C_3C_5C_LL_5R_3g_mr_os^3 + C_3C_5C_LL_5R_3g_mr_os^3 + C_3C_5C_LL_LR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LLR_3g_mr_os^3 + C_3C_5C_LR_3g_mr_os^3 + C_3C_5$$

10.317 INVALID-ORDER-317
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5L_LL_2R_3s^5 + C_3C_5L_LL_2R_3r_os^4 + C_3C_5L_LL_2R_3r_os^4 + C_3C_5L_5L_Lg_mr_os^4 + C_3C_5L_5L_Ls^4 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5L_LR_3g_mr_os^3 + C_3C_5L_LR_3g_mr_os$$

10.318 INVALID-ORDER-318
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{5}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{4}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{3}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{5}s^{3} + C_{3}C$$

- **10.319** INVALID-ORDER-319 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_Lr_os^4 + C_3C_5L_LLR_3g_mr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4 + C_3C_5L_5L_RR_3g_mr_os^4 + C_3C_5L_5L_RR_3g_mr_os^4$
- 10.320 INVALID-ORDER-320 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3 C_5 C_L L_5 L_L R_3 g_m r_o s^5 + C_3 C_5 C_L L_5 L_L R_3 s^5 + C_3 C_5 C_L L_5 L_L R_2 g_m r_o s^5 + C_3 C_5 C_L L_L R_3 R_5 g_m r_o s^4 + C_3 C_5 C_L L_L R_3 R_5 g_m r_o s^4 + C_3 C_5 C_L L_L R_3 R_L g_$
- 10.321 INVALID-ORDER-321 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_mr_os^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_Lg_mr_os^5 + C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Lg_mr_os^4$
- 10.322 INVALID-ORDER-322 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 R_5 r_o s^2 L_5 R_5 g_m r_o s L_5 R_5 g_m r_o s L_5 R_5 s + L_5 r_o s + L$
- 10.323 INVALID-ORDER-323 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s}\right)$
- $H(s) = -\frac{(C_3R_3s + 1)\left(C_5L_5R_5r_os^2 L_5R_5g_mr_os L_5R_5s + L_5r_os + R_5r_o\right)}{C_3C_5C_LL_5R_3R_5r_os^4 + 2C_3C_5L_5R_3R_5g_mr_os^3 + 4C_3C_5L_5R_3R_5s^3 + C_3C_LL_5R_3R_5s^3 + C_3C_LL_5R_3r_os^3 + C_3C_LL_5$
- 10.324 INVALID-ORDER-324 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_5R_3R_5R_Lr_os^4 + 2C_3C_5L_5R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_5R_3R_5R_Ls^3 + C_3C_5L_5R_3R_5r_os^3 + C_3C_LL_5R_3R_5R_Lg_mr_os^3 + C_3C_LL_5R_3R_5R_Ls^3 + C_3C_LL_5R_3R_5R_Lr_os^3 + C_3C_LL_5R_5R_Lr_os^3 + C_3C_LL_5R_5R_Lr_os^3 + C_3C_LL_5R_5R_Lr_os^3 + C_3C_LL_5R_5R_Lr_os^3 + C_3C_LL_5R_5R_Lr$
- 10.325 INVALID-ORDER-325 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}R_{L}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{L}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{3}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{5}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{5}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{5}g_{m}r_{o}s^{3} + 4C_{3}C_{5}L_{5}R_{5}g_{m}r_{o}s^{3} + 4C_{$
- 10.326 INVALID-ORDER-326 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}q_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{4} + 2C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + 2C_{3}C_{L}L_{5}L_{L}R_{3}g_{m}r_{o}s^{4} + 4C_{3}C_{L}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{L}L_{5}L_{L}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{5}L_{L}R_{5}r_{o}s^{4} + 2C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + C_{3}C_{5}L_{5}L_{L}R_{3}g_{m}r_{o}s^{4} + 4C_{3}C_{L}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{L}L_{5}L_{L}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}L_{5}L_{L}R_{5}r_{o}s^{4} + 2C_{3}C_{5}L_{5}L_{L}R_{5}r_{o}s^{4} + 2C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + C_{3}C_{5}L_{5}R_{3}R_{5}s^{3} + C_{3}C_{5}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{L}L_{5}L_{L}R_{3}s^{4} + C_{3}C_{L}L_{5}L_{L}R_{5}r_{o}s^{4} + C_{3}C_$

- 10.327 INVALID-ORDER-327 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5r_os^5 + 2C_3C_5L_5L_LR_3R_5g_mr_os^4 + 4C_3C_5L_5L_LR_3R_5s^4 + C_3C_5L_5L_LR_3r_os^4 + C_3C_LL_5L_LR_3R_5g_mr_os^4 + C_3C_LL_5L_RR_3R_5g_mr_os^4 + C$
- 10.328 INVALID-ORDER-328 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- 10.329 INVALID-ORDER-329 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + 2C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_5L_LR_3R_5R_Ls^4 + C_3C_5L_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_5L_RR_3R_5R_Lr_os^4 + C_3C_5L_5L_RR_3R$
- **10.330** INVALID-ORDER-330 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + 2C_3C_5L_5L_LR_3R_5g_mr_os^4 + 4C_3C_5L_5L_LR_3R_5s^4 + C_3C_5L_5L_LR_3R_5r_os^4 + 2C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_5L_Rg_mr_os^4 + 4C_3C_5L_Rg_mr_os^4 + 4C_3C_5L_Rg_mr_os^4 + 4C_3C_5L_Rg_mr_os^4 + 4C_$
- 10.331 INVALID-ORDER-331 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + C_3C_5C_LL_5L_RR_3R_5R_Lr_os^5 + C_3C_5C_LL_5L_RR_3R_5R_Lr$
- **10.332** INVALID-ORDER-332 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^2 + L_5 R_5 r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 R_5 g_m r_o s^3 + C_3 C_5 L_5 R_5 g_m r_o s^3 + C_5 L_5 R_5 g_m r_o s^3 + C_5 L_5 R_5 g_m r_o s^3 + C_5 L_5 R_5 g_m r_o s^$
- 10.333 INVALID-ORDER-333 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_3R_3s+1)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5g^2 C_5L_5r_os^2 + C_5L_5R_5g^2 C_5L_5r_os^2 + C_5C_5R_5g^2 C_5L_5r_os^2 + C_3C_5C_5R_3g_mr_os^4 + C_3C_5R_3g_mr_os^4 + C_3C_5R_3g_m$
- **10.334** INVALID-ORDER-334 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5L_5R_3R_5g_mr_os^4 + C_3C_5L_5R_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4$

- 10.335 INVALID-ORDER-335 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3R_5s^4 + 2C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3r_os^4 + C_3C_5C_LL_5R_3r_os^4 + C_$
- **10.336** INVALID-ORDER-336 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3$
- 10.337 INVALID-ORDER-337 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5L_LL_5L_LR_3R_5s^5 + C_3C_5L_LL_5L_LR_3r_os^5 + 2C_3C_5L_5L_LR_3g_mr_os^4 + 4C_3C_5L_5L_LR_3g_mr_os^4 + 4C_3C_5L_5L_LR_5g_mr_os^4 + C_3C_5L_5L_LR_5g_mr_os^4 + C_3C_5L_5L_LR_5g_mr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4 + C_3C_5L_5L_LR_3g_mr_os^4$
- 10.338 INVALID-ORDER-338 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_5L_LR_3g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_5g_mr_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_5g_mr_os^4 + C_3C_5C_LL_5R_5g_mr_os^5 + C_3C_5C_LL_5R_5g_mr_$
- 10.339 INVALID-ORDER-339 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5L_LL_RR_3R_Lr_os^5 + C_3C_5L_5L_LR_3R_5g_mr_os^4 + C_3C_5L_5L_LR_3R_Lg_mr_os^4 + C_3C_5L_5L_Rg_mr_os^4 + C_3C_5L$
- 10.340 INVALID-ORDER-340 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_os^5 + C_3C_5C_$
- 10.341 INVALID-ORDER-341 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + C_3C_5C_LL_5L_Rg_mr_os^5 + C_3C_5C$
- 10.342 INVALID-ORDER-342 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 R_3 R_5 g_m r_o s^2 + C_3 C_5 L_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 R_5 g_m r_o s^3 + C_$

10.343 INVALID-ORDER-343 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_3R_3s + 1)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_5L_5R_3g_mr_os^2 + C_3C_5L_5R_3g_mr_os^2 + C_3C_5L_5R_3g_mr_os^3 + C_3C_5L_5R_3g_mr_os^3$

- **10.344** INVALID-ORDER-344 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_Ls_Rg_mr_os^4 + C_3C_5L_Ls_Rg_Lr_os^4 + C_3C_5L_Ls_Rg_mr_os^3 + C_3C_5L_5R_3R_Lg_mr_os^3 + C_3C_5L_5R$
- 10.345 INVALID-ORDER-345 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3R_5s^4 + 2C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_$
- 10.346 INVALID-ORDER-346 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_5L_LR_3g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_5g_mr_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_5s^4 + C_$
- 10.347 INVALID-ORDER-347 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5L_LL_RR_3R_5s^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5L_LL_RR_3r_os^4 + 2C_3C_5L_5L_LR_3g_mr_os^4 + 4C_3C_5L_5L_LR_3s^4 + C_3C_5L_5L_LR_3s^4 + C_3C_$
- **10.348** INVALID-ORDER-348 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}R_{L}g_{m}r_{o}s^{4} + C_{3}C$
- 10.349 INVALID-ORDER-349 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_5L_LR_3R_5g_mr_os^4 + C_3C_5L_5L_RR_3R_5g_mr_os^4 + C_3C_5L_5L_RR$
- 10.350 INVALID-ORDER-350 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5q_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5C_LL_5L_LR_3R_Lq_mr_os^5 + 4C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_$

10.351 INVALID-ORDER-351 $Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_$

10.352 INVALID-ORDER-352 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(R_5g_mr_o + R_5 - r_o\right)}{C_3C_LL_3R_5g_mr_os^3 + C_3C_LL_3R_5s^3 + C_3C_LL_3r_os^3 + 2C_3L_3g_mr_os^2 + 4C_3L_3s^2 + C_3R_5g_mr_os + C_3R_5s + C_3r_os + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_LR_5g_mr_os + C_LR_5g_mr_os + C_LR_5g_$

10.353 INVALID-ORDER-353 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_3 R_5 R_L s^3 + C_3 C_L L_3 R_5 r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + 2 C_3 L_3 R_L g_m r_o s^2 + 2 C_3 L_3 R_L g_m r_o s^2 + 2 C_3 L_3 R_L g_m r_o s^2 + C_3 R_5 R_L g_m r_o s + C_4 R_$

10.354 INVALID-ORDER-354 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{3}L_{3}s^{2} + 1\right)\left(C_{L}R_{L}s + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{L}R_{5}R_{L}g_{m}r_{o}s^{2} + C_{3}C_{L}R_{5}R_{L}s^{2} + C_{3}C_{L}R_{5}R_{L}s^{2} + C_{3}C_{L}R_{5}g_{m}r_{o}s + C_{3}R_{5}g_{m}r_{o}s + C_{L}R_{5}g_{m}r_{o}s +$

10.355 INVALID-ORDER-355 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4}+4C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{L}R_{5}g_{m}r_{o}s^{4}+4C_{3}L_{2}L_{2}s^{2}+C_{3}R_{5}g_{m}r_{o}s+C_{3}R_{5}s+C_{3}r_{o}s+2C_{L}L_{L}g_{m}r_{o}s^{2}+4C_{L}L_{L}s^{2}+C_{L}R_{5}g_{m}r_{o}s+C_{3}R_{5}g_{m}r_{o}s^{2}+4C_{2}L_{2}g_{m}r_{o}s^{2}+4C_{2}L_{2}g_{m}r_{o}s^{2}+4C_{2}L_{2}g_{m}r_{o}s+C_{2}R_{5}g$

10.356 INVALID-ORDER-356 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 L_L r_o s^4 + 2 C_3 L_3 L_L g_m r_o s^3 + 4 C_3 L_3 L_L s^3 + C_3 L_3 R_5 g_m r_o s^2 + C_3 L_L R_5 g_m r_o s^2 + C_3 L_L R_5 g_m r_o s^2 + C_4 L_L R_5 g_m r_o s^2 +$

10.357 INVALID-ORDER-357 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4}+4C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{4}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{5}R_{5}g_{m}r_{o}s^{3}+C_$

10.358 INVALID-ORDER-358 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_3 L_3 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^3 + C_3 L_3 R_5 R_L g_m r_o s^3 + C_3 L_3 R_5 R_$

10.359 INVALID-ORDER-359 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $(C_3L_3s^2+1)(R_5g_mr_o+R_5$

 $H(s) = \frac{(C_3L_3s^2 + 1)(R_5g_mr_o + R_5g_mr_o + R_5$

10.360 INVALID-ORDER-360 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{10L_1 (\cup 3L \cup 3S)}{C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 s^4 + 2C_3 C_L L_3 L_L R_5 s^4 + 4C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 R_5 R_L g_m r_o s^3 + C_3 C_L R_5 R_L g_m r_o s^3 + C_3 C_$

10.361 INVALID-ORDER-361 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{2 C_3 C_5 L_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_L s^3 + C_3 C_5 L_3 r_o s^3 + C_3 C_5 R_L r_o s^2 + C_3 L_3 g_m r_o s^2 + C_3 L_3 s^2 + C_3 R_L g_m r_o s + C_3 R_L s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.362 INVALID-ORDER-362 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(-C_5r_os + g_mr_o + 1\right)}{s\left(C_3C_5C_LL_3r_os^3 + 2C_3C_5L_3g_mr_os^2 + 4C_3C_5L_3s^2 + C_3C_5r_os + C_3C_LL_3g_mr_os^2 + C_3C_LL_3s^2 + C_3g_mr_o + C_3 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.363 INVALID-ORDER-363 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_3 R_L r_o s^4 + 2 C_3 C_5 L_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 r_o s^3 + C_3 C_5 L_3 r_o s^3 + C_3 C_L L_3 R_L g_m r_o s^3 + C_3 C_L R_L g_m r_o s^3 + C_2$

10.364 INVALID-ORDER-364 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{L}R_{L}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3}+4C_{3}C_{5}L_{L}I_{3}r_{o}s^{3}+C_{3}C_{5}L_{L}I_{3}r_{o}s^{2}+2C_{3}C_{5}L_{3}g_{m}r_{o}s^{2}+4C_{3}C_{5}L_{3}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{3}g_{m}r_{o}s+C_{3}C_{L}R_{L}g_{m}r_{o}s+C_{3}C_{L}R_$

10.365 INVALID-ORDER-365 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4}+4C_{3}C_{5}L_{L}L_{r}r_{o}s^{3}+C_{3}C_{L}L_{L}r_{o}s^{3}+2C_{3}C_{5}L_{3}g_{m}r_{o}s^{2}+4C_{3}C_{5}L_{3}s^{2}+C_{3}C_{L}L_{3}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{L}g_{m}r_{o}s^{2}+C_{3}C_$

10.366 INVALID-ORDER-366 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 L_L r_o s^5 + 2 C_3 C_5 L_3 L_L g_m r_o s^4 + 4 C_3 C_5 L_3 r_o s^3 + C_3 C_5 L_L r_o s^3 + C_3 C_L L_3 L_L g_m r_o s^4 + C_3 C_L L_3 L_L g_m r_o s^2 + C_3 L_3 g_m r_o s^2 + C_3 L_L g_m r_o s^2 + C_5 L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L g_m r_o s^2 + C_3 L_L g_m r_o s^2 + C_3$

 $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(-C_5r_os + g_mr_o + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(2C_3C_5C_LL_3L_Lg_mr_os^4 + 4C_3C_5C_LL_3L_Ls^4 + 2C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LL_3r_os^3 + C_3C_5C_LL_Lr_os^3 + C_3C_5C_LL_3r_os^3 + C_3C_5C_LL_3r$ 10.368 INVALID-ORDER-368 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{L_L R_L s \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 L_L R_L r_o s^5 + 2 C_3 C_5 L_3 L_L R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_L R_L s^4 + C_3 C_5 L_3 L_L R_L s^3 + C_3 C_5 L_3 L_L R_L g_m r_o s^4 + C_3 C_5 L_2 R_L g_m r_o s^4 + C_3 C_5 L_3 L_L g_m r_o s^4 + C_3 C_5 L_3 L_L g_m r_o$ 10.369 INVALID-ORDER-369 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{(C_3L_3s + 1)(-C_5)}{2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5L_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_Lg_mr_os^4 + 2C_3C_5L_3L_Lg_mr_os^4 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Ls^3 + C_3C_5L_3r_os^3 + C_3C_5L_3L_Lg_mr_os^4 + C_3C_5L_3L_Lg_mr_os^4 + C_3C_5L_3L_Lg_mr_os^4 + 4C_3C_5L_3L_Lg_mr_os^3 + 4C_3C_5L_3R_Ls^3 + C_3C_5L_3R_Ls^3 + C_3C_5R_Ls^3 +$ 10.370 INVALID-ORDER-370 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$ $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Ls^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3L_Lg_mr_os^4 + C_3C_LL_3L_Lg_mr_os^4 + C_3C_LL_3L_Lg_mr_os$ 10.371 INVALID-ORDER-371 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$ $H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{2 C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_5 R_L s^3 + C_3 C_5 L_3 R_5 r_o s^3 + C_3 C_5 R_5 R_L r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + 2 C_3 L_3 R_L g_m r_o s^2 + 4 C_3 L_3 r_o s^2 + C_3 R_5 R_L g_m r_o s + C_3 R_5 R_L g_m r_o s + 2 C_5 R_5 R_L g_m r_o s + 4 C_5 R_5 R_L s + C_5 R_5 r_o s + R_5 g_m r_o s^2 + 2 C_3 L_3 R_5 r_o s^2 + 2 C_3 L_3 R_5 r_o s^2 + C_3 R_5 R_L g_m r_o s^2 + 2 C_5 R$ 10.372 INVALID-ORDER-372 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$ $H(s) = -\frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}L_{3}R_{5}r_{o}s^{4}+2C_{3}C_{5}L_{3}R_{5}g_{m}r_{o}s^{3}+4C_{3}C_{5}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+2C_{3}L_{3}g_{m}r_{o}s^{2}+4C_{3}L_{3}s^{2}+C_{3}R_{5}g_{m}r_{o}s+C_{5}C_{L}R_{5}r_{o}s^{2}+2C_{5}R_{5}g_{m}r_{o}s+4C_{5}R_{5}s+C_{L}R_{5}g_{m}r_{o}s+C_{$ 10.373 INVALID-ORDER-373 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$ $H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{C_3 C_5 C_L L_3 R_5 R_L r_o s^4 + 2 C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_5 R_L r_o s^3 + C_3 C_L L_3 R_5 R_L g_m r_o$ 10.374 INVALID-ORDER-374 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$ $\frac{(C_3D_3s + 1)(C_LR_Ls + 1)}{2C_3C_5C_LL_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5L_3R_5g_mr_os^3 + 4C_3C_5L_3R_5g_mr_os^3 + 4C_3C_LL_3R_5g_mr_os^3 + 4C_3C_LL_3$

10.367 INVALID-ORDER-367 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.375 INVALID-ORDER-375 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $\frac{(\cup_{3} L_{3} s^{-} + 1) (\cup_{L} L_{L} s^{-} + 2C_{3} C_{5} L_{L} L_{L} L_{5} g_{m} r_{o} s^{5} + 4C_{3} C_{5} L_{L} L_{L} L_{5} s^{5} + C_{3} C_{5} L_{L} L_{L} R_{5} r_{o} s^{4} + 2C_{3} C_{5} L_{L} L_{L} R_{5} r_{o} s^{4} + 4C_{3} C_{L} L_{3} L_{L} s^{4} + C_{3} C_{L} L_{3} L_{L} s^{4} + C_{3} C_{L} L_{3} R_{5} s^{3} + C_{3} C_{L} L_{3} R_{5} s^{3} + C_{3} C_{L} L_{2} L_{2} R_{5} r_{o} s^{4} + 4C_{3} C_{L} L_{3} L_{L} s^{4} + C_{3} C_{L} L_{3} L_{L} s^{4} + C_{3} C_{L} L_{3} R_{5} s^{3} + C_{3} C_{L} L_{3} R_{5} s^{3} + C_{3} C_{L} L_{3} L_{L} s^{4} + C_{3}$

10.376 INVALID-ORDER-376 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = -\frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o\right)}{C_3 C_5 C_L L_3 L_L R_5 r_o s^5 + 2 C_3 C_5 L_3 L_L R_5 g_m r_o s^4 + 4 C_3 C_5 L_3 L_L R_5 r_o s^3 + C_3 C_4 L_3 L_L R_5 r_o s^4 + C_3 C_4 L_4 L_4 R_5 r_o s^4 + C_4 L_4 L_4 L_4 R_5 r_o s^4 + C_4 L_4 L_4 L_4 L_5 R_5 r_o s^4 + C_4 L_4 L_4 L_5 R_5 r_o s^4 + C_4 L_4 L_4 L_5 R_5 r_o s^4$

10.377 INVALID-ORDER-377 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LR_5R_Lr_os^3 + 2C_3C_5L_3R_5g_mr_os^3 + 4C_3C_5L_3R_5s^3 + C_3C_5R_5r_os^2 + 2C_3C_5L_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_$

10.378 INVALID-ORDER-378 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Lr_os^5 + 2C_3C_5L_3L_LR_5R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_5R_Ls^4 + C_3C_5L_3L_LR_5r_os^4 + C_3C_5L_3R_5R_Lr_os^3 + C_3C_5L_3L_LR_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_5R_Lg_mr_os^4 + C_3C_LL$

10.379 INVALID-ORDER-379 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_LR_5R_Lr_os^4 + 2C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R$

10.380 INVALID-ORDER-380 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$

 $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5L_LR_5R_Lr_os^4 + 2C_3C_5L_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_5R_$

10.381 INVALID-ORDER-381 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 L_3 R_5 g_m r_o s^3 + 2 C_3 C_5 L_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_L g_m r_o s^3 + C_3 C_5 R_L g_m r_o s^2 + C_3 C_5 R_L g_m r_o s^2 + C_3 C_5 R_L g_m r_o s^2 + C_3 R_L g_m r_o s + C_5 R_5 g_m r_o s + C_5$

10.382 INVALID-ORDER-382 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $\frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{s\left(C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{5}L_{L}g_{r}s^{3}+C_{3}C_{5}L_{L}g_{r}r_{o}s^{2}+4C_{3}C_{5}L_{3}s^{2}+C_{3}C_{5}R_{5}g_{m}r_{o}s+C_{3}C_{L}L_{3}g_{m}r_{o}s^{2}+C_{3}C_{L}L_{3}g_{m}r_{o}s+C_{5}C_{L}R_{5}g_{m}r$

10.383 INVALID-ORDER-383 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o - C_5 R_5 R_L g_m r_o s^4 + C_3 C_5 L_3 R_5 R_L g_m r_o s^4 + C_3 C_5 L_4 R_L g_m r_o s^3 + C_3 C_5 L_3 R_L g_m r_o s^3 + C_3 C_5 R_5 R_L g_m r_o s^3 + C_$

10.384 INVALID-ORDER-384 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)\left(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)}{s\left(C_3C_5C_LL_3R_5g_mr_os^3 + C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LR_3R_Lg_mr_os^3 + 4C_3C_5C_LR_3R_Lg_$

10.385 INVALID-ORDER-385 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)\left(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)}{s\left(2C_3C_5C_LL_3L_Lg_mr_os^4 + 4C_3C_5L_LL_3L_2s^4 + C_3C_5C_LL_3R_5g_mr_os^3 + C_3C_5L_LR_5g_mr_os^3 + C_3C_5L_LL_8s^3 + C_3C_5L_4L_8s^3 + C_3C_5L_4$

10.386 INVALID-ORDER-386 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o s + G_5 R_5 s - G_5 r_o s + g_m r_o s + G_5 R_5 g_m r_o$

10.387 INVALID-ORDER-387 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{s\left(2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{c}s^{3$

10.388 INVALID-ORDER-388 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5L_Ll_2L_Rl_5r_os^5 + C_3C_5L_3L_LR_5g_mr_os^4 + C$

10.389 INVALID-ORDER-389 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.390 INVALID-ORDER-390 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_cs^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5C_LL_3R_Lr_os^$

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10.391 INVALID-ORDER-391 Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L\right)
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$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 L_5 g_m r_o s^4 + C_3 C_5 L_3 L_5 g_m r_o s^3 + 4 C_3 C_5 L_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_L g_m r_o s^2 + C_3 L_3 g_m r_o s^2 + C_3 L_3 g_m r_o s^2 + C_5 L_5 g_m r_$$

10.392 INVALID-ORDER-392
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1\right)}{s\left(C_3C_5C_LL_3L_5g_mr_os^4 + C_3C_5C_LL_3r_os^3 + 2C_3C_5L_3g_mr_os^2 + 4C_3C_5L_3s^2 + C_3C_5L_5g_mr_os^2 + C_3C_5L_3g_mr_os^2 + C_3C_LL_3g_mr_os^2 + C_3C$$

10.393 INVALID-ORDER-393
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 r_o s^$$

10.394 INVALID-ORDER-394
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1\right)}{s\left(C_3C_5C_LL_3L_5g_mr_os^4 + C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LL_3R_Lg_mr_os^3 + C_3C_5C_LL_5R_Lg_mr_os^3 + C_3C_5C_LL_5R_Lg_mr_os^3 + C_3C_5C_LL_3R_Lg_mr_os^3 +$$

10.395 INVALID-ORDER-395
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_{3}L_{3}s^{2}+1\right)\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}s^{2}-C_{5}r_{o}s+g_{m}r_{o}+$$

10.396 INVALID-ORDER-396
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o s^2 + C_5 L_5 r_o s^2 + C$$

10.397 INVALID-ORDER-397
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + 2C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{5}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{L}s$$

10.398 INVALID-ORDER-398
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Ls^4 + 2C_3C_5L_3L_LR_Lg_mr_os^4 + 4C_3C_5L_3L_LR_Ls^4 + C_3C_5L_3L_LR_Ls^4 + C_3C_5L_3L_Ls^4 + C_$$

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10.399 INVALID-ORDER-399 Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_$$

10.400 INVALID-ORDER-400
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3L_L$$

10.401 INVALID-ORDER-401
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{2 C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_L s^4 + C_3 C_5 L_5 R_L r_o s^3 + C_3 L_3 L_5 g_m r_o s^3 + C_3 L_3 L_5 g_m r_o s^3 + 2 C_3 L_3 R_L g_m r_o s^2 + 4 C_3 L_3 R_L g_m r_o s^2 + C_3 L_5 R_L g_m r_o s^2 + C_3 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_L g_m r_o s^2 + 4$$

10.402 INVALID-ORDER-402
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5r_os^2 - L_5g_mr_os - L_5s + r_o\right)}{C_3C_5C_LL_3L_5r_os^5 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_LL_3L_5s^4 + C_3C_LL_3r_os^3 + 2C_3L_3g_mr_os^2 + 4C_3L_3s^2 + C_3L_5g_mr_os^2 + C_3L_5g_mr_os$$

10.403 INVALID-ORDER-403
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_3 C_5 C_L L_3 L_5 R_L r_o s^5 + 2 C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_L r_o s^3 + C_3 L_4 L_5 R_L r_o s^3 + C_3 L_5 R_L$$

10.404 INVALID-ORDER-404
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{(C_3L_3s^2 + 1)(C_LR_Ls + 1)}{2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5L_LsL_5R_Ls^5 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5L_LsL_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + C_3C_LL_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_3L_5s^4 + C_3C_5L_5L_5s^4 + C_3C_5L_5L_5s^$$

10.405 INVALID-ORDER-405
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + \frac{\left(C_3L_3S^2 + 1\right)\left(C_LL_Ls^2 + \frac{1}{2}C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5L_Ls_Ls^6 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5L_Ls_Ls_Sr_os^5 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5g_mr_os^4 + 4C_3C_LL_3L_5g_mr_os^4 + 4C_3C_LL_3L_5g_m$$

10.406 INVALID-ORDER-406
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 r_o s^2 - L_5 g_m r_o s - L_5 s + r_o\right)}{C_3 C_5 C_L L_3 L_5 L_L r_o s^6 + 2 C_3 C_5 L_3 L_5 L_L g_m r_o s^5 + 4 C_3 C_5 L_3 L_5 L_L s^5 + C_3 C_L L_5 L_L s^5 + C_3 C_L L_5 L_L s^5 + C_3 C_L L_5 L_L s^5 +$$

- 10.407 INVALID-ORDER-407 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5r_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_5R_Lr_os^4 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5r_os^3 + C_3C_LL_3L_5r_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_5r_os^5 + C_3C_5C_LL_5r_os^5 + C_3C_5C_L$
- 10.408 INVALID-ORDER-408 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_Lr_os^6 + 2C_3C_5L_3L_5L_LR_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_Ls^5 + C_3C_5L_3L_5L_Lr_os^5 + C_3C_5L_3L_5L_LR_Lr_os^4 + C_3C_5L_3L_5L_LR_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_5L_3L_5L_LR_Ls^5 + C_3C_5L_3L_5L_Ls^5 + C_3C$
- 10.409 INVALID-ORDER-409 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_5L_LR_Lr_os^5 + 2C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_5L_3L_5L_Ls^5 + 2C_3C_5L_3L_5L_Ls^5 + 2C_3C_5L_5L_Ls^5 + 2C_3C_5L_5L_Ls^5 + 2C_3C_5L_5L_Ls^5 + 2C_3C_5L_5L_Ls^5 + 2C_5L_5$
- 10.410 INVALID-ORDER-410 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5L_LR_Lr_os^5 + C_3C_5C_LL_3L_5L_LR_Lr_os^5 + 2C_3C_5L_3L_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Lr_os^3 + C_3C_LL_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + 2C_3C_5L_3L_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Lr_os^3 + C_3C_LL_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^5 + C_3C_5L_5R_Lr_os^5 + C_3C_5L_5R_Lr_os^5 + C_3C_5L_5R_Lr_os^5 + C_3C_5L_5R_Lr_os^5 + C_3C_5L_5R_Lr_o$
- 10.411 INVALID-ORDER-411 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 L_5 g_m r_o s^4 + C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 R_5 R_5 g_m r_o s^3 + C_3 C_$
- 10.412 INVALID-ORDER-412 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{3}L_{3}s^{2} + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} + C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{L}R_{5}s^{4} + C_{3}C_{5}L_{L}R_{5}s^{3} + C_{3}C_{5}L_{L}R_{5}s^{3} + C_{3}C_{5}L_{3}g_{m}r_{o}s^{2} + 4C_{3}C_{5}L_{3}g_{m}r_{o}s^{2} + C_{3}C_{5}L_{5}s^{2} + C_{5}C_{5}L_{5}s^{2} + C_{5}C_{5}L_{5}s^{$
- 10.413 INVALID-ORDER-413 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5L_Ll_3L_5R_Ls^5 + C_3C_5L_Ll_3R_5R_Lg_mr_os^4 + C_3C_5L_Ll_3R_5R_Ls^4 + C_3C_5L_Ll_3R_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3R_5g_mr_os^4 + C$
- 10.414 INVALID-ORDER-414 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_3L_3s^2 + \frac{C_3C_5C_LL_3L_5g_mr_os^4 + C_3C_5C_LL_3R_5g_mr_os^3 + C_3C_5C_LL_3R_5g_mr_os^3 + 4C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LL_3R_Lg_mr_os^3 + 4C_3C_5C_LL_3R_Lg_mr_os^3 + C_3C_5C_LL_3R_Lg_mr_os^3 + C_3C_5C_LL_3R_Lg_m$

10.415 INVALID-ORDER-415 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + C_3C_5C_LL_3L_5g_mr_os^4 + C_3C_5C_LL_3L_5s^4 + 2C_3C_5C_LL_3L_5g_mr_os^4 + 4C_3C_5C_LL_3R_5g_mr_os^3 + C_3C_5C_LL_3R_5s^3 + C_3C_5$

10.416 INVALID-ORDER-416 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_Lg^6 + C_3C_5C_LL_3L_Lg_s^6 + C_3$

10.417 INVALID-ORDER-417 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + 2C_{3}C_{5}C_{L}L_{$

10.418 INVALID-ORDER-418 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5L_3L_LR_Ls^6 + C_3C_5L_3L_LR_5R_Lg_mr_os^5 + C_3C_5L_3L_LR_Lg_mr_os^5 + C_3C_5L_3L_Lg_mr_os^5 + C_3C$

10.419 INVALID-ORDER-419 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_Lg^6 + C_3C_5C_LL_3L_Lg_5g_mr_os^5 + C_3C_5C_LL_3L_Lg_mr_os^5 + 4C_3C_5C_LL_3L_Lg_mr_os^5 + 4C_3C_5C_LL_3L_Lg_mr$

10.420 INVALID-ORDER-420 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_2R_5g_mr_os^5 + C_3C_5C_LL_3L_3L_2R_5g_mr_os^5 + C_3C_5C_LL_3L_3L_3R_5g_mr_os^5 + C_3C_5C_LL_3L_3R_5g_mr_os^5 + C_3C_5C_LL_3L_3R_5g_mr_os^5 + C_3C_5C$

10.421 INVALID-ORDER-421 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$

10.422 INVALID-ORDER-422 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5R_5r_os^2 - L_5R_5g_mr_os - L_5R_5s + L_5r_os + R_5r_o\right)}{C_3C_5C_LL_3L_5R_5r_os^5 + 2C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_LL_3L_5R_5s^4 + C_3C_LL_3L_5r_os^4 +$

- 10.423 INVALID-ORDER-423 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lr_os^5 + 2C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5R_Lr_os^3 + C_3C_LL_3L_5R_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr$
- 10.424 INVALID-ORDER-424 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5C_LL_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr$
- 10.425 INVALID-ORDER-425 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5R_5r_os^5 + 2C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5L_2g_mr_os^5 + 4C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5L_2g_mr_os^5 + 4C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5L_2g_mr_os^5 + 4C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5R_5s^6 + C_3C_5L_3L_5R_5s^6 + C_3C_5L_5L_5R_5s^6 + C_3C_5L_5$
- 10.426 INVALID-ORDER-426 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.427 INVALID-ORDER-427 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5C_LL_5R_5R_Lr_os^4 + 2C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5R_5r_os^5 + C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5C_LL_3L_5R_5r_os^5$
- **10.428** INVALID-ORDER-428 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lr_os^6 + 2C_3C_5L_3L_5L_LR_5R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_5R_Ls^5 + C_3C_5L_3L_5L_LR_5r_os^4 + C_3C_5L_3L_5L_LR_5R_Lr_os^4 + C_3C_5L_3L_5L_LR_5R_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_5R_Lg_mr_os^5 + C_3C_LL_3L_5L_Rg_mr_os^5 + C_3C_LL_3L_5L_Rg$
- 10.429 INVALID-ORDER-429 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5L_LL_5L_LR_5R_Lr_os^5 + 2C_3C_5L_3L_5L_LR_5g_mr_os^5 + 4C_3C_5L_3L_5L_LR_5s^5 + 2C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5r_os^4 + C_3C_5L_3L_5L_Rs^2 + C_3C_5L_5L_5L_Rs^2 + C_3C_5L_5L_5L_Rs^2 + C_3C_5L_5L_5L_Rs^2 + C_3C_5L_5L_5L_Rs^2 + C_3$
- 10.430 INVALID-ORDER-430 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_RS_RLg_mr_os^6 + 4C_3C_5L_LL_3L_5L_RS_RLg^6 + C_3C_5C_LL_3L_5L_RS_RS_RLg^6 + C_3C_5C_LL_3L_5R_5R_Lr_os^5 + C_3C_5C_LL_3L_5R_5R_Lr_os^5 + 2C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5R_Lr_os^3 + C_3C_LL_3L_5L_RS_RLg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5R_Lr_os^3 + C_3C_LL_3L_5L_RS_RLg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_5R_5R_Ls^4 + C_3C_5L_5R_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C$

- **10.431** INVALID-ORDER-431 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 C_5 L_5 r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_5 L_5$
- 10.432 INVALID-ORDER-432 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 C_5L_5r_os^2 + C_5L_5R_5s^2 C_5L_5r_os^2 + C_5L_5R_5g_mr_os^4 + C_3C_5L_4L_5R_5g_mr_os^4 + C_3C_5L_4L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5$
- 10.433 INVALID-ORDER-433 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5L_Ll_3L_5R_5R_Lg^5 + C_3C_5L_Ll_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg$
- 10.434 INVALID-ORDER-434 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_5R_Lg_mr_os^4 + 2C_3C_5L_4L_5R_5g_mr_os^4 + 4C_3C_5L_4L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_$
- 10.435 INVALID-ORDER-435 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5C_LL_5L_LR_5g_mr_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_Lr_os^5 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_3L_5s^4 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5L_RS_5s^5 + C_3C_5$
- 10.436 INVALID-ORDER-436 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Rs_5g_mr_os^6 + C_3C_5C_LL_3L_5L_Rs_5e^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + 2C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5r_os^4 + C_3C_5L_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_$
- 10.437 INVALID-ORDER-437 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{5}s^{5} + 2C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{5}L_{L}s^{6} + C_{3}C_{5}C_{L}L_{5}L_{L}$
- 10.438 INVALID-ORDER-438 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}R_{L}q_{m}r_{o}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{3}C_{5}L_{3}L_{5}L_{L}R_{5}q_{m}r_{o}s^{5} + C_{3}C_{5}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}L_{5}L_{L}R_{5}s^{6}$

- **10.439** INVALID-ORDER-439 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_cs^6 + C_3C_5C_LL_5L_LR_5s^6 + C_3C_5C_LL_5L_LR_ss^6 + C_3C_5C_LL_5L_Rs^6 + C_$
- 10.440 INVALID-ORDER-440 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_s^6 + C_3C_5C_LL_3L_5L_LR_s^6 + C_3C_5C_LL_3L$
- 10.441 INVALID-ORDER-441 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 R_5 g_m r_o s^2 + C_3 C_5 L_3 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_5 g_m r_o s^4 + C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_5 R_5 R_L g_m r_o s^3 + C_5 L_5 R_5 R_L g_m$
- 10.442 INVALID-ORDER-442 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5g_mr_os^2 + C_5L_5R_5g_mr_os^2 + C_5L_5R_5g_mr_os^2 + C_5L_5R_5g_mr_os^2 + C_5L_5R_5g_mr_os^3 + C_3C_5L_3L_5R_5g_mr_os^3 + C_3C_5L_5R_5g_mr_os^3 + C_3C_5L_5R_5g_m$
- 10.443 INVALID-ORDER-443 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C$
- 10.444 INVALID-ORDER-444 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os$
- 10.445 INVALID-ORDER-445 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_3C_5C$
- 10.446 INVALID-ORDER-446 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5L_5R_5g_mr_os^4 + 4C_3C_5$

10.447 INVALID-ORDER-447 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_$

10.448 INVALID-ORDER-448 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5L_3L_5L_LR_5r_os^6 + C_3C_5L_3L_5L_Rr_os^6 + C_3C_5L_3L_5L_Rr_os^6$

10.449 INVALID-ORDER-449 $Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_5s^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_5s^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + 4C_3C_5C_LL_3L_5L_Rs^6 + 4C_3C$

10.450 INVALID-ORDER-450 $Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_RL_5s^6 + C_3C_5C_LL_5L_5L_5L_5L_5c^6 + C_3C_5C_LL_5L_5L_5L_5c^6 + C_3C_5C_LL_5L_5L_5c^6 + C_3C_5C_LL_5c^6 + C_$

10.451 INVALID-ORDER-451 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, R_{5}, R_{L} + \frac{1}{C_{L}s}\right)$

 $H(s) = \frac{L_{3}s\left(C_{L}R_{L}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}L_{3}R_{5}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}r_{c}s^{3}+C_{3}L_{3}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{3}R_{5}g$

10.452 INVALID-ORDER-452 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{L_{3}s\left(C_{L}L_{s}^{2}+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}r_{o}s^{4}+C_{3}L_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{3}r_{o}s^{2}+2C_{L}L_{3}L_{2}g_{m}r_{o}s^{3}+4C_{L}L_{3}L_{5}s^{2}+C_{L}L_{3}R_{5}g_{m}r_{o}s^{2}+C_{L}L_{3}R_{5}s^{2}+C_{$

10.453 INVALID-ORDER-453 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_{3}s\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}r_{o}s^{4} + C_{3}C_{L}L_{3}R_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}L_{L}g_{m}r_{o}s^{3} + 4C_{L}L_{3}L_{L}s^{3} + C_{L}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}R_{5}g_{m}r_{o}s^{2}$

10.454 INVALID-ORDER-454 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{L_{3}s\left(R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)\left(C_{L}L_{L}R_{L}s^{2} + R_{5}R_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}L_{3}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{3}L_{3}L_{L}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{L}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{3} + C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s$

10.455 INVALID-ORDER-455 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{L_3 R_L s \left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 L_4 L_4 L_5 g_m r_o s^4 + C_3 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_3 L_4 L_5 g_m r_o s^4 + C_4 L_3 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_5 g_m r_o s^4 + C_4 L_4 L_5 g_m r_o s^4 + C_4 L_5 L_5 g_m r_o s^4 + C_5 g_m r_$

10.456 INVALID-ORDER-456 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{1}{C_{5s}}, R_L\right)$

 $H(s) = \frac{L_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_L r_o s^3 + C_3 L_3 R_L g_m r_o s^2 + C_3 L_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_L s^2 + C_5 L_3 r_o s^2 + C_5 R_L r_o s + L_3 g_m r_o s + L_3 s + R_L g_m r_o + R_L g_m r_o s^2 + C_5 R_L r_o s + L_3 g_m r_o s + L_3 g_m r_o s + R_L g_m r_o s +$

10.457 INVALID-ORDER-457 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 r_o s^3 + C_3 L_3 q_m r_o s^2 + C_3 L_3 s^2 + C_5 C_L L_3 r_o s^3 + 2 C_5 L_3 q_m r_o s^2 + 4 C_5 L_3 s^2 + C_5 r_o s + C_L L_3 q_m r_o s^2 + C_L L_3 s^2 + q_m r_o + 1}$

10.458 INVALID-ORDER-458 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{1}{C_{5s}}, \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{L_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_L r_o s^3 + C_3 L_3 R_L g_m r_o s^2 + C_5 L_4 R_L r_o s^3 + 2 C_5 L_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_L s^2 + C_5 L_3 r_o s^2 + C_5 L_4 R_L g_m r_o s^2 + C_4 L_3 R_L g_m r_o s^2 + C_4 L_3 R_L g_m r_o s^2 + C_4 L_3 R_L g_m r_o s^2 + C_5 L_4 R_L g_m r_o s^2 + C_5 R_L r_o s^2$

10.459 INVALID-ORDER-459 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{L_{3}s\left(C_{L}R_{L}s+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{3}C_{5}C_{L}L_{3}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{3}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{L}s^{3}+C_{3}L_{3}g_{m}r_{o}s^{2}+C_{5}L_{4}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{3}R_{L}s^{3}+C_{5}C_{L}L_{3}r_{o}s^{3}+C_{5}C_{L}L_{3}r_{o}s^{2}+2C_{5}L_{3}g_{m}r_{o}s^{2}+4C_{5}L_{3}g_{m}r_{o}s^{2}+C_{L}L_{3}g_{m}r_{o}s^{2}+C_{$

10.460 INVALID-ORDER-460 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{5}r_{o}s+g_{m}r_{o}+1\right)}{C_{3}C_{5}C_{L}L_{3}L_{L}r_{o}s^{5}+C_{3}C_{5}L_{3}r_{o}s^{3}+C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}s^{4}+C_{3}L_{3}g_{m}r_{o}s^{2}+C_{5}L_{L}L_{2}L_{g}m_{r}r_{o}s^{4}+C_{5}C_{L}L_{3}L_{L}s^{4}+C_{5}C_{L}L_{3}r_{o}s^{3}+C_{5}C_{L}L_{3}r_{o}s^{3}+C_{5}C_{L}L_{3}r_{o}s^{3}+C_{5}C_{L}L_{3}g_{m}r_{o}s^{2}+C_{L}L_{3}g_{m}r_{$

10.461 INVALID-ORDER-461 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_3 L_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_L r_o s^3 + C_3 L_3 L_L q_m r_o s^2 + C_3 L_3 L_L s^2 + C_5 C_L L_3 L_L r_o s^3 + 2 C_5 L_3 L_L g_m r_o s^2 + 4 C_5 L_3 L_L s^2 + C_5 L_3 r_o s + C_5 L_L r_o s + C_L L_3 L_L g_m r_o s^2 + C_L L_3 L_L s^2 + L_3 g_m r_o + L_3 + L_L g_m r_o + L_L r_o s^2 + C_5 L_3 r_o s + C_5 r_o$

10.462 INVALID-ORDER-462 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_{3}s\left(-C_{5}r_{o}s + g_{m}r_{o} + 1\right)\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)}{C_{3}C_{5}C_{L}L_{3}L_{L}r_{o}s^{5} + C_{3}C_{5}L_{L}3L_{L}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}R_{L}g_{$

10.463 INVALID-ORDER-463 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{1}{C_{5}s}, \frac{1}{C_{Ls}+\frac{1}{R_{I}}+\frac{1}{L_{Ls}}}\right)$

 $H(s) = \frac{L_3 L_L R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_L R_L r_o s^3 + C_3 L_3 L_L R_L g_m r_o s^2 + C_3 L_3 L_L R_L g_m r_o s^2 + 4 C_5 L_3 L_L R_L g_m r_o s^2 + 4 C_5 L_3 L_L R_L g_m r_o s^2 + C_5 L_3$

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10.465 INVALID-ORDER-465 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1}, \infty, \frac{1}{C_{5}s}, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{T}s}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L_3R_Ls\left(C_LL_Ls^2+1\right)\left(-C_5r_os+g_mr_o+1\right)
H(s) = \frac{L_3 R_L s \left( C_L L_L s^2 + 1 \right) \left( -C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_3 L_L R_L r_o s^5 + C_3 C_5 L_3 R_L r_o s^3 + C_3 C_L L_3 L_L R_L g_m r_o s^4 + C_5 C_L L_3 L_L R_L g_m r_o s^4 + C_5 C_L L_3 L_L R_L g_m r_o s^4 + C_5 C_L L_3 L_L R_L r_o s^3 + C_5 C_L L_3 R_L r_o s^3 + C_5 C_L L_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_L g_m r_o s^2 + 4 C_5 R_L g
10.466 INVALID-ORDER-466 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \infty, \frac{R_{5}}{C_{5}R_{5}s+1}, R_{L}\right)
             H(s) = \frac{L_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 R_5 R_L r_o s^3 + C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L s^2 + C_5 L_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_3 R_5 R_L s^2 + C_5 L_3 R_5 R_L r_o s + L_3 R_5 g_m r_o s +
10.467 INVALID-ORDER-467 Z(s) = \left(\infty, \infty, \frac{L_{3}s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_{L}s}\right)
                                                                               H(s) = \frac{L_{3}s\left(-C_{5}R_{5}r_{o}s + R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{C_{3}C_{5}L_{3}R_{5}r_{o}s^{3} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}r_{o}s^{2} + C_{5}C_{L}L_{3}R_{5}r_{o}s^{3} + 2C_{5}L_{3}R_{5}g_{m}r_{o}s^{2} + 4C_{5}L_{3}R_{5}s^{2} + C_{L}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}R_{5}s^{2} + C_{L}L_{3}r_{o}s^{2} + 2L_{3}g_{m}r_{o}s + 4L_{3}s + R_{5}g_{m}r_{o} + R_{5} + r_{o}s^{2} + C_{5}R_{5}r_{o}s + C_{5}R_{5}
10.468 INVALID-ORDER-468 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{L_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 R_5 R_L r_o s^3 + C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 R_L s^2 + C_5 L_4 R_5 R_L r_o s^3 + 2 C_5 L_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_3 R_5 R_L r_o s^2 + C_5 L_3 R_5 R_L g_m r_o s^2 + C_4 L_3 R_5 R_L g_m r_o s^2 + C_5 L_3 R_5
10.469 INVALID-ORDER-469 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L_3s (C_L R_L s + 1) (C_5 R_5 r_o s - R_5 g_m r_o - R_5 + r_o)
H(s) = -\frac{L_{3}s\left(C_{L}\kappa_{L}s+1\right)\left(C_{5}\kappa_{5}r_{o}s-\kappa_{5}g_{m}r_{o}-\kappa_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}L_{3}R_{5}R_{L}r_{o}s^{4}+C_{3}C_{5}L_{3}R_{5}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{3}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3}+C_{5}C_{L}L_{3}R_{5}R_{L}s^{3
10.470 INVALID-ORDER-470 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
H(s) = -\frac{L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}r_{o}s-R_{5}g_{m}r_{o}-R_{5}+r_{o}\right)}{C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}r_{o}s^{5}+C_{3}C_{5}L_{3}R_{5}r_{o}s^{3}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{2}+C_{3}L_{3}R_{5}g_{m}r_{o}s^{2}+C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{4}+C_{5}C_{L}L_{3}L_{L}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{4}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+C_{5}C_{L}L_{5}R_{5}r
10.471 INVALID-ORDER-471 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
H(s) = \frac{L_3 L_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 L_L R_5 r_o s^3 + C_3 L_3 L_L R_5 g_m r_o s^2 + C_3 L_3 L_L R_5 s^2 + C_5 L_4 L_4 L_5 g_m r_o s^2 + 4 C_5 L_3 L_L R_5 r_o s + C_5 L_4 R_5 r_o s + C_5 L_5 R_5 r_o s + C
10.472 INVALID-ORDER-472 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)
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 $H(s) = \frac{L_{3}s\left(-C_{5}r_{o}s + g_{m}r_{o} + 1\right)\left(C_{L}L_{L}L_{L}s + 1\right)}{C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}r_{o}s^{5} + C_{3}C_{5}L_{3}L_{L}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{4} + C_{3}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{4} + C_$

 $L_3s(-C_5r_os + g_mr_o + 1)(C_LL_LR_Ls^2 + I_0)$

10.464 INVALID-ORDER-464 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5L_3R_5r_os^3 + C_3C_LL_3L_LR_5g_mr_os^4 + C_3C_LL_3L_LR_5s^4 + C_3C_LL_3L_LR_5s^4 + C_3C_LL_3R_5R_Lg_mr_os^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5$

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10.473 INVALID-ORDER-473 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)
H(s) = \frac{L_3 L_L R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 L_L R_5 R_L r_o s^3 + C_3 L_3 L_L R_5 R_L r_o s^2 + C_5 L_3 L_L R_5 R_L r
10.474 INVALID-ORDER-474 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_2L_2s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Lr_os^5 + C_3C_5L_3L_LR_5r_os^4 + C_3C_5L_3R_5R_Lr_os^3 + C_3C_LL_3L_LR_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_5R_Ls^4 + C_3C_LL_3L_LR_5r_os^4 + C_3L_3L_LR_5s^3 + C_3
10.475 INVALID-ORDER-475 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)
H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Lr_os^5 + C_3C_5L_3R_5R_Lr_os^3 + C_3C_LL_3L_LR_5R_Lg_mr_os^4 + C_3C_LL_3L_Rg_mr_os^4 + C_3C_LL_3L_Rg_mr_os^4
10.476 INVALID-ORDER-476 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_2L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, R_L\right)
H(s) = \frac{L_3 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_3 R_5 R_L s^3 + C_3 C_5 L_3 R_L r_o s^3 + C_3 L_3 R_L g_m r_o s^2 + C_5 L_3 R_5 g_m r_o s^2 + C_5 L_3 R_5 g_m r_o s^2 + C_5 L_3 R_5 g_m r_o s^2 + C_5 L_3 R_L g_m r_o s^2 + C_5 L_3 R_L g_m r_o s^2 + C_5 R_5 R_L g_m r_o s + C_5 R_5 R_L g_m r_
10.477 INVALID-ORDER-477 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_{Ls}}\right)
                               H(s) = \frac{L_{3}s\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{C_{3}C_{5}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}L_{3}r_{o}s^{3} + C_{3}L_{3}g_{m}r_{o}s^{2} + C_{5}L_{4}R_{5}g_{m}r_{o}s^{3} + C_{5}C_{L}L_{3}R_{5}s^{3} + C_{5}C_{L}L_{3}r_{o}s^{3} + 2C_{5}L_{3}g_{m}r_{o}s^{2} + 4C_{5}L_{3}s^{2} + C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s + C_{5}r_{o}s + C_{L}L_{3}g_{m}r_{o}s^{2} + C_{L}L_{3}s^{2} + G_{L}L_{3}s^{2} + G_{L}L_{
10.478 INVALID-ORDER-478 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         L_3R_Ls(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1)
H(s) = \frac{L_3 K_L s \left( C_5 K_5 g_m r_o s + C_5 K_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_3 R_5 R_L s^3 + C_3 C_5 L_3 R_5 R_L s^3 + C_5 C_L L_3 R_5 R_L g_m r_o s^3 + C_5 C_L L_3 R_5 R_L s^3 + C_5 C_L L_3 R_L s^3 + C_5 C_L L_3 R_L s^3 + C_5 C_L L_3 R_L s^3 + C_5 C_L 
10.479 INVALID-ORDER-479 Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L_{3}s(C_{L}R_{L}s+1)(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+c_{5}R_{5}s-c_{5}r_{o}s+c_{5}R_{5}s-c_{5}r_{o}s+c_{5}R_{5}s-c_{5}r_{o}s+c_{5}R_{5}s-c_{5}r_{o}s+c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{5}s-c_{5}R_{
H(s) = \frac{-3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5L_Lg_mr_os^4 + C_3C_5L_Lg_
10.480 INVALID-ORDER-480 Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}g_{m}r_{o}s+C_{5}R_{5}s-C_{5}r_{o}s+g_{m}r_{o}s\right)
H(s) = \frac{L_{35} \left( \bigtriangledown_L L_{2} L_{1} - 1 \right) \left( \bigtriangledown_3 C_{5} L_{1} L_{1} L_{1} C_{5} - 2 C_{5} L_{1} L_{1} L_{1} C_{5} - 2 C_{5} L_{1} L_{2} L_{1} C_{5} - 2 C_{5} L_{2} L_{2} L_{1} C_{5} - 2 C_{5} C_{5} L_{3} L_{2} C_{5} C_{5} C_{5} C_{5} L_{3} L_{2} C_{5} C_{5}
```

 $H(s) = \frac{L_3L_Ls\left(C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1\right)}{C_3C_5L_3L_LR_5g_mr_os^3 + C_3C_5L_3L_LR_5s^3 + C_3C_5L_3L_LR_5s^3 + C_5C_LL_3L_LR_5s^3 + C_5C_LL_3L_LR_5s^$

10.481 INVALID-ORDER-481 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_1s^2+1}\right)$

```
10.482 INVALID-ORDER-482 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
```

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3L_Lg_mr_os^4 + C_3C_5L_3R_5R_Ls^4 + C_3C_5L_3R_5r_os^4 + C_3C_5L_3R_5s^3 + C_3C_5L_3R$$

10.483 INVALID-ORDER-483
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + C_5 R_5 s - C_5 r_o s + C_5 R_5 r_o s +$$

10.484 INVALID-ORDER-484
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_5g_mr_os^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3R_5R_Lg_mr_os^3 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_LR_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C$$

10.485 INVALID-ORDER-485
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_Lr_os^5 + C_3C_5L_3R_5R_Lg_mr_os^3 + C_3C_5L_3R_Lr_os^3 + C_3C_5L_3R_Lr_os^3 + C_3C_LL_3L_LR_Lg_mr_os^4 + C_3C_LL_3L_LR_Ls^4 + C_3L_3R_Lg_mr_os^2 + C_3L_3R_Ls^2 + C_5C_LL_3L_LR_5g_mr_os^4 + C_5C_LL_3L_LR_5g_mr_os^4 + C_5C_LL_3L_LR_5g_mr_os^4 + C_5C_LL_3L_LR_5g_mr_os^4 + C_5C_LL_3L_Rs^4 + C_5C_LL_3L$$

10.486 INVALID-ORDER-486
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + C_3 C_5 L_3 L_5 R_L s^4 + C_3 C_5 L_3 R_L g_m r_o s^2 + C_5 L_3 R_L g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^2$$

10.487 INVALID-ORDER-487
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_{3}s\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{C_{3}C_{5}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{3}L_{5}s^{4} + C_{3}C_{5}L_{3}r_{o}s^{3} + C_{3}L_{3}g_{m}r_{o}s^{2} + C_{5}L_{4}L_{5}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}r_{o}s^{3} + 2C_{5}L_{3}g_{m}r_{o}s^{2} + C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}g_{m}r_{o$$

10.488 INVALID-ORDER-488
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + C_3 C_5 L_3 L_5 R_L s^4 + C_5 C_L L_3 L_5 R_L g_m r_o s^4 + C_5 C_L L_3 L_5 R_L g_m r_o s^4 + C_5 C_L L_3 L_5 R_L g_m r_o s^4 + C_5 C_L L_3 L_5 R_L g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 R_L g_m r_o s^2 + C_5 L_5 R_L g_m r_o s^3 + C_5 L_5 R_L g_m r_o s^$$

10.489 INVALID-ORDER-489
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

10.490 INVALID-ORDER-490 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$

10.491 INVALID-ORDER-491 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_3L_Ls\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1\right)}{C_3C_5L_3L_5L_Lg_mr_os^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3L_Ls^4 + C_5C_LL_3L_5L_Lg_mr_os^4 + C_5C_LL_3L_5L_Ls^4 + C_5C_LL_3L_5L_Ls^4 + C_5C_LL_3L_5L_ss^4 + C_5C_LL_3L_ss^4 + C_5C_LL_3L_ss^4 + C_5C_LL_sL_ss^4 + C_5C_LL_sL_ss^4$

10.492 INVALID-ORDER-492 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_5g_mr_os^4 + C$

10.493 INVALID-ORDER-493 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

10.494 INVALID-ORDER-494 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_LR_Lr_os^5 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_Lr_os^4 + C_3C_5L_3L_Lr_os^4 + C_3C_5L_3L_LR_Ls^6 + C_3C_5L_3L_Ls^6 + C_3C_5L_3L$

10.495 INVALID-ORDER-495 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R_Lg_mr_os^4 + C_3C_5L_5R$

10.496 INVALID-ORDER-496 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, R_L\right)$

 $H(s) = \frac{L_3 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_3 L_5 R_L r_o s^4 + C_3 L_3 L_5 R_L g_m r_o s^3 + C_3 L_3 L_5 R_L s^3 + C_5 L_3 L_5 R_L g_m r_o s^3 + 4 C_5 L_3 L_5 R_L s^3 + C_5 L_3 L_5 R_L r_o s^3 + C_5 L_5 R_L r_o s^2 + L_3 L_5 g_m r_o s^2 + L_5 R_L g_m r_o s + L_5 R_L g_m r_o s + L_5 R_L g_m r_o s + L_5 R_L g_m r_o s^2 + L_5 R_L g_m r$

10.497 INVALID-ORDER-497 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)$

 $H(s) = \frac{L_3s\left(-C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o\right)}{C_3C_5L_3L_5r_os^4 + C_3L_3L_5g_mr_os^3 + C_3L_3L_5s^3 + C_3L_3L_5r_os^4 + 2C_5L_3L_5g_mr_os^3 + 4C_5L_3L_5s^3 + C_5L_3L_5g_mr_os^3 + C_5L_5g_mr_os^3 + C_5L_5g_mr$

10.498 INVALID-ORDER-498 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{L_3 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_3 L_5 R_L r_o s^4 + C_3 L_3 L_5 R_L g_m r_o s^3 + C_3 L_3 L_5 R_L g_m r_o s^3 + C_5 L_5 R_L g_m r_o$

10.499 INVALID-ORDER-499 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{L_{3}s\left(C_{L}R_{L}s+1\right)\left(C_{5}L_{5}r_{o}s^{2}-L_{5}g_{m}r_{o}s-L_{5}s+r_{o}\right)}{C_{3}C_{5}C_{L}L_{3}L_{5}R_{L}r_{o}s^{5}+C_{3}C_{5}L_{3}L_{5}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{5}R_{L}s^{4}+C_{3}C_{L}L_{3}L_{5}R_{L}s^{4}+C_{3}C_{L}L_{3}L_{5}R_{L}s^{4}+C_{3}C_{L}L_{3}L_{5}R_{L}s^{4}+C_{3}C_{L}L_{3}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}s^{4}+C_{5}C_{L}L_{5}R_{L}$

10.500 INVALID-ORDER-500 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}L_{5}r_{o}s^{2}-L_{5}g_{m}r_{o}s-L_{5}s+r_{o}\right)}{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}r_{o}s^{6}+C_{3}C_{5}L_{3}L_{5}L_{L}s^{5}+C_{3}C_{L}L_{3}L_{5}L_{L}s^{5}+C_{3}C_{L}L_{3}L_{5}L_{L}s^{5}+C_{3}C_{L}L_{3}L_{5}L_{L}s^{5}+C_{3}C_{L}L_{3}L_{5}L_{L}s^{5}+C_{3}C_{L}L_{3}L_{5}L_{L}s^{5}+C_{5}C_{L}L_{3}L_{5$

10.501 INVALID-ORDER-501 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_3L_Ls\left(-C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o\right)}{C_3C_5L_3L_5L_Lr_os^4 + C_3L_3L_5L_Lg_mr_os^3 + C_3L_3L_5L_Ls^3 + C_3L_3L_5L_Ls^3 + C_5L_3L_5L_Lg_mr_os^3 + 4C_5L_3L_5L_Ls^3 + C_5L_3L_5L_Lg_mr_os^3 + 4C_5L_3L_5L_Lg_mr_os^3 + 4C_5L_3L_5L_Lg_mr_os^3 + C_5L_3L_5L_Lg_mr_os^3 + C_5L_5L_3L_5L_Lg_mr_os^3 + C_5L_5L_5L_Lg_mr_os^3 + C_5L_5L_5L_Lg_mr_os^3 + C_5$

10.502 INVALID-ORDER-502 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5L_3L_5r_os^4 + C_3C_LL_3L_5L_Lg_mr_os^5 + C_3C_LL_3L_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_Lr_os^4 + C_3$

10.503 INVALID-ORDER-503 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$

10.504 INVALID-ORDER-504 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_Lr_os^6 + C_3C_5L_3L_5L_Lr_os^5 + C_3C_5L_3L_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_LL_3L_5L_Ls^5 +$

10.505 INVALID-ORDER-505 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_Lr_os^6 + C_3C_5L_3L_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_LL_3L_5L_Rs^5 + C_3C_LL_3L_5$

- **10.506** INVALID-ORDER-506 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_3 L_3 R_L g_m r_o s^3 + C_5 L_3 R_5 g_m r_o s^3 + C_5 L_3 R_5 g_m r_o s^3 + C_5 L_3 R_5 g_m r_o s^2 + C_5 L_$
- **10.507** INVALID-ORDER-507 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{L_{3}s\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} + C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{C_{3}C_{5}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{3}R_{5}s^{4} + C_{3}C_{5}L_{3}R_{5}s^{3} + C_{3}C_{5}L_{3}r_{o}s^{3} + C_{3}C_{5}L_{3}r_{o}s^{3} + C_{3}L_{3}g_{m}r_{o}s^{2} + C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{5}C_{L}L_{3}R_{5}s^{3} + C_{5}C_{L}L_{3}r_{o}s^{3} + C_{5}$
- 10.508 INVALID-ORDER-508 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 R_L g_m r_o s^3 + C_5 R_5 R_L g_m r_o s^3 + C$
- 10.509 INVALID-ORDER-509 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5L_Ll_3L_5R_Ls^5 + C_3C_5L_Ll_3R_5R_Lg_mr_os^4 + C_3C_5L_Ll_3R_5R_Ls^4 + C_3C_5L_Ll_3R_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3R_5g_mr_os^4 + C$
- **10.510** INVALID-ORDER-510 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3R_5g_mr_os^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_5g_mr_os^4 + C_3C_5L_5g_mr$
- 10.511 INVALID-ORDER-511 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{L_3L_Ls\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5L_5s^2 + C_5R_5g_mr_os + C_5L_5s^2 + C_5R_5g_mr_os + C_5L_5s^2 + C_5R_5g_mr_os + C_5L_3L_5L_5g_mr_os + C_5L_3L_5g_mr_os + C_5L_5g_mr_os + C_5$
- **10.512** INVALID-ORDER-512 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_LR_5s^5$
- **10.513** INVALID-ORDER-513 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_Lg_mr_os^4 + C_3C_5L_3L_5L_LR_Ls^4 + C_3C_5L_3L_LR_5R_Lg_mr_os^3 + C_3C_5L_3L_LR_Ls^3 + C_3C_5L_3L_LR_Lg_mr_os^2 + C_3L_3L_LR_Lg_mr_os^2 + C_3L_3L_LR_Lg_mr_os^4 + C_5C_LL_3L_5L_LR_Ls^4 + C_5C_LL_3L_LR_Ls^4 + C_5C_LL_3L_LR_Ls^4 + C_5C_LL_3L_LR_Ls^3 + C_5C_LL_3L_Ls^3 + C$

- **10.514** INVALID-ORDER-514 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5L_3L_LR_Ls^5 + C_3C_5L_3L_LR_Ls^5 + C_3C_5L_3L_LR_Ls^6 + C_3C_5L_3L_Ls^6 + C_3C_5L_2L_Ls^6 + C_3C_5L_2L_Ls^6 + C_3C$
- 10.515 INVALID-ORDER-515 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5r_Ls^5 + C_3C_5C_LL_3L_LR_Lr_os^5 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3R_5R_Lg_mr_os^4 + C_3C_5L_3R_5R_Lg_mr_os$
- **10.516** INVALID-ORDER-516 $Z(s) = \left(\infty, \ \infty, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ R_L\right)$
- $H(s) = \frac{L_3 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s R_5 r_o\right)}{C_3 C_5 L_3 L_5 R_5 R_L r_o s^4 + C_3 L_3 L_5 R_5 R_L r_o s^3 + C_3 L_3 L_5 R_5 R_L r_o s^3 + C_5 L_5 R_5 R_L$
- 10.517 INVALID-ORDER-517 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{L_{3}s\left(-C_{5}L_{5}R_{5}r_{o}s^{2} + L_{5}R_{5}g_{m}r_{o}s + L_{5}R_{5}s L_{5}r_{o}s R_{5}r_{o}\right)}{C_{3}C_{5}L_{3}L_{5}R_{5}r_{o}s^{4} + C_{3}L_{3}L_{5}R_{5}s^{3} + C_{3}L_{3}L_{5}R_{5}s^{3} + C_{3}L_{3}L_{5}r_{o}s^{2} + C_{5}L_{4}L_{5}R_{5}r_{o}s^{4} + 2C_{5}L_{3}L_{5}R_{5}s^{3} + C_{5}L_{5}L_{5}R_{5}s^{3} + C_{4}L_{3}L_{5}R_{5}s^{3} + C_{4}L_{3}L_{5}r_{o}s^{3} + C_{4}L_{3}L_{5}r_{o}s^{2} + 2L_{4}L_{5}r_{o}s^{2} + 2L_{4}L_{5}r_{o}s^{2} + 2L_{4}L_{5}r_{o}s^{2} + 2L_{4}L_{5}r_{o}s^{2} + 2L_{5}L_{5}r_{o}s^{2} + 2L_{$
- **10.518** INVALID-ORDER-518 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{L_3 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s + L_5 R_5 r_o s^2 + L_$
- **10.519** INVALID-ORDER-519 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lr_os^5 + C_3C_5L_3L_5R_5r_os^4 + C_3C_LL_3L_5R_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_5R_Ls^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3R_5R_Lr_os^3 + C_3L_3L_5R_5s^3 + C_3L_3L_5R_5s^3 + C_3L_3L_5R_5s^3 + C_3L_3L_5R_5r_os^4 + C_3C_LL_3L_5R_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr_o$
- 10.520 INVALID-ORDER-520 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5L_3L_5R_5r_os^4 + C_3C_LL_3L_5L_LR_5g_mr_os^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_LL_3L_5L_LR_5r_os^4 + C_3L_3L_5R_5r_os^4 + C_3L_3$
- 10.521 INVALID-ORDER-521 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{L_3L_Ls\left(-C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s L_5r_os R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s L_5r_os R_5r_os^2 + L_5R_5g_mr_os^2 + L_5$

- 10.522 INVALID-ORDER-522 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5L_LL_3L_5R_5R_Lr_os^5 + C_3C_LL_3L_5L_LR_5g_mr_os^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_LL_3L_5R_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_5R_Ls^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr_os^4 + C_3C_LL_3L_5R_Lr_os^4 + C_3C_LL_3R_5R_Lr_os^4 + C_3C_LL_3R_5R_L$
- 10.523 INVALID-ORDER-523 $Z(s) = \left(\infty, \ \infty, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_5R_Lr_os^4 + C_3L_3L_5L_LR_5R_Lg_mr_os^3 + C_3L_3L_5L_LR_5R_Ls^3 + C_3L_3L_5L_LR_5R_Lr_os^2 + C_5C_LL_3L_5L_LR_5R_Lr_os^4 + 2C_5L_3L_5L_LR_5R_Lg_mr_os^3 + 4C_5L_3L_5L_LR_5R_Lg_mr_os^3 + 4C_5L_3L_5L_LR_5R_Lg_mr_os^3 + C_5L_3L_5L_LR_5R_Lr_os^2 + C_5L_3L_5L_LR_5R_Lr_os^4 + 2C_5L_3L_5L_LR_5R_Lr_os^4 + 2C_5L_3L_5L_Rr_os^4 + 2C_5L_$
- 10.524 INVALID-ORDER-524 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lr_os^6 + C_3C_5L_3L_5L_LR_5r_os^5 + C_3C_5L_3L_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_5R_Ls^5 + C_3C_LL_3L_5L_LR_5R_Ls^5 + C_3C_LL_3L_5L_LR_5R_Lr_os^5 + C_3C_LL_3L_5L_LR_5R_Lr_os^4 + C_3L_3L_5L_LR_5r_os^4 + C_3L_3L_5L_Rr_os^4 +$
- 10.525 INVALID-ORDER-525 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lr_os^6 + C_3C_5L_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_5R_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_5R_Lr_os^5 + C_3C_LL_3L_5L_Rr_os^5 +$
- **10.526** INVALID-ORDER-526 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L\right)$
- $H(s) = \frac{L_3R_Ls\left(C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 C_5L_5r_os^2 + L_5g_mr_os + L_5s + R_5g_mr_os^2 + C_5L_3L_5R_5g_mr_os^2 + C_5L_3L_5R_5g_mr_os^2 + C_5L_3L_5R_5g_mr_os^2 + C_5L_3L_5R_5g_mr_os^3 + C_5L_5R_5g_mr_os^3 + C_5L_5R_5g_mr_$
- 10.527 INVALID-ORDER-527 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{L_{3}s\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}R_{5}s^{2} C_{5}L_{5}r_{o}s^{2} + L_{5}g_{m}r_{o}s + L_{5}s + R_{5}g_{m}r_{o} + R_{5} r_{o}\right)}{C_{3}C_{5}L_{3}L_{5}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{3}L_{5}r_{o}s^{4} + C_{3}C_{5}L_{3}L_{5}r_{o}s^{4} + C_{3}L_{3}L_{5}s^{3} + C_{3}L_{3}L_{5}s^{3} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{4}L_{5}R_{5}g_{m}r_{o}s^{4} + C_{5}C_{L}L_{3}L_{5}r_{o}s^{4} + C_{5}C_{L}L_{5}L_{5}r_{o}s^{4} + C_{5}C_{L}L_{5}L_{5}r_{o}s^{4} + C_{5}C_{L}L_{5}L_{5}r_{o}s^{4} + C_{5}C_{L$
- 10.528 INVALID-ORDER-528 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_Lr_os^4 + C_3L_3L_5R_Lg_mr_os^3 + C_3L_3R_5R_Lg_mr_os^2 + C_3L_3R_5R_Ls^2 + C_3L_3R_5R_Lg_mr_os^4 + C_5C_LL_3L_5R_5R_Ls^4 + C_5C_LL_3L_5R_Ls^4 + C_5C$
- **10.529** INVALID-ORDER-529 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5L_4L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_5L_5R_5g_mr_os^4 + C_3C_5L_5R_5g_mr_os^4 + C$

- **10.530** INVALID-ORDER-530 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$
- 10.531 INVALID-ORDER-531 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{L}{C_3C_5L_3L_5L_LR_5g_mr_os^4 + C_3C_5L_3L_5L_LR_5s^4 + C_3C_5L_3L_5L_Lr_os^4 + C_3L_3L_5L_Lg_mr_os^3 + C_3L_3L_LR_5g_mr_os^2 + C_3L_3L_LR_5s^2 + C_3L_3L_LR_5s^2 + C_5C_LL_3L_5L_LR_5s^4 + C_5C_LL_3L_5L_LR_5s^4 + C_5C_LL_3L_5L_Lr_os^4 + C_5C_LL_3L_5L_Tr_os^4 + C_5C_LL_3L_5L_Tr_os^4$
- 10.532 INVALID-ORDER-532 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- 10.533 INVALID-ORDER-533 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$
- **10.534** INVALID-ORDER-534 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + C_3C_5L_Ll_3L_5L_LR_5g_mr_os^6 + C_3C_5L_3L_5L_LR_5g_mr_os^6 + C_3C_5L_3L_5L_Rr_os^6 + C_3C_5L_3L_5L$
- 10.535 INVALID-ORDER-535 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_Lr_os^6 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_LL_3L_5L_LR_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_Ls^5 + C_3C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5R_Ls^6 + C_3C_5L_3L_5R_Ls$
- **10.536** INVALID-ORDER-536 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, R_L\right)$
- $H(s) = \frac{L_3 R_L s \left(\bigcup_5 L_5 R_5 g_m r_o s^2 + \bigcup_5 L_5 R_5 s^- \bigcup_5 L_5 r_o s^- \bigcup_5 L_5 r_o s^- \bigcup_5 R_5 r_o s^+ + R_5 g_m r_o s^- + U_5 L_5 R_5 r_o s^- \bigcup_5 R_5 r_o s^- \bigcup_5 R_5 r_o s^- + R_5 g_m r_o s^- + U_5 L_5 R_5 r_o s^- U_5 R_5$
- 10.537 INVALID-ORDER-537 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{L_{3}s\left(C_{5}L_{5}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}R_{5}s^{2} C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} C_{5}R_{5}r_{o}s + R_{5}g_{m}r_{o} + R_{5} r_{o}\right)}{C_{3}C_{5}L_{3}L_{5}R_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{3}L_{5}R_{5}s^{4} + C_{3}C_{5}L_{3}L_{5}r_{o}s^{4} + C_{3}C_{5}L_{3}L_{5}r_{o}s^{4} + C_{5}C_{L}L_{3}L_{5}r_{o}s^{4} + C_{5}C_{L}L_{$

- 10.538 INVALID-ORDER-538 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_Lr_os^4 + C_3C_5L_3R_5R_Lr_os^4 + C_3C_5L_3R$
- **10.539** INVALID-ORDER-539 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3R_5r_os^4 + C$
- **10.540** INVALID-ORDER-540 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5R_5s^4 + C_3C_5L_5R_5s^4 + C_3C_5L_5R_5s^4 + C_3C_5L_5R_5s^4 + C$
- 10.541 INVALID-ORDER-541 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- 10.542 INVALID-ORDER-542 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Lr_os^5 + C_3C_5C_LL_3L_5R_5R_Lr$
- 10.543 INVALID-ORDER-543 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_5R_Lg_mr_os^4 + C_3C_5L_3L_5L_LR_5R_Ls^4 + C_3C_5L_3L_5L_LR_5R_Lr_os^4 + C_3C_5L_3L_LR_5R_Lg_mr_os^2 + C_3L_3L_LR_5R_Ls^2 + C_3L_3L_LR_5R_Lg_mr_os^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_LR_5R_Ls^4 + C_5C_LL_3L_5L_Rs^4 + C$
- 10.544 INVALID-ORDER-544 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- 10.545 INVALID-ORDER-545 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_RS_RL_g_mr_os^6 + C_3C_5C_LL_3L_5L_RS_RL_s^6 + C_3C_5C_LL_3L_5L_RL_ros^6 + C_3C_5C_LL_3L_RS_RL_ros^5 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3R_5R_Ls^4 + C_3C_5L_3R_5R$

10.546 INVALID-ORDER-546 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(R_5g_mr_o + R_5 - r_o\right)}{C_3C_LL_3R_5g_mr_os^3 + C_3C_LL_3r_os^3 + C_3C_LL_3r_os^3 + C_3C_LR_3R_5g_mr_os^2 + C_3C_LR_3r_os^2 + 2C_3L_3g_mr_os^2 + 4C_3L_3s^2 + 2C_3R_3g_mr_os + 4C_3R_3s + C_3R_5g_mr_os + C_LR_5g_mr_os + C_LR_5g_mr_$

10.547 INVALID-ORDER-547 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_3 R_5 R_L g_m r_o s^2 + C_3 C_L R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + C_3 R_3 R_5 g_m r_o s^2 + C_3 R_5 g_m r_o s^2 + C_3 R_5 g_m r_o s^2 + C_3 R_5 g_m r_o s^2 + C_3$

10.548 INVALID-ORDER-548 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{3}L_{3}s^{2}+C_{3}R_{3}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{L}s^{3}+C_{3}C_{L}L_{3}R_{L}s^{3}+C_{3}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2}+C_{3}C_{L}R_{3}R_{L}s^{2}+C_{3}C_{L}R_{3$

10.549 INVALID-ORDER-549 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{3}L_{3}s^{2}+C_{3}R_{3}s+1\right)\left(R_{5}g_{m}r_{o}+R_{5}-r_{o}\right)}{2C_{3}C_{L}L_{3}L_{2}g_{m}r_{o}s^{4}+4C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+C_{3}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3}+2C_{3}C_{L}L_{2}R_{3}g_{m}r_{o}s^{3}+4C_{3}C_{L}L_{2}R_{5}s^{3}+C_{3}C_{L}L_{3}R_{5}s^{3}+C_{3}C_$

10.550 INVALID-ORDER-550 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^3 + C_3 C_L L_L R_3 R_5 g_m r_o s^3 + 2 C_3 L_4 L_3 r_o s^3 + 2 C_3 L_4 L_3 r_o s^3 + 2 C_3 L_4 L_3 r_o s^3 + 2 C_3 L_4 R_3 g_m r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + 2 C_3 L_4 R_3 g_m r_o s^2 + 2 C_$

10.551 INVALID-ORDER-551 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_3L_4)}{2C_3C_LL_3L_4g_mr_os^4 + 4C_3C_LL_3L_5s^4 + C_3C_LL_3R_5g_mr_os^3 + C_3C_LL_3R_5g_mr_os^3 + 4C_3C_LL_3R_5s^3 + 2C_3C_LL_3R_5g_mr_os^3 + 4C_3C_LL_3R_5g_mr_os^3 + 4C_3C_LL_3R_5g$

10.552 INVALID-ORDER-552 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_5 R_L s^4 + C_3 C_L L_3 L_L R_1 r_o s^4 + C_3 C_L L_L R_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_L R_3 R_5 R_L s^3 + C_3 C_L L_L R_3 R_L r_o s^3 + C_3 L_3 L_L R_5 g_m r_o s^3 + C_3 L_$

10.553 INVALID-ORDER-553 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_LL_3L_LR_5q_mr_os^4 + C_3C_LL_3L_LR_5s^4 + 2C_3C_LL_3L_LR_2q_mr_os^4 + 4C_3C_LL_3L_LR_3s^4 + C_3C_LL_2R_3R_5q_mr_os^3 + C_3C_LL_LR_3R_5q_mr_os^3 + 4C_3C_LL_LR_3R_Lq_mr_os^3 + 4C_3$

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10.554 INVALID-ORDER-554 Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)
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$$H(s) = \frac{1}{C_3C_LL_3L_LR_5g_mr_os^4 + C_3C_LL_3L_LR_5s^4 + 2C_3C_LL_3L_LR_Lg_mr_os^4 + 4C_3C_LL_3L_LR_cs^4 + C_3C_LL_3R_5R_Lg_mr_os^3 + C_3C_LL_3R_5R_Lg_$$

10.555 INVALID-ORDER-555 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{2C_3 C_5 L_3 R_L g_m r_o s^3 + 4C_3 C_5 L_3 r_o s^3 + 2C_3 C_5 R_3 R_L g_m r_o s^2 + 4C_3 C_5 R_3 r_o s^2 + C_3 C_5 R_L r_o s^2 + C_3 L_3 g_m r_o s^2 + C_3 R_3 g_m r_o s + C_3 R_3 s + C_3 R_L g_m r_o s + C_3 R_L g_m r_o s + 4C_5 R_L g_m r_o s + C_5 R_L g_m r_o s$$

10.556 INVALID-ORDER-556 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(-C_5r_os + g_mr_o + 1\right)}{s\left(C_3C_5C_LL_3r_os^3 + C_3C_5L_Rg_mr_os^2 + 2C_3C_5L_3g_mr_os^2 + 4C_3C_5L_3s^2 + 2C_3C_5R_3g_mr_os + 4C_3C_5R_3s + C_3C_LL_3g_mr_os^2 + C_3C_LL_3g_mr_os + C_3C_LR_3s + C_3C$$

10.557 INVALID-ORDER-557 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_3 R_L r_o s^4 + C_3 C_5 C_L R_3 R_L r_o s^3 + 2 C_3 C_5 L_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_L g_m r_o s^3 + 2 C_3 C_5 R_3 R_L g_m r_o s^2 + 4 C_3 C_5 R_3 R_L s^2 + C_3 C_5 R_3 r_o s^2 + C_5 C_5 R_5 r_o s^2 + C_5$$

10.558 INVALID-ORDER-558 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_3 C_5 C_L L_3 R_L g_m r_o s^3 + 4C_3 C_5 C_L L_3 R_L g_m r_o s^2 + 4C_3 C_5 C_L R_3 R_L g^2 + C_3 C_5 C_L R_3 R_L g^2 + C_5 C_L R_3 R_L g^2$$

10.559 INVALID-ORDER-559 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_3 C_5 C_L L_3 L_L g_m r_o s^4 + 4C_3 C_5 C_L L_3 L_L s^4 + C_3 C_5 C_L L_1 R_3 g_m r_o s^3 + 4C_3 C_5 C_L L_1 R_3 s^3 + C_3 C_5 C_L L_1 R_3 s^3 + C_3 C_5 C_L L_1 R_3 s^3 + C_3 C_5 C_L L_1 R_3 r_o s^2 + 2C_3 C_5 L_3 g_m r_o s^2 + 4C_3 C_5 L_3 s^2 + 2C_3 C_5 R_3 g_m r_o s^2 + 4C_3 C_5 R_3 g_m r_o s^2$$

10.560 INVALID-ORDER-560 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_L R_3 r_o s^4 + 2 C_3 C_5 L_L L_R g_m r_o s^4 + 4 C_3 C_5 L_L R_3 g_m r_o s^3 + 4 C_3 C_5 L_L R_3 g_m r_o s^3 + 4 C_3 C_5 L_L R_3 g_m r_o s^3 + 4 C_3 C_5 L_L R_3 g_m r_o s^3 + 2 C_5 L_L R_3 g_m r_o$$

10.561 INVALID-ORDER-561 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{1}{s\left(2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + 2C_{3$$

- 10.562 INVALID-ORDER-562 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_Lr_os^5 + C_3C_5C_LL_LR_3R_Lr_os^4 + 2C_3C_5L_3L_LR_Lg_mr_os^4 + 4C_3C_5L_3L_LR_Ls^4 + C_3C_5L_3L_Lr_os^4 + 2C_3C_5L_LR_3R_Lg_mr_os^3 + 4C_3C_5L_LR_3R_Lg_mr_os^3 + 4C_3C_5L_LR_3R_Ls^3 + C_3C_5L_LR_3r_os^3 + C_3C_5L_3L_LR_3r_os^3 + C_3C_5L_3L_3r_os^3 + C_3C_$
- **10.563** INVALID-ORDER-563 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}r_{o}s^{5} + 2C_{3}C_{5}C_{L}L_{L}R_{3}R_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{L}R_{3}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{L}R_{3}r_{o}s^{4} + 2C_{3}C_{5}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}L_{3}L_{L}s^{4} + 2C_{3}C_{5}L_{3}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4}L_{L}s^{4} + 2C_{3}C_{5}L_{L}s^{4}L_{L}s^{4} + 2C_{3}C_{5$
- 10.564 INVALID-ORDER-564 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_Lr_os^4 + 2C_3C_5C_LL_LR_3R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_LR_3r_os^4 + C_3C_5C_LL_RR_3r_os^4 +$
- **10.565** INVALID-ORDER-565 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_5 R_5 r_o s R_5 g_m r_o R_5 + r_o\right)}{2 C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_3 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 C_5 R_5 R_L$
- **10.566** INVALID-ORDER-566 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_5R_5r_os R_5g_mr_o R_5 + r_o\right)}{C_3C_5C_LL_3R_5r_os^4 + C_3C_5L_3R_5r_os^3 + 2C_3C_5L_3R_5g_mr_os^3 + 4C_3C_5L_3R_5s^3 + 2C_3C_5R_3R_5g_mr_os^2 + 4C_3C_5R_3R_5s^2 + C_3C_LL_3R_5s^3 + C_3C_LR_3R_5s^3 + C_3C_LR_3R_5s^3$
- 10.567 INVALID-ORDER-567 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_5R_Lr_os^3 + 2C_3C_5L_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_5r_os^3 + 2C_3C_5R_3R_5R_Lg_mr_os^2 + 4C_3C_5R_3R_5r_os^2 + C_3C_5R_3R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5R_5r_os^2 + C_3C_5R_5r_os^2 + C_3C_5R_5r_os^2 + C_3C_5R_5r_os^$
- 10.568 INVALID-ORDER-568 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3R_5R_Lq_mr_os^4 + 4C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + 2C_3C_5C_LR_3R_5R_Lq_mr_os^3 + 4C_3C_5C_LR_3R_5R_Ls^3 + C_3C_5C_LR_3R_5r_os^3 + C_3C_5C_LR_3R_5r_os^3 + 2C_3C_5L_3R_5q_mr_os^3 + 4C_3C_5L_3R_5q_mr_os^3 + 4C_3C_5L_3R_5q_mr_os^3$
- 10.569 INVALID-ORDER-569 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5q_mr_os^5 + 4C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_5r_os^4 + 2C_3C_5C_LL_RR_3R_5g_mr_os^4 + 4C_3C_5C_LL_RR_3R_5s^4 + C_3C_5C_LL_RR_3R_5r_os^4 + 2C_3C_5L_RR_3R_5r_os^4 + 2C_3C_5L_RR_3R_5r_$

- 10.570 INVALID-ORDER-570 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5L_LL_Rs_5r_os^5 + C_3C_5L_LL_Rs_5r_os^4 + 2C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3R_5r_os^3 + 2C_3C_5L_LR_3R_5g_mr_os^3 + 4C_3C_5L_LR_3r_os^3 + C_3C_5L_LR_3r_os^3 + C_3C_5L_$
- 10.571 INVALID-ORDER-571 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_5r_os^4 + 2C_3C_5C_LL_2R_3R_5g_mr_os^4 + 4C_3C_5C_LL_2R_3R_5g_mr_os^4 + 4C_3C_5C_LL_3R_5g_mr_os^4 + 4C_3C_5C_LL_3$
- 10.572 INVALID-ORDER-572 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Lr_os^5 + C_3C_5L_LL_R_3R_5R_Lr_os^4 + 2C_3C_5L_3L_LR_5R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_5r_os^4 + C_3C_5L_3L_LR_5r_os^4 + C_3C_5L_3R_5R_Lr_os^3 + 2C_3C_5L_LR_3R_5R_Lg_mr_os^3 + 4C_3C_5L_LR_3R_5R_Ls^3 + C_3C_5L_LR_3R_5R_Ls^3 + C_3C_5L_LR_3$
- 10.573 INVALID-ORDER-573 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_5r_os^5 + 2C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5r_os^4 + 2C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5r_os^4 + 2C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5r_os^4 + 2C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5L_3L_LR_5g_mr_os^4 + 4C_3C_5C_LL_RR_5R_Ls^4 + C_3C_5C_LL_RR_5R_Ls^4 + C_3C_5C_LL$
- 10.574 INVALID-ORDER-574 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + 2C_3C_5C_LL_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5r_os^4 + C_3C_5C_LL_LR_3R_5R_Lr_os^4 + C_3C_5C_LL_LR_3R_5R_Lr_os^$
- 10.575 INVALID-ORDER-575 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 R_3 R_5 g_m r_o s^2 + C_3 C_5 R_5 R_5 g_m r_o s^2 + C_3 C_5 R_5 R_5 g_m r_o s^2 + C_3 C_5 R_5 g_m r_o s^2 + C_5 R_5 g_m r_o$
- 10.576 INVALID-ORDER-576 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{3}L_{3}s^{2} + C_{3}R_{3}s + 1\right)\left(C_{5}R_{5}g_{m}r_{o}s + C_{5}R_{5}s C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}L_{L}R_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}C_{5}L_{L}R_{3}R_{5}g_{m}r_{o}s^{2} + 2C_{3}C_{5}L_{3}g_{m}r_{o}s^{2} + 4C_{3}C_{5}R_{3}g_{m}r_{o}s + 4C_{3}C_{5}R_{3}g_{m}r_{o}s + C_{3}C_{5}R_{5}g_{m}r_{o}s + C_{3}C_{5}R_{5}g_{$
- 10.577 INVALID-ORDER-577 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5C_LR_3R_5R_Lg_mr_os^3 + C_3C_5L_3R_5g_mr_os^3 + C_3C$

- 10.578 INVALID-ORDER-578 $Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{5}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + C_{3}C_{5}C_{L}R_{3}R_{5}g_{m}r_{o}s^{2} + 4C_{3}C_{5}C_{L}R_{3}R_{L}g_{m}r_{o}s^{2} + 4C_{3}C_{5}C_{L}R_{3}R_{L}s^{2} + C_{3}C_{5}C_{L}R_{3}R_{c}s^{2} + C_{3}$
- 10.579 INVALID-ORDER-579 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{5}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{5}s^{3} + C_{3}C_{5}C_{L}L_{L}R_{3}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{L}R_{3}s^{3} + C_{3}C_{5}C_{L}L_{L}R_{5}s^{3} + C_{3}C_{5}C_{L}L$
- 10.580 INVALID-ORDER-580 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5L_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_2R_3R_5g_mr_os^4 + C_3C_5C_LL_LR_3R_5s^4 + C_3C_5C_LL_LR_3r_os^4 + 2C_3C_5L_3L_Lg_mr_os^4 + 4C_3C_5L_3L_Ls^4 + C_3C_5L_3R_5g_mr_os^3 + C_3C_5L_$
- 10.581 INVALID-ORDER-581 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{c}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{c}s^$
- 10.582 INVALID-ORDER-582 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5r_Ls^5 + C_3C_5C_LL_3L_LR_1r_os^5 + C_3C_5C_LL_2R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5R_Ls$
- 10.583 INVALID-ORDER-583 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_Rs_5g_mr_os^5 + C_3C_5C_LL_3L_Rs_5s^5 + 2C_3C_5C_LL_3L_Rl_gmr_os^5 + 4C_3C_5C_LL_3L_Rl_ss^5 + C_3C_5C_LL_3L_Rl_ss^5 + C_3C_5C_LL_2R_3R_5g_mr_os^4 + C_3C_5C_LL_Rl_3R_5g_mr_os^4 + 2C_3C_5C_LL_Rl_3R_Lg_mr_os^4 + 4C_3C_5C_LL_Rl_3R_Lg_mr_os^4 + 4C_3C_5C_Ll$
- 10.584 INVALID-ORDER-584 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_LR_0s^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5C_LL_3R_Lr_os^$
- 10.585 INVALID-ORDER-585 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 L_5 g_m r_o s^4 + C_3 C_5 L_3 L_5 s^4 + 2 C_3 C_5 L_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_L g_m r_o s^3 + C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_2 g_m r_o s^3 + C_3 C_5 L_5 R_3 g_m r_o s^3 + C_3 C_5 R_3 g_m r_o s^$

- **10.586** INVALID-ORDER-586 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{3}L_{3}s^{2} + C_{3}R_{3}s + 1\right)\left(C_{5}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}s^{2} C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}L_{L}L_{3}r_{o}s^{3} + C_{3}C_{5}L_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}L_{L}L_{5}R_{3}g_{m}r_{o}s^{2} + 2C_{3}C_{5}L_{3}g_{m}r_{o}s^{2} + 2C_{3}C_{5}L_{3}g_{$
- 10.587 INVALID-ORDER-587 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_Lr_os^4 + C_3C_5C_LL_5R_3R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3R_Lg_mr_os^4 + C_3C$
- 10.588 INVALID-ORDER-588 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{2}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{L}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{L}g$
- **10.589** INVALID-ORDER-589 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{c}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}s^{3} + 2C_{3}C_{5}C_{L}L_{5}R_{3}s^{3} + 2C_{3}C_{5}C_{L}L_{5}R_{5}s^{3} + 2C_{5}C_{L}L_{5}R_{5}s^{3} + 2C_{5}C_{L}L_{$
- 10.590 INVALID-ORDER-590 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_5L_Rg_mr_os^5 + C_3C_5C_LL_5L_Rg_ss^5 + C_3C_5C$
- 10.591 INVALID-ORDER-591 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{5}L_{2}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{5}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{5}R_{5}g_$
- 10.592 INVALID-ORDER-592 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- 10.593 INVALID-ORDER-593 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}q_{m}r_{o}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{L}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}$

- 10.594 INVALID-ORDER-594 $Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_Lg_mr_os^5 + C_3C_5C_LL_3L_Lg_mr_os^5 + C_3C_5C_LL_3L$
- 10.595 INVALID-ORDER-595 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_5 L_5 r_o s^2 L_5 g_m r_o s L_5 s + r_o\right)}{2 C_3 C_5 L_3 L_5 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_5 R_3 R_L g_m r_o s^3 + C_3 L_5 L_5 R_3 r_o s^3 + C_3 L_5 R_5 r_o s^3 + C_3 L_5 R_5$
- **10.596** INVALID-ORDER-596 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_5L_5r_os^2 L_5g_mr_os L_5s + r_o\right)}{C_3C_5C_LL_3L_5r_os^5 + C_3C_5L_LL_5R_3r_os^4 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5R_3s^3 + C_3C_LL_3L_5g_mr_os^4 + C_3C_LL_3L_5s^4 + C_3C_LL_3L_5s^4 + C_3C_LL_5R_3g_mr_os^3 + C_3C_LL_5R_3s^3 + C_3C_LL_5R_3s^3$
- 10.597 INVALID-ORDER-597 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5L_Lt_5R_3R_Lr_os^4 + 2C_3C_5L_3L_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_Ls^4 + C_3C_5L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_5R_Lg_mr_os^4 + 4C_3C_5L_5R_Lg_mr_os^4 + 4C_3C_5L_5R_Lg_mr_os^4 + 4C_3C$
- 10.598 INVALID-ORDER-598 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5r_os^5 + 2C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3r_os^4 + C_3C_5C_LL_5R_3r_os^4 + 2C_3C_5L_4L_5R_3r_os^4 + 4C_3C_5L_4L_5R_3r_os^4 + 4C_3C_5L_4R_3r_os^4 + 4C_$
- 10.599 INVALID-ORDER-599 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5r_os^5 + 2C_3C_5C_LL_5L_Rg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5L_Lr_os^5 + C_3C_5C_LL_5R_3r_os^4 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5R_3g_mr_os^3 + 4C_3C_5L_5L_5R_3g_mr_os^3 + 4C_3C_5L_5L_5R_3s^3 + C_3C_5L_5L_5R_3s^3 + C_3C_5L_5R_3s^3 + C_3C_$
- 10.600 INVALID-ORDER-600 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5L_LL_5L_LR_3r_os^5 + 2C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5L_Rs^6 + 2C_3C_5L_5L_LR_3g_mr_os^4 + 4C_3C_5L_5L_LR_3g_mr_os^4 + 4C_3C_5L_5L_Lr_os^4 + C_3C_5L_5L_Lr_os^4 + C$
- 10.601 INVALID-ORDER-601 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lq_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_3L_5R_Lq_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 +$

- 10.602 INVALID-ORDER-602 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_Lr_os^6 + C_3C_5C_LL_5L_LR_3R_Lr_os^5 + 2C_3C_5L_3L_5L_LR_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_us^5 + C_3C_5L_3L_5L_Lr_os^5 + C_3C_5L_3L_5L_LR_us^5 + C_3C_5L_3L_3L_us^5 + C_3C_5L_3L_us^5 + C_3C_5L_3L_us^5 + C_3C_5L_us^5 + C_3C_5L_us^5$
- **10.603** INVALID-ORDER-603 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + 2C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + 2C_3C_5L_3L_5L_Lg_mr_os^5 + 4C_3C_5L_LL_5L_LR_3r_os^5 + 2C_3C_5L_LL_5L_LR_3r_os^5 + 2C_3C_$
- 10.604 INVALID-ORDER-604 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_RR_3r_os^5 + C_3C_5C_$
- **10.605** INVALID-ORDER-605 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_3 C_5 L_3 L_5 g_m r_o s^3 + C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 R_3 R_5 g_m r_o s^3 + C_3 C_5 R_$
- **10.606** INVALID-ORDER-606 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_3L_3s^2 + C_3R_3s + 1)(C_5L_5g_mr_s^2 + C_3C_5C_LL_3L_5g_mr_os^3 + C_3C_5C_LL_3R_5g_mr_os^3 + C_3C_5C_LL_3R_5g_mr_o$
- 10.607 INVALID-ORDER-607 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LR_3R_5R_Lg_mr_os^4 + C_3C$
- **10.608** INVALID-ORDER-608 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s \cdot (C_3 C_5 C_L L_3 L_5 g_m r_o s^4 + C_3 C_5 C_L L_3 L_5 s^4 + C_3 C_5 C_L L_3 R_5 g_m r_o s^3 + C_3 C_5 C_L L_3 R_L g_m r_o s^3 + 4 C_3 C_5 C_L L_3 R_L g_m r_o s^3 + 4 C_3 C_5 C_L L_3 R_L g_m r_o s^3 + C_3 C_5 C_L L_5 R_3 g_m r_o s^3 + C_3 C_5 C_L L_5 R_3 g_m r_o s^3 + C_3 C_5 C_L L_5 R_3 g_m r_o s^3 + C_3 C_5 C_L L_5 R_2 g_m r_o s^3 + C_3 C_5 C_L L_5 R_3 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_3 C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5$
- **10.609** INVALID-ORDER-609 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{5}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{5}s^{3} + C_{3}C_{5}C_{L}L_{5}L_{2}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{5}R_{3}g_{m}r_{o}s^{3} + C_{3}C_{5}C_{L}L_{5}R_{3}s^{3} + 2C_{3}C_{5}C_{L}L_{5}R_{3}s^{3} + 2C_{3}C_{5}C_{L}L_{5}R_{5}s^{3} + 2C_{5}C_{L}L_{5}R_{5}s^{3} + 2C_{5}C_{L}L_{5}R_{5}s^{3}$

- **10.610** INVALID-ORDER-610 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_Ls^6 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C$
- 10.611 INVALID-ORDER-611 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{s\left(C_{3}C_{5}C_{L}L_{3}L_{5}g_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}L_{5}s^{4} + 2C_{3}C_{5}C_{L}L_{3}L_{L}g_{m}r_{o}s^{4} + 4C_{3}C_{5}C_{L}L_{3}L_{L}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{5}g_{m}r_{o}s^{3} + 2C_{3}C_{5}C_{L}L_{3}R_{L}g_{m}r_{o}s^{3} + 4C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{5}C_{L}L_{3}R_{L}s^{3} + C_{3}C_{L}s^{2} + C_{3}C_{L}s^{2} + C_{3}C_{L}s^{2} + C_{3}C_{L}s^{2} +$
- 10.612 INVALID-ORDER-612 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_s^6 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 +$
- 10.613 INVALID-ORDER-613 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_Ls^6 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3L_LR_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3L_LR_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_$
- 10.614 INVALID-ORDER-614 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- 10.615 INVALID-ORDER-615 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_3L_5R_5r_os^4 + 2C_3C_5L_5R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_5R_3R_5r_os^3 + C_3C_5L_5R_3R_5r_os^3 + C_3L_3L_5R_5g_mr_os^3 + C_3L_3L_5R_5g_mr_os^3 + 2C_3L_3L_5R_5g_mr_os^3 + 4C_3L_3L_5R_5g_mr_os^3 + 4C_3L_5L_5R_5g_mr_os^3 + 4C_3L_5L_5R_5g_mr_os^3$
- **10.616** INVALID-ORDER-616 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5L_LL_5R_3R_5r_os^4 + 2C_3C_5L_3L_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5g_mr_os^3 + 4C_3C_5L_5R_3R_5g_mr_os^3 + 4C_3C_5L_5R_3R_5g_mr_os^3 + 4C_3C_5L_5R_3R_5g_mr_os^4 + C_3C_LL_3L_5R_5g_mr_os^4 + C$
- 10.617 INVALID-ORDER-617 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lr_os^5 + C_3C_5L_Lt_5R_3R_5R_Lr_os^4 + 2C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_5R_Lg_mr_os^4 + 4C_3C_5L_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3R_5R_Lg_$

- **10.618** INVALID-ORDER-618 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_5r_os^5 + 2C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5C_LL_5R_3R_5r_os^4 + 2C_3C_5L_4L_5R_5R_Lr_os^4 + 2C_3C_5L_4R_5R_Lr_os^4 +$
- **10.619** INVALID-ORDER-619 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5R_5r_os^5 + 2C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_RR_3R_5s^5 + C_3C_5C_LL_5L_RR_$
- 10.620 INVALID-ORDER-620 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5L_LL_Rs_5r_os^5 + 2C_3C_5L_3L_5L_Rs_5r_os^5 + 4C_3C_5L_3L_5L_Rs_5r_os^4 + 2C_3C_5L_5L_Rs_3r_os^4 + 4C_3C_5L_5L_Rs_5r_os^4 + 4C_3C_5L_5L_Rs_5r_os^$
- 10.621 INVALID-ORDER-621 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5r_os^5 + 2C_3C_5C_LL_3L_5R_5r_os^5 + 2C_$
- 10.622 INVALID-ORDER-622 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lr_os^6 + C_3C_5C_LL_5L_LR_3R_5R_Lr_os^5 + 2C_3C_5L_3L_5L_LR_5R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_5r_os^5 + C_3C_5L_3L_5L_LR_5r_os^5 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + 2C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_5L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_5L_Rg_mr_os^4 + 4C_3C_5L_3L_5L_Rg_mr_os^4 + 4C_3C_$
- 10.623 INVALID-ORDER-623 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + 2C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + C_3C_5C_LL_5L_LR_5R_Lr_os^5 + 2C_3C_5L_3L_5L_LR_5g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5r_os^5 + 2C_3C_5C_LL_5L_Rs_Rr_os^5 + 4C_3C_5C_LL_5L_Rs_Rr_os^5 + 4C_3C$
- 10.624 INVALID-ORDER-624 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}R_{L}q_{m}r_{o}s^{6} + 4C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}r_{o}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}r_{o}s^{5} + 2C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{3}R_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{5}L_{L}R_{5}R_{L}s^{6} + C_{3}C_{5}C_{L}L_{$
- 10.625 INVALID-ORDER-625 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_3L_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_0s^4 + C_3C_5L_5R_3R_5g_mr_os^3 + 4C_3C_5L_5R_3R_Lg_mr_os^3 + 4C_3C_5L_5R_Lg_mr_os^3 + 4C_$

- 10.626 INVALID-ORDER-626 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3r_os^4 + 2C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_3L_5s^4 + 2C_3C_5L_5R_3s^3 + 4C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s^3 +$
- 10.627 INVALID-ORDER-627 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5C_LL_5R_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_Ls^4 + C_3C_5C_LL_5R_5R_Ls^4 + C_3C$
- **10.628** INVALID-ORDER-628 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + 4C_3C_5C_LL_5R_3R_Lg_mr_os^4 + 4C_3C_5C_$
- 10.629 INVALID-ORDER-629 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5r_os^5 + 2C_3C_5C_LL_5L_LR_3g_mr_os^5 + 4C_3C_5C_LL_5L_LR_3g_mr_os^5 +$
- 10.630 INVALID-ORDER-630 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.631 INVALID-ORDER-631 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_$
- 10.632 INVALID-ORDER-632 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_1r_os^6 + C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_RR_3R_5R_Ls^5 + C_3C_5C_LL$
- 10.633 INVALID-ORDER-633 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 L_L R_5 g_m r_o s^6 + C_3 C_5 C_L L_3 L_5 L_L R_5 s^6 + 2 C_3 C_5 C_L L_3 L_5 L_L R_2 g_m r_o s^6 + 4 C_3 C_5 C_L L_3 L_5 L_L R_3 r_o s^6 + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m r_o s^5 + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 4 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 4 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + C_3 C_5 C_L L_5 L_L R_3 R_5 g_m r_o s^5 + C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 4 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 4 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_3 C_5 C_L L_5 L_L R_3 R_L g_m r_o s^5 + 2 C_5 C_L L_5 L_L R_3 R_$

- 10.634 INVALID-ORDER-634 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_cs^6 + C_3C_5C_LL_3L_5L_LR_cs^6 + C_3C_5C_LL_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^6 + C_3C_5C_LL_5L_5L_LR_cs^$
- **10.635** INVALID-ORDER-635 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_3L_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3R_5g_mr_os^3 + C_3C_5L_5R_3R_5g_mr_os^3 + C_3C_5L_5R_5g_mr_os^3 + C_3C_5L_5R_5g$
- **10.636** INVALID-ORDER-636 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5r_os^5 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_5R_3R_5g_mr_os^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_3r_os^4 + C_3C$
- **10.637** INVALID-ORDER-637 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5C_LL_3L_5R_Lr_os^5 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5C_LL_5R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_5R_3R_5R_Lr_os^4 + C_3C_5C_LL_5R_5R_5R_Lr_os^4 + C_3C_5C_LL_5R_5R_Lr_os^4 + C_3C_5C_LL$
- 10.638 INVALID-ORDER-638 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os$
- **10.639** INVALID-ORDER-639 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_2R_5s^5 + C_3C_5C_LL_3L_3C_5C$
- 10.640 INVALID-ORDER-640 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_5L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_5L_LR_3r_os^5 + C_3C_5C_LL_5L_LR_3r_os$
- 10.641 INVALID-ORDER-641 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_mr_os^5 + 2C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_Lg_mr_$

- 10.642 INVALID-ORDER-642 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5C_LL_5L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_5L_Rs^2 + C_3C$
- 10.643 INVALID-ORDER-643 $Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- 10.644 INVALID-ORDER-644 $Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_RL_5s^6 + C_3C_5C_LL_5L_5L_5L_5L_5c^6 + C_3C_5C_LL_5c^6 +$
- **10.645** INVALID-ORDER-645 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_3 R_3 s \left(C_L R_L s + 1\right) \left(R_5 g_m r_o + R_5 r_o\right)}{C_3 C_L L_3 R_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_3 R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_L L_3 R_5 g_m r_o s^2 + C_L$
- **10.646** INVALID-ORDER-646 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_3 R_3 s \left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 r_o\right)}{C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 L_4 L_3 R_5 g_m r_o s^2 + C_4 L_3 L_L R_3 g_m r_o s^3 + 4 C_L L_3 L_L R_3 g_m r_o s^3 + C_L L_3 L_L R_5 g_m r_o s^3 + C_L L_3 L_L R_5$
- 10.647 INVALID-ORDER-647 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5g_mr_os^4 + C_3C_LL_3L_LR_3r_os^4 + C_3C_LL_3L_LR_3r_os^4 + C_3C_LL_3R_3R_5R_Lg_mr_os^3 + C_3C_LL_3R_3R_5R_Ls^3 + C_3C_LL_3R_3R_5g_mr_os^2 + C_3L_3R_3R_5s^2 + C$
- 10.648 INVALID-ORDER-648 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_5 R_L s^4 + C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 R_3 R_5 R_L g_m r_o s^3 + C_3 L_3 R_3 R_5 R_L g_m r_o s^3 + C_3 L_3 L_L R_3 R_5 g_m r_o s^3 + C_3 L_3 L_L R_$
- 10.649 INVALID-ORDER-649 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_Lr_os^4 + C_3L_3R_3R_5R_Ls^2 + C_3L_3R_3R_5R_Ls^2 + C_3L_3R_3R_5R_Ls^2 + C_3L_3L_LR_3R_5g_mr_os^3 + C_LL_3L_LR_3R_5g_mr_os^3 + C_LL_3L_RR_3R_5g_mr_os^3 + C_LL_3L_RR_3R_5g_mr$

10.650 INVALID-ORDER-650
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_3 R_L r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^2 + C_3 L_3 R_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_3 R_L s^2 + C_5 L_3 R_3 r_o s^2 + C_5 L_3 R_L r_o s^2 + C_5 R_3 R_L r_o s + L_3 R_3 g_m r_o s + L_3 R_3 g_m r_o s + L_3 R_1 g_m r_o s + L_3 R_2 g_m r_o s + L_3 R_2 g_m r_o s + L_3 R_2 g_m r_o s + L_3 R_3 g_m r$$

10.651 INVALID-ORDER-651 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_3 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_3 r_o s^3 + C_3 L_3 R_3 g_m r_o s^2 + C_5 L_4 R_3 r_o s^3 + 2 C_5 L_3 R_3 g_m r_o s^2 + 4 C_5 L_3 R_3 s^2 + C_5 L_3 r_o s^2 + C_5 L_3 r_o s^2 + C_5 L_3 R_3 g_m r_o s^2 + C_4 L_3 R_3 g_m r_o s^2 + L_4 g_m r_o s + L_3 s + R_3 g_m r_o s + R_3 g_m r_o s^2 + C_5 R_3 r_o s^2 +$$

10.652 INVALID-ORDER-652 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_3 R_L r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^2 + C_5 L_4 R_3 R_L r_o s^3 + 2 C_5 L_3 R_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_3 R_L r_o s^2 + C_5 L_3 R_3 R_L r_o s^2 +$$

10.653 INVALID-ORDER-653 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_L R_L s + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 R_3 R_L r_o s^4 + C_3 C_5 L_3 R_3 r_o s^3 + C_3 C_L L_3 R_3 R_L g_m r_o s^3 + C_5 C_L L_3 R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_3 R_3 R_L g_m r_o s^3 + 4 C_5 C_L L_3 R_3 R_L r_o s^3 + C_5 C_L L_3$$

10.654 INVALID-ORDER-654 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_{2} s}}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_L L_L s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 L_L R_3 r_o s^5 + C_3 C_5 L_3 R_3 r_o s^3 + C_3 C_L L_3 L_L R_3 g_m r_o s^4 + C_5 C_L L_3 L_L R_3 g_m r_o s^4 + C_5 C_L L_3 L_L R_3 r_o s^3 + C_5 C_L L_3 R_3 r_o s^3$$

10.655 INVALID-ORDER-655
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$L_3L_LR_3s\left(-C_5r_os+g_mr_o+1\right)$$

$$H(s) = \frac{L_3 L_L R_3 s \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_L R_3 r_o s^3 + C_3 L_3 L_L R_3 g_m r_o s^2 + C_3 L_3 L_L R_3 s^2 + C_5 C_L L_3 L_L R_3 g_m r_o s^2 + 4 C_5 L_3 L_L R_3 s^2 + C_5 L_3 L_L r_o s^2 + C_5 L_3 R_3 r_o s + C_5 L_L R$$

10.656 INVALID-ORDER-656
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3R_3R_Lr_os^4 + C_3C_5L_3R_3r_os^3 + C_3C_LL_3L_LR_3g_mr_os^4 + C_3C_LL_3L_LR$$

10.657 INVALID-ORDER-657
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3L_LR_3R_Ls\left(-C_5r_os + g_mr_o + 1\right)}{C_3C_5L_3L_LR_3R_Lr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^2 + C_5L_3L_LR_3R_Lg_mr_os^2 + C_5L_3L_LR_3R_Lg_mr_os^2$$

10.658 INVALID-ORDER-658 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_Lr_os^5 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3R_3R_Lr_os^3 + C_3L_3L_LR_3R_Ls^4 + C_3L_3L_LR_3s^3 + C_3L_3R_3R_Ls^4 + C_3L_3L_Rs^3 + C_3L$

10.659 INVALID-ORDER-659 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_Lr_os^5 + C_3C_5L_3R_3R_Lr_os^5 + C_3C_5L_3L_LR_3R_Lg_mr_os^4 + C_3C_LL_3L_LR_3R_Lg_mr_os^4 + C_5C_LL_3L_LR_3R_Lg_mr_os^4 + C_5C_LL_3L_LR_3R_Lg_mr_os^4$

10.660 INVALID-ORDER-660 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 R_3 R_5 R_L r_o s^3 + C_3 L_3 R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_3 R_5 R_L g_m r_o s^2 + 4 C_5 L_3 R_3 R_5 R_L s^2 + C_5 L_3 R_3 R_5 R_L r_o s^2 + C_5 L_3 R_5 R_L r_o s^2 + C$

10.661 INVALID-ORDER-661 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_o} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3 R_3 s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 R_3 R_5 r_o s^3 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_5 L_4 R_3 R_5 r_o s^3 + 2 C_5 L_3 R_3 R_5 g_m r_o s^2 + 4 C_5 L_3 R_3 R_5 r_o s^2 + C_5 L_3 R_3 R_5 g_m r_o s^2 + C_5 L_3 R_3 R_5 g_m r_o s^2 + C_5 L_3 R_3 R_5 g_m r_o s^2 + C_5 L_4 R_3 R_5 g_m r_o s^2 + 2 L_5 R_3 R_5 g_m r_o s^2 + 2 L_5 R_5 g$

10.662 INVALID-ORDER-662 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(-C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_5 L_3 R_3 R_5 R_L r_o s^3 + C_3 L_3 R_3 R_5 R_L r_o s^2 + C_5 L_3 R_5 R_L r_o s^2 + C_5 L_5 R_5 R_L$

10.663 INVALID-ORDER-663 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_{2S}}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3R_3R_5R_Lr_os^4 + C_3C_5L_3R_3R_5r_os^3 + C_3C_LL_3R_3R_5R_Lg_mr_os^3 + C_3C_LL_3R_3R_5R_Ls^3 + C_3C_LL_3R_3R_5r_os^3 + C_3L_3R_3R_5r_os^3 + C_3L_3R_3$

10.664 INVALID-ORDER-664 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $\overline{C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}r_{o}s^{5}+C_{3}C_{5}L_{3}R_{3}R_{5}r_{o}s^{3}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{L}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{5}C_{L}L_{3}L_{L}R_{3}R_{$

10.665 INVALID-ORDER-665 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_3L_LR_3s\left(-C_5R_5r_os + R_5g_mr_o + R_5 - r_o\right)$

 $H(s) = \frac{L_3L_LL_3S_3C_1 - C_5L_3L_LR_3R_5g_mr_os^2 + C_5L_3L_3L_LR_3R_5g_mr_os^2 + C_5L_3L_3L_LR_3R_5g$

10.666 INVALID-ORDER-666 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5r_os^5 + C_3C_5L_LR_3R_3R_5R_Lr_os^4 + C_3C_5L_3R_3R_5r_os^3 + C_3C_LL_3L_LR_3R_5r_os^4 + C_3C_LL_3L_LR_3r_os^4 + C_3C_LL_3R_3R_5R_Lr_os^3 + C_3C_LL_3R_3R_5R_Lr_os^3 + C_3L_LR_3R_5r_os^4 + C_3C_LL_3R_3R_5R_Lr_os^4 + C_3C_LL_3R_3$

10.667 INVALID-ORDER-667 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5L_3L_LR_3R_5R_Lr_os^3 + C_3L_3L_LR_3R_5R_Lg_mr_os^2 + C_3L_3L_LR_3R_5R_Ls^2 + C_3L_3L_LR_3R_5R_Lr_os^3 + 2C_5L_3L_LR_3R_5R_Lg_mr_os^2 + 4C_5L_3L_LR_3R_5R_Ls^2 + C_5L_3L_LR_3R_5R_Lr_os^2 + C_5L_3L_3L_LR_3R_5R_Lr_os^2 + C_$

10.668 INVALID-ORDER-668 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + C_3C_5L_3L_LR_3R_5r_os^4 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_5R_Lr_os^4 + C_3L_3L_LR_3R_5r_os^4 + C_3L_3L_LR_3R_5$

10.669 INVALID-ORDER-669 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{L_L s}}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3C_LL_3L_LR_3R_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_5R_Lg_mr_os^4 + C_3L_3R_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_Rs^2R_5R_Ls^4 + C_3C_LL_3L_Rs^2R_Ls^2R_Ls^2 + C_3C_LL_3L_Rs^2R_Ls^2 + C_3C_LL_3L_Rs^2R_Ls^2 + C_3C_LL_3L_Rs^2R_Ls^2 +$

10.670 INVALID-ORDER-670 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_3 R_5 R_L g_m r_o s^3 + C_3 C_5 L_3 R_3 R_L r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^2 + C_5 L_3 R_3 R_L g_m r_o s^2 + C_$

10.671 INVALID-ORDER-671 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3 R_3 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_3 R_3 R_5 g_m r_o s^3 + C_3 C_5 L_3 R_3 g_m r_o s^2 + C_5 L_3 R_3 g_m r_o s^3 + C_5 C_L L_$

10.672 INVALID-ORDER-672 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $\frac{L_{3}\kappa_{3}\kappa_{L}s\left(\cup_{5}\kappa_{5}g_{m}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s-\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s+\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s+\cup_{5}r_{o}s+\cup_{5}\kappa_{5}s+\cup_{5}r_{o}$

10.673 INVALID-ORDER-673 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_{1}C_{2}C_{1}L_{2}R_{3}R_{5}R_{L}q_{m}r_{o}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}s^{4} + C_{3}C_{5}L_{L}L_{3}R_{3}R_{L}r_{o}s^{4} + C_{3}C_{5}L_{3}R_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{3}R_{3}R_{L}s^{3} + C_$

10.674 INVALID-ORDER-674 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

10.675 INVALID-ORDER-675 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_3 L_L R_3 s \left(C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 R_5 g_m r_o s + C_5 R_5 s + C_5 R_5 r_o s + C_5 R_5 s + C_5 R_5 r_o s + C_5 R_5$

10.676 INVALID-ORDER-676 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os^4 + C_3C_5L_3R_3R_5g_mr$

10.677 INVALID-ORDER-677 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5L_3L_LR_3R_5R_Lg_mr_os^3 + C_3C_5L_3L_LR_3R_5R_Ls^3 + C_3C_5L_3L_LR_3R_Lr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^2 + C_3L_3L_LR_3R_Lg_mr_os^3 + C_5C_LL_3L_LR_3R_5R_Ls^3 + C_5C_LL_3L_LR_3R_Ls^3 + C_5C$

10.678 INVALID-ORDER-678 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.679 INVALID-ORDER-679 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + C_3C_5L_Ll_3L_LR_3R_5R_Ls^5 + C_3C_5L_3L_Rl_3R_5R_Lg_mr_os^5 + C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_Lr_os^3 + C_3C_5L_3L_LR_3R_Lg_mr_os^4 + C_3L_3L_LR_3R_Lg_mr_os^4 + C_3L_3L_LR_3R_Lg_mr_os$

10.680 INVALID-ORDER-680 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 L_3 L_5 R_3 R_L g_m r_o s^4 + C_3 C_5 L_3 R_5 R_L g_m r_o s^3 + C_5 L_3 L_5 R_3 g_m r_o s^3 + C_5 L_3 L_5 R_3 g_m r_o s^3 + C_5 L_3 L_5 R_4 g_m r_o s^3 + C_5 L_3 R_3 R_L g_m r_o s^3 + C_5 L_3 R_5 R_4 g_m r_o s^3 + C_5 L_3 R_5 R_5 R_5 g_m r_o s^3 + C_5 L_3 R_5 g_m r_o s^3 + C_5 L_5 R_5 g_m$

10.681 INVALID-ORDER-681 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $L_3R_3s\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1\right)$ $H(s) = \frac{L_3 R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 L_3 L_5 R_3 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_3 g_m r_o s^4 + C_5 C_L L_3 L_5 R_3 g_m r_o s^4 + C_5 C_L L_3 L_5 R_3 g_m r_o s^4 + C_5 C_L L_3 L_5 R_3 g_m r_o s^4 + C_5 C_L L_3 L_5 R_3 g_m r_o s^4 + C_5 C_L L_3 L_5 R_3 g_m r_o s^4 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^4 + C_5 L_5 L_3 R_3 g_m r_o s^4 + C_5 L_5 L_3 R_3 g_m r_o s^4 + C_5 L_5 L_5 R_5 g_m r_$

10.682 INVALID-ORDER-682 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o r_o s^2 + C_5 L_5 r_o s^2 + C_5$

10.683 INVALID-ORDER-683 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_Lr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3R_3r_os^3 + C_3C_LL_3R_3R_Lg_mr_os^3 + C_3C_LL_3R_3R_Ls^3 + C_3C_LL_3R_3R_Ls$

10.684 INVALID-ORDER-684 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5L_2R_3g_mr_os^4 + C_3C_5L_3L_5L_3R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr$

10.685 INVALID-ORDER-685 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_3L_LR_3s\left(C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + C_5L_5L_2L_2R_3g_mr_os^4 + C_3C_5L_3L_2L_2R_3s^4 + C_3C_5L_3L_2L_2R_3s^4 + C_5C_LL_3L_5L_2R_3s^4 + C_5C_LL_3L_5L_3R_3s^4 + C_5C_LL_3L_5$

10.686 INVALID-ORDER-686 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Ls^5$

10.687 INVALID-ORDER-687 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_Lg_mr_os^4 + C_3C_5L_3L_5L_LR_3R_Ls^4 + C_3C_5L_3L_LR_3R_Lr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^2 + C_3L_3L_LR_3R_Lg_mr_os^4 + C_5C_LL_3L_5L_LR_3R_Ls^4 + C_5C_LL_3L_5L_LR_3R_Lr_os^3 + C_5L_3L_5L_LR_3R_Lr_os^3 + C_5L_3L_5L_LR_3R_Ls^4 + C_5C_LL_3L_5L_LR_3R_Ls^4 + C_5C_LL_3L_5L_Rs^2 + C_5C_LL_3L$

10.688 INVALID-ORDER-688 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + C_3C_5L_LL_3L_5L_LR_3R_Ls^6 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5R_3R_Lg_mr_os^5 + C$

10.689 INVALID-ORDER-689 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $\overline{C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_LR_3R_Lr_os^5 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_5L_5R_3R_Lg_mr_os^4 + C_3C_5L_5L_5R_3R_Lg_mr_os^$

10.690 INVALID-ORDER-690 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = \frac{L_3 R_3 R_L s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_3 L_5 R_3 R_L r_o s^4 + C_3 L_3 L_5 R_3 R_L g_m r_o s^3 + C_3 L_3 L_5 R_3 R_L g_m r_o s^3 + C_5 L_3 L_5 R_3 R_L r_o s^3 + C_5 L_5 R_5 R_L r_o s$

10.691 INVALID-ORDER-691 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3 R_3 s \left(-C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o\right)}{C_3 C_5 L_3 L_5 R_3 r_o s^4 + C_3 L_3 L_5 R_3 g_m r_o s^3 + C_3 L_3 L_5 R_3 s^3 + C_3 L_3 L_5 R_3 r_o s^4 + 2 C_5 L_3 L_5 R_3 g_m r_o s^3 + 4 C_5 L_3 L_5 R_3 r_o s^3 + C_5 L_3 L_5 R_3 g_m r_o s^3 + C_4 L_3 L_5 R_3 r_o s^3 + C_4 L_5 L_5 R_3 r_o s^3 + C_5 L_5 L_5 R_5 r_o s^3 + C_5 L_5$

10.692 INVALID-ORDER-692 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{L_{3}R_{3}R_{L}s\left(-C_{5}L_{5}r_{o}s^{2} + L_{5}g_{m}r_{o}s + L_{5}s - r_{o}\right)}{C_{3}C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{4} + C_{3}L_{3}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{4} + 2C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{4} + 2C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{4} + 2C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{3}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{5}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{5}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{5}L_{5}R_{3}R_{L}r_{o}s^{3} + C_{5}L_{5}L_{5}R_{5}R_{L}r_{o}s^{3} + C_{5}L_{5}$

10.693 INVALID-ORDER-693 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Lr_os^5 + C_3C_5L_3L_5R_3r_os^4 + C_3C_LL_3L_5R_3R_Lg_mr_os^4 + C_3C_LL_3L_5R_3R_Ls^4 + C_3$

10.694 INVALID-ORDER-694 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5R_3r_os^4 + C_3C_LL_3L_5L_LR_3g_mr_os^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5L_Rs^5 + C_3C_LL_3L_5$

10.695 INVALID-ORDER-695 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.696 INVALID-ORDER-696 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_2} + \frac{1}{L_2 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_LL_3L_5R_3R_Lr_os^5 + C_3C_LL_3L_5R_3r_os^4 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5R_3R_Ls^4 + C_3C_LL_3R_3R_Ls^4 + C_3C_LL_3$

10.697 INVALID-ORDER-697 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_2 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_Lr_os^4 + C_3L_3L_5L_LR_3R_Lg_mr_os^3 + C_3L_3L_5L_LR_3R_Lr_os^2 + C_5C_LL_3L_5L_LR_3R_Lr_os^4 + 2C_5L_3L_5L_LR_3R_Lg_mr_os^3 + 4C_5L_3L_5L_LR_3r_os^3 + C_5L_3L_5L_LR_3r_os^3 + C_5L_3L_5L_LR_3r_os^3 + C_5L_3L_5L_LR_3r_os^3 + C_5L_3L_5L_LR_3R_Lr_os^3 + C_5L_3L_5L_RR_3R_Lr_os^3 + C_5L_$

- 10.698 INVALID-ORDER-698 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lr_os^6 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5R_3R_Lr_os^4 + C_3C_LL_3L_5L_LR_3R_Ls^5 + C_3C_LL_3L_5L_LR_3R_Lr_os^4 + C_3L_3L_5L_LR_3g_mr_os^4 + C_3L_3L_5L_RR_3g_mr_os^4 + C_3L_3L_5L_RR_3g_mr_os^4$
- **10.699** INVALID-ORDER-699 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lr_os^6 + C_3C_5L_3L_5R_3R_Lr_os^4 + C_3C_LL_3L_5L_LR_3R_Lg_mr_os^5 + C_3C_LL_3L_5L_LR_3R_Lr_os^4 + C_3L_3L_5R_3R_Lg_mr_os^3 + C_3L_3L_5R_3R_Ls^3 + C_3L_3L_5R_3R_Lr_os^4 + C_3L_3L_5L_LR_3R_Lr_os^4 + C_3L_3L_5L_LR_3R_Lr_os^4 + C_3L_3L_5R_3R_Lr_os^4 + C_3L_3R_Lr_os^4 + C_3L_3L_5R_3R_Lr_os^4 + C_3L_3L_5R_Lr_os^4 +$
- 10.700 INVALID-ORDER-700 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{L_3 R_3 R_L s \left(C_5 L_5 g_m r_o s^2 + C_5 L_3 L_5 R_3 R_L g_m r_o s^4 + C_3 C_5 L_3 L_5 R_3 R_L s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_3 R_L r_o s^3 + C_5 L_3 L_5 R_3 g_m r_o s^3 + C_5 L_3 L_5 g_m r_o s^3 + C_5 L_5 g_m$
- 10.701 INVALID-ORDER-701 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_3 R_3 s \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 + C_5 R_5 g_m r_o s + C_5 R_5 r_o s^2 + C_5$
- 10.702 INVALID-ORDER-702 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3R_3R_5R_Lg_mr_os^3 + C_3C_5L_3R_3R_Lg_mr_os^3 + C_3C$
- 10.703 INVALID-ORDER-703 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_Lr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os$
- 10.704 INVALID-ORDER-704 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os^4 + C_3C_5L_3R_5R_5g_mr_os^4 + C_3C_5L_3R_5g_mr_os^4 + C_3C_5L_3R_5g_mr_os^4 + C$
- 10.705 INVALID-ORDER-705 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3g_mr_os^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_LR_3s^6 + C_3C_5L_3L_LR_3s^6 + C_3C_5L_3L_LR_3s^6 + C_3C_5L_3L_LR_3s^6 + C_3C_5L_3L_LR_3s^6 + C_3C_5L_3L_LR_3s^6 + C_5C_LL_3L_LR_3s^6 + C_5C_LL$

- 10.706 INVALID-ORDER-706 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_3L_LR_3r_os^5 + C_3C_5C_LL_3L_3L_LR_3r_os^5 + C_3C_5C_LL_3L_3L_LR_3r_os^5 + C_3C_5C_LL_3L_3L_3R_3r_os^5 + C_3C$
- 10.707 INVALID-ORDER-707 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_Lg_mr_os^4 + C_3C_5L_3L_LR_3R_Ls^4 + C_3C_5L_3L_LR_3R_5R_Lg_mr_os^3 + C_3C_5L_3L_LR_3R_Lr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^2 + C_3L_3L_LR_3R_Lg_mr_os^4 + C_5C_LL_3L_5L_LR_3R_Lg_mr_os^4 + C_5C_LL_3L_5L_Rg_mr_os^4 + C_5C_LL_3L_5L_Rg_mr$
- 10.708 INVALID-ORDER-708 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- 10.709 INVALID-ORDER-709 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Rg_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_5R_3R_5R_Lg$
- 10.710 INVALID-ORDER-710 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = \frac{L_3 R_3 R_L s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_o r_o$
- 10.711 INVALID-ORDER-711 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{L_3 R_3 s \left(-C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s L_5 r_o s L_5 r_o s L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 r_o s L_5 R_5 r_o s^2 + L_5 R_5 r_o s^2$
- 10.712 INVALID-ORDER-712 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lr_os^4 + C_3L_3L_5R_3R_5R_Lg_mr_os^3 + C_3L_3L_5R_3R_5R_Lr_os^3 + C_3L_3L_5R_3R_5R_Lr_os^3 + C_5L_3L_5R_3R_5R_Lr_os^4 + 2C_5L_3L_5R_3R_5R_Lr_os^4 + 2C_5L_3L_5R_5R_5R_Lr_os^4 + 2C_5L_3L_5R_5R_5R_Lr_os^4 + 2C_5L_3L_5R_5R_5R_Lr_os^4 + 2C_5L_3L_5R_5R_Lr_os^4 + 2C_5L_3L_5R_5R_Lr_os^4 + 2C_5L_5R_5R_5R_Lr_os^4 + 2C_5L_5R_5R_5R_Lr_os^4 + 2C_5L_5R_5R_5R_Lr_os^4 + 2C_5L_5R_5R_Lr_os^4 + 2C_5L_5R$
- 10.713 INVALID-ORDER-713 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5R_3R_5R_Ls^4 + C_3C_LL_3L_5R_3R_5r_os^4 +$

- 10.714 INVALID-ORDER-714 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5L_LR_3R_5g_mr_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5L_3L_5L_3R_3r_os^5 + C_3C_LL_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_5L_5L_5L_5L_5L_5L_5$
- 10.715 INVALID-ORDER-715 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- **10.716** INVALID-ORDER-716 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_LR_3R_5g_mr_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5R_3R_5R_Lr_os^4 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5L_LR_3r_os^5 + C_3C_LL_3L_5R_3R_5R_Lr_os^4 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5L_RR_3r_os^5 + C_3C_LL_3L_5R_3R_5r_os^4 + C_3C_LL_3L_5R_5R_5r_os^4 + C_3C_LL_3L_5R_5R_5r_os^4 + C_3C_LL_3L_5R_5R_5r_os^4 + C_3C_LL_3L_5R_5R_5r_os^4 + C_3C_LL_3L_5R_5R_5r_os^4 + C_3C_LL_3$
- 10.717 INVALID-ORDER-717 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3L_3L_5L_LR_3R_5R_Lg_mr_os^3 + C_3L_3L_5L_LR_3R_5R_Lr_os^4 + C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_5L_3L_5L_RR_3R_5R_Lr_os^4 + C_5L_3L_5L_RR_3R$
- 10.718 INVALID-ORDER-718 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5L_LR_3R_5r_os^5 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_RR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_RR_3$
- 10.719 INVALID-ORDER-719 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5R_3R_5R_Lr_os^4 + C_3C_LL_3L_5L_LR_3R_5R_Ls^5 + C_3C_LL_3L_5L_LR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_RR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_LR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_RR_3R_5R_Lr_os^5 + C_3C_LL_3L_5L_RR_3R_5$
- 10.720 INVALID-ORDER-720 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^3 + C_3L_3L_5R_3R_Lg_mr_os^3 + C_3L_3R_3R_5R_Lg_mr_os^3 + C_3L_3R_3R_5R_Lg_mr_os^3$
- 10.721 INVALID-ORDER-721 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3r_os^4 + C_3L_3L_5R_3g_mr_os^3 + C_3L_3R_3R_5g_mr_os^2 + C_3L_3R_3R_5s^2 + C_3L_3L_5R_3R_5g_mr_os^4 + C_5C_LL_3L_5R_3R_5s^4 + C_5C_LL_3L_5R_3r_os^4 + C_5C_LL_3L_5R$

- 10.722 INVALID-ORDER-722 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_Lr_os^4 + C_3L_3L_5R_3R_Lg_mr_os^3 + C_3L_3R_3R_5R_Lg_mr_os^2 + C_3L_3R_3R_5R_Ls^2 + C_3L_3R_5R_Ls^2 + C_3L_3R_5R_Ls^2 + C_3L_3R_5R_Ls^2 + C_3L_3R_5R$
- 10.723 INVALID-ORDER-723 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5R_5s^4 + C_3C_5L_5L_5L_5R_5s$
- 10.724 INVALID-ORDER-724 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5L_RR_3g_mr_os^5 + C_3C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5L_3L_5L_RR_3g_mr_os^6 + C_3C_5L_3L_5R_3R_5g_mr_os^6 + C_3C_5L_3L_5R_3R_5g_mr_os^6 + C_3C_5L_3L_5R_3R_5g_mr_os^6 + C_3C_5L_3L_5L_RR_3g_mr_os^6 + C_3C_5L_3L_5R_3g_mr_os^6 + C_3C_5L_3L_5R$
- 10.725 INVALID-ORDER-725 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.726 INVALID-ORDER-726 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5g_mr_os^6 + C_3C_5L_3L_5R_3R_5s^6 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5s^6 + C_3C_5C_LL_3L_5R_5R_5s^6 + C_3C_5C_LL_3L_5R_5s^6 + C_3C_5C_LL_3L_5R_5s^6 + C_3C_5C_LL_3L_5R_5s^6 + C_3C_5C_LL_3L_5R_5s^6 + C_3C_5C$
- 10.727 INVALID-ORDER-727 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5L_LR_3R_5R_Ls^4 + C_3C_5L_3L_5L_LR_3R_Lg_mr_os^4 + C_3L_3L_LR_3R_Lg_mr_os^4 + C_3L_LR_3R_Lg_mr_os^4 + C_3L_LR_3R_Lg_mr_os^4 + C_3L_LR_3R_Lg_mr_os^4$
- 10.728 INVALID-ORDER-728 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5L_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_LR_3R_5s^5 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5L_RR_3r_os^5 + C_3C_5L_3L$
- 10.729 INVALID-ORDER-729 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_Lr_os^6 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_LL_3L_5L_LR_3R_Ls^5 + C_3C_LL_3L_5L_Rg_mr_os^6 + C_3C_5L_3L_5L_Rg_mr_os^6 + C_3C$

- 10.730 INVALID-ORDER-730 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_Lr_os^4 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3L_3R_3R_5R_Lg_mr_os^2 + C_3L_3R_3R_5R_Ls^2 + C$
- 10.731 INVALID-ORDER-731 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{L_3}{C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3R_3R_5r_os^3 + C_3L_3R_3R_5g_mr_os^2 + C_3L_3R_3R_5s^2 + C_5C_LL_3L_5R_3R_5g_mr_os^4 + C_5C_LL_3L_5R_3R_5s^4 + C_5C_LL_3L_5R_3r_os^4 + C_5C_LL_3R_3R_5r_os^3 + 2C_5L_3L_5R_3g_mr_os^3 + C_5C_LL_3L_5R_3r_os^4 + C_5C_LL$

- 10.732 INVALID-ORDER-732 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_Lr_os^4 + C_3C_5L_3R_3R_5R_Lg_mr_os^2 + C_3L_3R_3R_5R_Ls^2 + C_3L_3R_3R_5R_Lg_mr_os^4 + C_5C_LL_3L_5R_3R_5R_Ls^4 + C_5C_LL_3L_5R_3R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4 + C_5C_LL_3L_5R_5R_Lr_os^4$
- 10.733 INVALID-ORDER-733 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Lr_os^5 + C_3C_5L_4L_3R_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3R_5R_5s^4 + C_3C_5L_3R_5s^4 + C_3C_5L_3R_5s^4 + C_3C_5L_3R_5s^4 + C_3C_5L_3R_5s^4 + C_3C_5L_3R_5s^4 + C_3C_5L_3R_5s^4 + C_3C$
- 10.734 INVALID-ORDER-734 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_5R_5s^4 + C_3C_5L_3L_5R_5R_5s^4 + C_3C_5L_5L_5R_5R_5s^4 + C_3C_5L_5R_5R_5s^4 + C_3C$
- 10.735 INVALID-ORDER-735 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_5g_mr_os^4 + C_3C_5L_3L_5L_LR_3R_5s^4 + C_3C_5L_3L_5L_LR_3r_os^4 + C_3C_5L_3L_LR_3R_5g_mr_os^2 + C_3L_3L_LR_3R_5s^2 + C_3L_3L_LR_3R_5s^2 + C_5L_LL_3L_5L_LR_3R_5g_mr_os^4 + C_5C_LL_3L_5L_LR_3R_5s^4 + C_5C_LL_3L_5L_LR_3r_os^4 + C_5C_LL_3L_5L_RR_3r_os^4 + C_5C$
- 10.736 INVALID-ORDER-736 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- 10.737 INVALID-ORDER-737 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_3 C_5 L_3 L_5 L_L R_3 R_5 R_L q_m r_o s^4 + C_3 C_5 L_3 L_5 L_L R_3 R_5 R_L s^4 + C_3 C_5 L_3 L_5 L_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_3 L_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_3 L_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_3 L_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_3 L_L R_3 R_5 R_L r_o s^4 + C_3 C_5 L_3 L_L R_3 R_5 R_L r_o s^4 + C_5 C_L L_3 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_5 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_5 L_5 L_L R_5 R_L r_o s^4 + C_5 C_L L_5 L_5 L_L r_o s^4 + C_5 C_L L_5$

- 10.738 INVALID-ORDER-738 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5L_RR_3R_5R_Lr_os^6 + C_3C_5L_3L$
- 10.739 INVALID-ORDER-739 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- **10.740** INVALID-ORDER-740 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(R_{5}g_{m}r_{o} + R_{5} r_{o}\right)\left(C_{3}L_{3}R_{3}s^{2} + L_{3}s + R_{3}\right)}{C_{3}C_{L}L_{3}R_{3}R_{5}g_{m}r_{o}s^{3} + C_{3}C_{L}L_{3}R_{3}r_{o}s^{3} + 2C_{3}L_{3}R_{3}g_{m}r_{o}s^{2} + 4C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{3}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{3}R_{5}g_{m}r_{o}s + C_{L}R_{3}R_{5}g_{m}r_{o}s + C_{L}R_{3}R_{5}s + C_{L}R_{3}r_{o}s + 2C_{L}R_{3}R_{5}g_{m}r_{o}s + 2C_{L}R_{3}R_{5}g_{m}r_{o}s + C_{L}R_{3}R_{5}s + C_{L}R_{3}r_{o}s + 2C_{L}R_{3}R_{5}g_{m}r_{o}s + 2C_{L}R_{3}R_{5}s + C_{L}R_{3}r_{o}s + 2C_{L}R_{3}R_{5}s + 2C_{L}R_{3}r_{o}s + 2C_{L}R_{3}r_{o}s$
- 10.741 INVALID-ORDER-741 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{R_L \left(R_5 g_m r_o + R_5 r_o \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_4 R_5 R_4 r_o s^3 + C_3 C_4 L_3 R_3 R_5 R_4 r_o s^3 + C_3 C_4 L_3 R_3 R_5 r_o s^2 + C_3 L_3 R_3 R_5 r_o s^2 + C_3 L_3 R_3 R_4 r_o s^2 + C_3 L_3 R_5 R_4 r_o s^2 + C_4 L_3 R_5 R_5 R_5 r_o s^2 + C_4 L_3 R_$
- 10.742 INVALID-ORDER-742 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{(C_L R_L s + 1) (R_5 g_m r_o + R_5 1)}{C_3 C_L L_3 R_3 R_5 g_m r_o s^3 + C_3 C_L L_3 R_5 g_m r_o s^3 + C_3 C_L$
- 10.743 INVALID-ORDER-743 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(R_5 g_m r_o + R_5 + C_3 C_L L_3 L_L R_3 g_m r_o s^4 + 4 C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_5 g_m r_o s^4 + C_3 C_L L_3 R_3 R_5 g_m r_o s^3 + C_3 C_L L_3 R_5 g_m r_o s^3$
- 10.744 INVALID-ORDER-744 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{L_L s \left(R_5 g_m r_o + R_5 r_o\right) \left(C_3 L_3 R_3 s^2 + L_3 s^2 + L_3 L_4 R_3 r_o s^4 + C_3 C_L L_3 L_4 R_3 r_o s^4 + C_3 C_L L_3 L_4 R_3 r_o s^3 + C_3 L_3 L_4 R_3 s^3 + C_3 L_3 L_4 R_5 s^3 + C_3 L_4 L_4 R_5 s^3 + C_4 L_4 L_4 R_5 r_5 + C_4 L_5 R_5 r_5 + C_4 L_5 R_5 r_5 + C_5 L_5 R$
- 10.745 INVALID-ORDER-745 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_LL_3L_LR_3g_mr_os^4 + 4C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_LR_5g_mr_os^4 + C_3C_LL_3L_LR_5s^4 + C_3C_LL_3R_3R_5g_mr_os^3 + C_3C_LL_3R_5g_mr_os^3 + C_3C_LL_3R_$

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10.746 INVALID-ORDER-746 Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)
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$$H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_Lg_mr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^3$$

10.747 INVALID-ORDER-747
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_5 s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + 4 C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 C_L L_3 L_L R_5 r_o s^4 + C_3 C_L L_3 L_L$$

10.748 INVALID-ORDER-748
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_5 s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + 4 C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 C_L L_3 L_L R_5 R_L g_m r_$$

10.749 INVALID-ORDER-749
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{2 C_3 C_5 L_3 R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 r_o s^3 + C_3 C_5 L_3 R_L r_o s^3 + C_3 L_3 R_3 g_m r_o s^2 + C_3 L_3 R_L g_m r_o s^2 + C_5 L_3 R_L g_m r_o s^2 + 4 C_5 L_3 R_L g_m r_o s^2 + 2 C_5 R_3 R_L g_m r_o s^2 + 2 C$$

10.750 INVALID-ORDER-750
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(-C_5 r_o s + g_m r_o + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{C_3 C_5 C_L L_3 R_3 r_o s^4 + 2 C_3 C_5 L_3 R_3 g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 s^3 + C_3 C_L L_3 R_3 g_m r_o s^3 + C_3 C_L L_3 R_3 s^3 + C_3 C_L L_3 R_3 g_m r_o s^3 + C_5 C_L L_3 r_o s^3 + C_5 C_L R_3 r_o s^3 + 2 C_5 L_3 g_m r_o s^2 + 4 C_5 L_3 g_m r_o s^2 + 4 C_5 L_3 g_m r_o s^2 + 2 C_5 R_3 g_m r_o s^2 + 2 C_5 R$$

10.751 INVALID-ORDER-751
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_5 r_o s + g_m r_o + 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + L_3$$

10.752 INVALID-ORDER-752
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) (-C_5 r_L s_1 + 1) (-C_5 r_L s_2 r_L s_3 r_L s_3 r_L s_4 + C_3 r_L s_2 r_L s_3 r_L s_3 r_L s_4 + C_3 r_L s_3 r_L s_3 r_L s_4 + C_3 r_L s_2 r_L s_3 r_L s_3$$

10.753 INVALID-ORDER-753
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{(C_L L_L s^2 + 1) (-C_5 r_1)}{2C_3 C_5 C_L L_3 L_L R_3 g_m r_o s^5 + 4C_3 C_5 C_L L_3 L_L R_3 s^5 + C_3 C_5 C_L L_3 L_L r_o s^5 + C_3 C_5 C_L L_3 R_3 r_o s^4 + 2C_3 C_5 L_3 R_3 g_m r_o s^3 + 4C_3 C_5 L_3 R_3 g_m r_o s^3 + C_3 C_L L_3 L_L g_m r_o s^4 + C_3 C_L L_3 L_L g_m r_o s^4 + C_3 C_L L_3 L_L g_m r_o s^4 + C_3 C_L L_3 L_L g_m r_o s^3 + C_3 C_L L_3 L_L g_m r_o s^3 + C_3 C_L L_3 L_L g_m r_o s^4 + C_3 C_L L_3 L$$

10.754 INVALID-ORDER-754 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_L s \left(-C_5 r_o s + g_m r_o + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + L_3 r_o s^3 + C_3 C_L L_3 L_L R_3 r_o s^5 + 2 C_3 C_5 L_3 L_L R_3 g_m r_o s^4 + 4 C_3 C_5 L_3 L_L R_3 r_o s^3 + C_3 C_L L_3 L_L R_3 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 g_m$

10.755 INVALID-ORDER-755 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_Lr_os^5 + 2C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_3r_os^2 + C_3C_5C_LL_3R_3r_os^2 + C_3C_5C_LL_3R_3r_os^2 + C_3C_5C_LL_3R_3r_os^2 +$

10.756 INVALID-ORDER-756 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_Lr_os^5 + 2C_3C_5L_3L_LR_3R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3R_Lg_mr_os^4 + C_3C_5L_3L_LR_3R_Lg_$

10.757 INVALID-ORDER-757 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5L_Ll_3L_LR_3R_Ls^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_LR_3g_mr_os^4 + 4C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3R_Ls^3$

10.758 INVALID-ORDER-758 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5L_Ll_3L_LR_3R_Ls^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3r_os^3 + C_3C_5L_3R_Lr_os^3 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3r_os^3 + C$

10.759 INVALID-ORDER-759 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)$

 $H(s) = -\frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_3 L_3 R_3 R_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 R_5 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 R_5 r_o s^3 + C_3 C_5 L_3 R_3 R_5 r_o s^3 + C_3 C_5 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + 4 C_3 L_3 R_3 R_5 g_m r_o s^2 + 4 C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 R_L g$

10.760 INVALID-ORDER-760 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_5R_5r_os - L_3R_3R_5r_os^4 + 2C_3C_5L_3R_3R_5g_mr_os^3 + 4C_3C_5L_3R_3R_5g_mr_os^3 + C_3C_LL_3R_3R_5g_mr_os^3 + 2C_3L_3R_3g_mr_os^2 + 4C_3L_3R_3g^2 + C_3L_3R_5g_mr_os^2 + C_3L_3R_5g_mr_os^3 + C_3C_LL_3R_3r_os^3 + C_3C_LL_3R_3r_os^3 + 2C_3L_3R_3g_mr_os^2 + 4C_3L_3R_5g_mr_os^2 + C_3L_3R_5g_mr_os^3 + C_3C_LL_3R_3r_os^3 + C$

10.761 INVALID-ORDER-761 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3C_LL_3R_3R_5R_Lg_mr_os^3 + C_3C_LL_3R_3R_5R_Lg_mr_os^3$

- 10.762 INVALID-ORDER-762 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5r_os^4 + C_3C_5L_4R_3R_5g_mr_os^3 + 4C_3C_5L_3R_3R_5g_mr_os^3 + 4C_3C_5L_3R_5g_mr_os^3 + 4C_3$
- 10.763 INVALID-ORDER-763 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_5r_os^5 + C_3C_5C_LL_3R_3R_5r_os^4 + 2C_3C_5L_3R_3R_5g_mr_os^3 + 4C_3C_5L_3R_3R_5s^3 + C_3C_5L_3R_5r_os^3 + 2C_3C_LL_3L_LR_3g_mr_os^4 + 4C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_LR_3s^4 + C_3C_LL_3$
- 10.764 INVALID-ORDER-764 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5r_os^5 + 2C_3C_5L_3L_LR_3R_5g_mr_os^4 + 4C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_LL_3L_LR_3R_5g_mr_os^4 + C_3C_LL_3L_LR_3r_os^4 + C_3C_LL_3L_LR_3r_os$
- 10.765 INVALID-ORDER-765 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_5r_os^5 + 2C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5r_os^4 + C_3C_5C_LL_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5g_mr_os^3 + 4C_3C_5L_3R_3R_5s^3 + C_3C_5L_3R_3R_5r_os^4 + C_3C_5C_LL_3R_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_o$
- 10.766 INVALID-ORDER-766 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + 2C_3C_5L_3L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_3R_5R_Ls^4 + C_3C_5L_3L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_LR_3R$
- 10.767 INVALID-ORDER-767 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5L_Ll_3L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_5r_os^5 + C_3C_5L_Ll_LR_3R_5g_mr_os^4 + 4C_3C_5L_3L_LR_3R_5s^4 + C_3C_5L_3L_LR_3r_os^4 + 2C_3C_5L_3R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3L_Rs_3R_5r_os^4 + 4C_3C_5L_3L_Rs_3R_5r_os^4 + 4C_3C_5L_3R_3R_5r_os^4 + 4C_3C_5L_3R_3R_5R_5r_os^4 + 4C_3C_5L_3R_5R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_5r_os^4 + 4C_3C_5L_3R_$
- 10.768 INVALID-ORDER-768 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_5r_os^5 + C_3C_5C_LL_3L_LR_5R_Lr_os^5 + C_3C_5C_LL_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_$
- **10.769** INVALID-ORDER-769 $Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s R_5 r_o s + C_5 R_5 r_o$

10.770 INVALID-ORDER-770 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$

 $(C_3L_3R_3s^2 + L_3s + R_3)(C_5R_5g_mr_os + C_5R_5s -$

 $H(s) = \frac{(C_3L_3R_3s^5 + L_3s + R_3)(C_5R_5g_mr_os + C_5R_5s - C$

- 10.771 INVALID-ORDER-771 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_4R_3R_5g_mr_os^3 + C_3C_5L_3R_3R_5g_mr_os^3 + 2C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R$
- 10.772 INVALID-ORDER-772 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5L_3R_3g_mr_os^3 + 4C_3C_5L_3R_3g_mr_os^4 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_5g_mr_os^4 + C_3C_5C_L$
- 10.773 INVALID-ORDER-773 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3s}^{2}+1} + R_{3}, \infty, R_{5} + \frac{1}{C_{5s}}, L_{L}s + \frac{1}{C_{L}s}\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}s^{5} + C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}r_{o}s^{4} + C_{3}C_{5}L_{L}R_{3}r_{o}s^{4} + C_{3}C_{5}L_{L}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}r_{o}s^{4} + C_{3}C_{5}L_{L}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}s^{4} + C_{3}C_{5}C_{L}L_{3}R_{3}r_{o}s^{4} + C_{3}C_{5}L_{3}R_{3}r_{o}s^{4} + C_{3}C_{5}L_{3}R_{3}r_{o}s$
- 10.774 INVALID-ORDER-774 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s}^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5L_4L_RR_3R_5s^5 + C_3C_5L_4L_RR_3r_os^5 + 2C_3C_5L_3L_RR_3g_mr_os^4 + 4C_3C_5L_3L_RR_3s^4 + C_3C_5L_3L_RR_5g_mr_os^4 + C_3C_5L_3L_Rr_os^4 + C_3C_$
- 10.775 INVALID-ORDER-775 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_$
- 10.776 INVALID-ORDER-776 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $\overline{C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}R_{L}g_{m}r_{o}s^{5}+C_{3}C_{5}L_{L}L_{L}R_{3}R_{5}R_{L}s^{5}+C_{3}C_{5}L_{L}L_{L}R_{3}R_{L}r_{o}s^{5}+C_{3}C_{5}L_{3}L_{L}R_{3}R_{5}g_{m}r_{o}s^{4}+C_{3}C_{5}L_{3}L_{L}R_{3}R_{L}g_{m}r_{o}s^{4}+C_{3}C_{5}L_{3}L_{L}R_{3}R_{L}s^{4}+C_{3}C_{5}L_{L}s^{4}+C_{3}C_{5}L_{L}s^{4}+C_{3}C_{5}L_{L}s^{4}+C_{3}C_{5}L_{L}s^{4}+C_{3}C_{5}L_{L}s^{4}+C_{3}C_{5}L_{L}$
- 10.777 INVALID-ORDER-777 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_{1}C_{2}C_{1}C_{2}L_{2}L_{1}R_{3}R_{5}a_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{5}s^{5} + 2C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{L}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}R$

- 10.778 INVALID-ORDER-778 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^$
- 10.779 INVALID-ORDER-779 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 R_3 r_o s^3 + C_3 C_5 L_3 L_5 R_3 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_2 g_m r_o s^4 + C_3 C_5 L_3 L_5 R_2 g_m r_o s^4 + C_3 C_5 L_3 R_3 g_m r_o s^4 + C_3 C_5 L_3$
- 10.780 INVALID-ORDER-780 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_5L_5g_mr_os^2 + C_5L_5s^2 + C_3C_5L_LL_3L_5R_3g_mr_os^3 + C_3C_5L_LL_3R_3g_mr_os^3 + C_3C_5L_LL_3R_3g_mr_os^3 + C_3C_5L_LL_3R_3g_mr_os^3 + C_3C_5L_3R_3g_mr_os^3 + C_3C_5L_3R_3g_m$
- 10.781 INVALID-ORDER-781 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_4L_3R_3R_Lr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3R_3R_Lg_mr_os^4 + C$
- 10.782 INVALID-ORDER-782 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_3r_os^4$
- 10.783 INVALID-ORDER-783 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_2g_mr_os^6 + C_3C_5C_LL_3L_5L_2s^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_2R_3g_mr_os^5 + 4C_3C_5C_LL_3L_2R_3s^5 + 4C_3C_5C_LL_3L_2R_3s^5 + 4C_3C_5C_LL_3L_2R_3s^5 + 4C_3C_5C_LL_3R_3r_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_3L_5g_mr_os^4 + 4C_3C_5L_5L_5g_mr_os^4 + 4C_3C_5L_5g_mr_os^4 + 4C_3C_5L_5g_mr_os^4 + 4$
- 10.784 INVALID-ORDER-784 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_LR_3g_mr_os^4 + C_3C_5L_3L_LR_3g_mr_os^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L$
- 10.785 INVALID-ORDER-785 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}} + R_3, \infty, L_{5s} + \frac{1}{C_{5s}}, L_{Ls} + R_L + \frac{1}{C_{Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_La_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_2g_mr_os^5 + C_3C_5C_LL_3L_5R_2g_mr_os^5 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3g_mr_os^5$

- 10.786 INVALID-ORDER-786 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_LR_3R_Lr_os^5 + C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_Rs^5 + C_3C$
- 10.787 INVALID-ORDER-787 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- 10.788 INVALID-ORDER-788 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Lg_mr$
- 10.789 INVALID-ORDER-789 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$
- $H(s) = -\frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{2 C_3 C_5 L_3 L_5 R_3 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_3 r_o s^4 + C_3 C_5 L_3 L_5 R_3 r_o s^4 + C_3 C_5 L_3 L_5 R_3 r_o s^4 + C_3 L_3 L_5 R_3 g_m r_o s^3 + C_3 L_3 L_5 R_2 g_m r_o s^3 + C_3 L_3 L_5 R_2 g_m r_o s^3 + C_3 L_3 L_5 R_2 g_m r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^3 + C_3 L_3 R_2 g_m r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^3 + C_3 L_3 R_2 g_m r_o s^3 + C_3 L_3 R_3 R_L g_m r_o s^3 + C_3 L_3 R_2 R_L g_m r_o s^3 + C_3 L_3 R_2 R_L g_m r_o s^3 + C_3 L_3 R$
- 10.790 INVALID-ORDER-790 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_5L_5r_os^2 L_3C_5L_4L_5R_3r_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_4L_3L_5R_3g_mr_os^4 + C_3C_4L_3L_5R_3g_m$
- 10.791 INVALID-ORDER-791 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_3r_os^4 + C_3C_LL_3L_5R_3R_Lg_mr_os^4 + C$
- 10.792 INVALID-ORDER-792 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5L_Ll_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_Lr_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_LL_3L_5R_3g_mr_os^4 + C_$
- 10.793 INVALID-ORDER-793 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5R_3r_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5L_2g_mr_os^5 + C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5L_2g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5L_2g_mr_os^5 + C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5L_2g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 +$

- 10.794 INVALID-ORDER-794 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3r_os^6 + 2C_3C_5L_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_LR_3g_mr_os^5 + C_3C_LL_3L_5L_LR_3g_mr_os^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5L$
- 10.795 INVALID-ORDER-795 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5$
- 10.796 INVALID-ORDER-796 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lr_os^6 + 2C_3C_5L_3L_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_Ls^5 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5L_LR_3R_Lr_os^5 + C_3C_5L_3L_5L_RR_3R_Lr_os^5 + C_3C_5L_3L_5L_RR_3R_Lr$
- 10.797 INVALID-ORDER-797 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_Lr_os^5 + 2C_3C_5L_3L_5L_LR_3s^6 + C_3C_5L_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5L_RR_3r_os^6 + C_3C_5L_3L_5L_RR_$
- 10.798 INVALID-ORDER-798 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5L_Ll_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_1r_os^6 + C_3C_5C_LL_3L_5R_3R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_3R_Ls^6 + C_3C_5L_3L_5L_Rs_s^6 + C_3C_5L_3L_5L_Rs_s^6 + C_3C_5L_3L_5R_3R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_$
- 10.799 INVALID-ORDER-799 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os^3 + C_3C_5L_3R_3R_Lg_mr_os^3 + C_3C_5L_3R_3R$
- 10.800 INVALID-ORDER-800 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3r_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3R_3g_mr_os^5 + C_3C_5L_3R_3g_mr_os^3 + C_3C$
- 10.801 INVALID-ORDER-801 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os$

- 10.802 INVALID-ORDER-802 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_Lg_mr_os^4$
- **10.803** INVALID-ORDER-803 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3g_mr_os^$
- **10.804** INVALID-ORDER-804 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g_mr_os^4 + C_3C_5L_5R_3g$
- 10.805 INVALID-ORDER-805 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5$
- 10.806 INVALID-ORDER-806 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- 10.807 INVALID-ORDER-807 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C$
- 10.808 INVALID-ORDER-808 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5$
- **10.809** INVALID-ORDER-809 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_5L_3L_5R_3R_5g_mr_os^3 + C_3L_3L_5R_3R_5g_mr_os^3 + C_3L_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g_mr_os^3 + C_3L_5R_5g$

- **10.810** INVALID-ORDER-810 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5r_os^5 + 2C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C_3C_LL_3L_5R_3R_5g_mr_os^4 + C_3C_LL_3L_5R_3R_5s^4 + C_3C_LL_3L_5R_5s^4 + C$
- 10.811 INVALID-ORDER-811 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5R_Lr_os^4 + C_3C_LL_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_LL_3L_5R_3R_5R_Lr_os^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5R_5R_Lr_os^4 + C_3C_LL_3L_5R_5R_Lr$
- 10.812 INVALID-ORDER-812 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_5r_os^5 + C_3C_5C_LL_3L_5R_3R_5r_os^5 + 2C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5R_5g_mr_os^4 + 4C_3C_5L_3L_5R_5R_5g_mr_os^5 + 4C_3C_5L_3L_5R_5g_mr_os^5 + 4C_3C_5L_3L_5R_5g_mr_os^5 + 4C_3C_5L_5L_5R_5g_mr_os^5 + 4C_3C_5L_5L_5R_5g_mr_os^5 + 4C_3C_5L_5L_5R_5g_mr_os^5 + 4C_3C_5L_5L_5R_5g_mr_os^5 + 4C_3C_5L_5L_5R_5g_mr_os^5 + 4C_5C_5L_5R_5g_mr_os^5 + 4C_5C_5L_5R_5g_mr_os^5 + 4C_5C_5L_5R_5$
- 10.813 INVALID-ORDER-813 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5C_LL_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5L_LR_3g_mr_os^4 + 4C_3C_5L_3L_5L_RR_3g_mr_os^4 + 4C_3C_5L_$
- 10.814 INVALID-ORDER-814 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- 10.815 INVALID-ORDER-815 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + 2C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_5R_5R_Lg_mr_os^5 + 4C_3C_5C_$
- **10.816** INVALID-ORDER-816 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + 2C_3C_5L_3L_5L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_5R_Ls^5 + C_3C_5L_3L_5L_LR_3R_5r_os^5 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_3L_5L_Rr_os^5 + C_3C_5L_3L$
- 10.817 INVALID-ORDER-817 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_5s^5 + C_3C_5L_3L_5L_LR_3r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_LR_3R_5r_os^6 + 4C_3C_5L_3L_5L_RR_3R_5r_os^6 + 4C_3$

- 10.818 INVALID-ORDER-818 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L_RR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L$
- 10.819 INVALID-ORDER-819 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_$
- 10.820 INVALID-ORDER-820 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + C_3C_5C_LL_3L_5R_3r_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_5L_5L_5R_3g_mr_os^4 + C_3C_5L_5L_5L_5R_3g_mr_os^4 + C_3C_5L_5L_5L_5R_3g_mr_os^4 + C_$
- 10.821 INVALID-ORDER-821 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5L_Ll_3L_5R_3R_5R_Ls^5 + C_3C_5L_Ll_3L_5R_3R_Lr_os^5 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg$
- 10.822 INVALID-ORDER-822 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 +$
- 10.823 INVALID-ORDER-823 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_$
- 10.824 INVALID-ORDER-824 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_2$
- 10.825 INVALID-ORDER-825 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}q_{m}r_{o}s^{6} + 4C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{5}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{5}s^{5} + 2C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}$

- 10.826 INVALID-ORDER-826 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L$
- 10.827 INVALID-ORDER-827 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 + C_3C_5C_LL_$
- 10.828 INVALID-ORDER-828 $Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1} + R_3, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_$
- **10.829** INVALID-ORDER-829 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_Lg_$
- 10.830 INVALID-ORDER-830 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3R_3R_5r_os^4 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5g_mr_os^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_$
- 10.831 INVALID-ORDER-831 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + C_3C_5C_LL_3R_3R_5R_Lr_os^5 + C_3C_5C_LL_3R_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr$
- 10.832 INVALID-ORDER-832 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_5R_5s^5 + 2C_3C_5C_LL_3L_5R_5R_5s^5$
- 10.833 INVALID-ORDER-833 $Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$

10.834 INVALID-ORDER-834 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_2LR_3s^5 + C_3C_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_3L_5L_5L_5L_5L_5L_5L_5L_5L_5L_5L_$

10.835 INVALID-ORDER-835 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 +$

10.836 INVALID-ORDER-836 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_I} + \frac{1}{L_Is}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3R_5L_5L_5R_5g_mr_os^5 + C_3C_5L_5L_5L_5R_5g_mr_os^5 + C_3C_5L_5L_5L_5R_5g_mr_os^5 + C$

10.837 INVALID-ORDER-837 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 + C_3C_5C_LL_3L_$

10.838 INVALID-ORDER-838 $Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_$

10.839 INVALID-ORDER-839 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, R_5, \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(R_5 g_m r_o + R_5 - r_o \right)}{C_3 C_L L_3 R_3 R_5 g_m r_o s^3 + C_3 C_L L_3 R_3 r_o s^3 + 2 C_3 L_3 R_3 g_m r_o s^2 + 4 C_3 L_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 g_m r_o s + C_4 R_3 R_5 g_m r_o s + C_4 R_5 R_5$

10.840 INVALID-ORDER-840 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, R_5, \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 R_3 R_5 R_L g_m r_o s^3 + C_3 C_L L_3 R_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 R_L g_m r_o s^2 + C_3 L_3 R_5$

10.841 INVALID-ORDER-841 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, R_5, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{R(s) - R(s)}{C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_3 R_5 q_m r_o s^3 + C_3 C_L L_3 R_5 R_L q_m r_o s^3 + C_3 C_L L_3 R_5$

10.842 INVALID-ORDER-842
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L L_R S_2 r_o s^3 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 L_L R_5 s^4 + C_3 C_L L_3 R_3 R_5 g_m r_o s^3 + C_3 C_L L_3 R_3 R_5 g_m r_o s^3 + C_3 C_L L_L R_5 g_m r_o s^3 + C_3 C_L L_L R_5 g_m r_o s^3 + C_3 C_L L_L R_$

10.843 INVALID-ORDER-843
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L R_3 s \left(C_3 L_3 s^2 + 1\right) \left(R_5 g_m r_o + R_5 - r_o\right)}{C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 r_o s^4 + 2 C_3 L_3 L_L R_3 g_m r_o s^3 + 4 C_3 L_3 L_L R_5 g_m r_o s^3 + C_3 L_3 L_L R_5 g_m r_o s^3 + C_3 L_3 L_L R_5 g_m r_o s^2 + C_3 L_3 R_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 g_m r_o s^2 + C_3 L_3 R_5 g_m r_$

10.844 INVALID-ORDER-844
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{1}{2C_3C_LL_3L_LR_3g_mr_os^4 + 4C_3C_LL_3L_LR_3s^4 + C_3C_LL_3L_LR_5g_mr_os^4 + C_3C_LL_3L_LR_5s^4 + C_3C_LL_3R_3R_5g_mr_os^3 + C_3C_LL_3R_3R_5g_mr_os^3 + C_3C_LL_3R_3R_Lg_mr_os^3 + 4C_3C_LL_3R_3R_Lg_mr_os^3 + 4C_3C_LL_3R_3R_Lg_mr_os^3 + C_3C_LL_3R_3R_Lg_mr_os^3 + C_3C_LL_3R_3R_L$

10.845 INVALID-ORDER-845
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

 $H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5R_Lg_mr_os^4 + C_3C_LL_3L_LR_3R_5R_Ls^4 + C_3C_LL_3L_LR_3R_Lr_os^4 + C_3L_3L_LR_3R_5g_mr_os^3 + C_3L_3L_LR_3R_Lg_mr_os^3 + C$

10.846 INVALID-ORDER-846
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_5 s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + 4 C_3 C_L L_3 L_L R_3 r_o s^4 + C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_5 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + C_3 C_L L_3 L_L R_3 R_L g_m r_o s^4 + C_3 C_L R_3 R_L g_m r_$

10.847 INVALID-ORDER-847
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

 $H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5g_mr_os^4 + C_3C_LL_3L_LR_3R_5s^4 + 2C_3C_LL_3L_LR_3R_Lg_mr_os^4 + 4C_3C_LL_3L_LR_3r_os^4 + C_3C_LL_3L_LR_5R_Lg_mr_os^4 + C_$

10.848 INVALID-ORDER-848
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, R_L\right)$$

 $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{2 C_3 C_5 L_3 R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 R_L s^3 + C_3 C_5 L_3 R_3 r_o s^3 + C_3 C_5 L_3 R_L r_o s^3 + C_3 C_5 R_3 R_L r_o s^2 + C_3 L_3 R_3 g_m r_o s^2 + C_3 L_3 R_L g_m r_o s^2 + C_3 L_3 R_L g_m r_o s + C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L g_m r_o s + 4 C_5 R_3 R_L g_m r_o s + C_5 R_3 r_o s + C_5$

10.849 INVALID-ORDER-849
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(-C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_3 R_3 r_o s^4 + 2 C_3 C_5 L_3 R_3 g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 s^3 + C_3 C_5 L_3 r_o s^3 + C_3 C_L L_3 R_3 g_m r_o s^3 + C_5 C_L R_3 r_o s^2 + 2 C_5 R_3 g_m r_o s + 4 C_5 R_3 s + C_5 C_L R_3 r_o s^3 + C_5 C_L R_3$

10.850 INVALID-ORDER-850 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 R_3 R_L r_o s^4 + 2 C_3 C_5 L_3 R_3 R_L g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 R_L s^3 + C_3 C_5 L_3 R_3 R_L r_o s^3 + C_3 C_5 L_3 R_3 R_L$

10.851 INVALID-ORDER-851 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{R_3 \left(C_3 L_3 R_3 R_L q_m r_o s^4 + 4 C_3 C_5 L_L R_3 R_L q_m r_o s^4 + 4 C_3 C_5 L_L R_3 R_L q_m r_o s^4 + 4 C_3 C_5 L_L R_3 R_L q_m r_o s^4 + C_3 C_5 L_L R_3 R_L r_o s^4 + C_3 C_5 L_L R_3 R_L r_o s^4 + C_3 C_5 L_L R_3 R_L r_o s^3 + 2 C_3 C_5 L_R R_2 R_L r_o s^3 + 2 C_3 C_5 L_R R_2 R_L r_o s^3 + 2 C_3 C_5 L_R R_2 R_L r_o s^3 + 2 C_3 C_$

10.852 INVALID-ORDER-852 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_1 L_2 L_2 R_3 g_m r_o s^5 + 4 C_3 C_5 L_2 L_2 L_2 R_3 r_o s^4 + C_3 C_5 L_4 L_2 R_3 r_o s^4 + 2 C_3 C_5 L_4 R_3 r_o s^4 + 2 C_3 C_5 L_3 R_3 g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 g_m r_o s^3 + 4 C_3 C_5 L_3 L_2 g_m r_o s^4 + C_3 C_L L_3$

10.853 INVALID-ORDER-853 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{L_L R_3 s \left(C_3 L_3 s^2 + 1\right) \left(-C_5 r_o s + g_m r_o + 1\right)}{C_3 C_5 C_L L_3 L_L R_3 r_o s^5 + 2 C_3 C_5 L_3 L_L R_3 g_m r_o s^4 + 4 C_3 C_5 L_3 L_L R_3 s^4 + C_3 C_5 L_3 L_L R_3 r_o s^3 + C_3 C_4 L_3 L_L R_3 g_m r_o s^4 + C_3 C_4 L_3 L_L R_3 g_m r_o s^4 + C_3 C_4 L_3 L_L R_3 g_m r_o s^4 + C_3 C_4 L_3 L_L R_3 g_m r_o s^4 + C_3 L_4 L_3 L_4 R_3 g_m r_o s^4 + C_3 L_4 L_4 R_3 g_m r_o$

10.854 INVALID-ORDER-854 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_Lr_os^5 + 2C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_Lr_os^4 +$

10.855 INVALID-ORDER-855 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_s} + \frac{1}{L_s s}}\right)$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_Lr_os^5 + 2C_3C_5L_3L_LR_3R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3R_Lr_os^3 + C_3C_5L_3L_LR_3R_Lr_os^3 + C_3C_5L_3L_LR_3R_Lr_os^4 + C_3C_$

10.856 INVALID-ORDER-856 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^4 + 2C_3C_5L_3L_LR_3g_mr_os^4 + 4C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_LR_3s^4 + 2C_3C_5L_3L_LR_3s^4 + 2C_3C_5L_3L_LR$

10.857 INVALID-ORDER-857 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3R_Lq_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3R_3R_Lr_os^4 + C_3C_5C_LL_3R_3R_Lr_os^4 + 2C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3r_os^3 + C_3C_5L_3R_3r_os^3 + C_3C_5L_3R_3R_Lr_os^4 + C_3C_5C_LL_3R_3R_Lr_os^4 + 2C_3C_5L_3R_3R_Lr_os^4 + 2C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3r_os^3 + C_3C_5L_3R_3r_os^3 + C_3C_5L_3R_3r_os^4 + C_3C_5L_3R_3r$

10.858 INVALID-ORDER-858 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, R_L\right)$

 $H(s) = -\frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 r_o s - R_5 g_m r_o - R_5 + 2 G_2 L_3 R_3 R_5 R_L g_m r_o s^3 + 4 G_3 C_5 L_3 R_3 R_5 R_L s^3 + G_3 C_5 L_3 R_3 R_5 R_L r_o s^3 + G_3 C_5 L_3 R_3 R_5 R_L r_o s^3 + G_3 C_5 R_5 R_$

10.859 INVALID-ORDER-859 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls}\right)$

 $-\frac{R_3 \left(C_3 L_3 s^2+1\right) \left(C_5 R_5 r_o s-R_5 g_m r_o-R_5+r_o\right)}{C_3 C_5 C_L L_3 R_3 R_5 r_o s^4+2 C_3 C_5 L_3 R_3 R_5 g_m r_o s^3+4 C_3 C_5 L_3 R_3 R_5 r_o s^3+C_3 C_L L_3 R_3 R_5 g_m r_o s^3+C_3 C_L L_3 R_3 R_5 s^3+C_3 C_L L_3 R_3 R_5 s^3+C_3 C_L L_3 R_3 r_o s^3+2 C_3 L_3 R_3 r_o s^3+2 C_3 L_3 R_5 g_m r_o s^2+C_3 L_3 R_5 r_o s^2+C_3 L_3 R_5$

10.860 INVALID-ORDER-860 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3R_3R_5R_Lr_os^4 + 2C_3C_5L_3R_3R_5R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_5R_Ls^3 + C_3C_5L_3R_3R_5R_Lr_os^3 + C_3C_5L_3R_5R_5R_Lr_os^3 + C_3C_5L_3R_5R_5R_Lr_os^3 + C_3C_5L_3R_5R_5R_Lr_os^3 + C_3C_5L_3R_5R_Lr_os^3 + C_3C$

10.861 INVALID-ORDER-861 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right)$

 $\overline{2C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}g_{m}r_{o}s^{4}+4C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}R_{L}s^{4}+C_{3}C_{5}C_{L}L_{3}R_{3}R_{5}r_{o}s^{4}+C_{3}C_{5}C_{L}L_{3}R_{5}R_{L}r_{o}s^{4}+C_{3}C_{5}C_{L}R_{3}R_{5}R_{L}r_{o}s^{3}+2C_{3}C_{5}L_{3}R_{3}R_{5}g_{m}r_{o}s^{3}+4C_{3}C_{5}L_{3}R_{3}R_{5}r_{o}s^{3}+C_{3}C_{5}L_{3}R_{$

10.862 INVALID-ORDER-862 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + 4C_3C_5L_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_3r_os^4 + C_3C_5L_LR_3R_5r_os^4 + 2C_3C_5L_3R_3R_5g_mr_os^3 + 4C_3C_5L_3R_3R_5s^3 + C_3C_5L_3R_3R_5r_os^4 + 2C_3C_5L_3R_3R_5r_os^4 + 2C_3C_5L_3R_3R_5r_o$

10.863 INVALID-ORDER-863 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5r_os^5 + 2C_3C_5L_3L_LR_3R_5g_mr_os^4 + 4C_3C_5L_3L_LR_3R_5s^4 + C_3C_5L_3L_LR_3r_os^4 + C_3C_5L_3L_LR_3R_5r_os^3 + C_3C_LL_3L_LR_3R_5g_mr_os^4 + C_3C_LL_3L_LR_3R_5s^4 + C_3C_LL_3L_LR_3r_os^4 + 2C_3L_3L_LR_3r_os^4 + 2C_3L_3L_LR_$

10.864 INVALID-ORDER-864 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_5r_os^5 + 2C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3R_5r_os^4 + C_3C_5C_LL_3R_5R_Lr_os^4 + C_3C_5C_LL_3R_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_LL_3R_5r_os^4 + C_3C_5C_$

10.865 INVALID-ORDER-865 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_2s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + 2C_3C_5L_3L_LR_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_LR_3R_5R_Ls^4 + C_3C_5L_3L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_RR_3R_5R_Lr_os^4 + C_3C_5L_3L_RR_3R$

- 10.866 INVALID-ORDER-866 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_5r_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lr_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lr_os^4 + 2C_3C_5L_3L_LR_3R_5R_Lr_os^4 + 2C_3C$
- 10.867 INVALID-ORDER-867 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_5r_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Lr_os^4 + C_3C_5C_LL_3R_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_3R_5R_Lr_os^4 + C_3C_5C_LR_3R_3R$
- 10.868 INVALID-ORDER-868 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + C_5 R_5 r$
- 10.869 INVALID-ORDER-869 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + g_m r_o + 1 \right)}{C_3 C_5 C_L L_3 R_3 R_5 g_m r_o s^4 + C_3 C_5 L_L R_3 R_5 g_m r_o s^3 + 4 C_3 C_5 L_3 R_3 g_m r_o s^3 + 4 C_3 C_5 L_3 R_5 g_m r_o s^3 + C_3 C_5 L_$
- 10.870 INVALID-ORDER-870 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_Lr_os^4 + C_3C_5L_3R_3R_5g_mr_os^3 + C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_$
- 10.871 INVALID-ORDER-871 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_5R_Lg_mr_os^4 + C_$
- 10.872 INVALID-ORDER-872 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_Lr_os^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_3r_os^$
- 10.873 INVALID-ORDER-873 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5q_mr_os^5 + C_3C_5L_4L_RR_3R_5s^5 + C_3C_5L_4L_RR_3r_os^5 + 2C_3C_5L_3L_RR_3q_mr_os^4 + 4C_3C_5L_3L_RR_3s^4 + C_3C_5L_3L_RR_5q_mr_os^4 + C_3C_5L_3L_Rr_os^4 + C_3C_$

- 10.874 INVALID-ORDER-874 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_mr_os^5 + 4C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_5g_mr_os^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_5g_mr_os^4 + C_3C_5C_LL_3R_5g_mr_$
- 10.875 INVALID-ORDER-875 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_LR_3R_Lg_mr_os^4 + C_3C_5L_3L_LR_3R_5g_mr_os^4 + C_3C_5L_3L_LR_3R_Lg_mr_os^4 + C_3C_5L_3L_LR$
- 10.876 INVALID-ORDER-876 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_$
- 10.877 INVALID-ORDER-877 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5C_LL_3L_LR_3r_$
- 10.878 INVALID-ORDER-878 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5$
- 10.879 INVALID-ORDER-879 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1 \right) \left(C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 C_5 r_o s + g_m r_o + 1 \right) \left(C_5 L_5 g_m r_o s^3 + C_3 C_5 L_4 L_3 L_5 R_3 g_m r_o s^3 + C_3 C_5 L_4 L_3 R_3 g_m r_o s^3 + C_3 C_5 L_4 R_3 g_m r_o s^3 + C_3 C_5 L_5 R_5 g_m r_o s^3 + C_5 C_5 L_5 R_5 g_m r_o s^3 + C_5 C_5 L_5 R_5 g_m r_o s^3 + C_5 C_5 L_$
- 10.880 INVALID-ORDER-880 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_4L_3R_3R_Lr_os^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_$
- 10.881 INVALID-ORDER-881 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3R_3R_Lg_mr_os^4 + 4C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5C_LL_3R_3r_os^4 + C_3C_5C_LL_3R_3r_os^4$

- 10.882 INVALID-ORDER-882 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5$
- 10.883 INVALID-ORDER-883 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_LR_3g_mr_os^4 + C_3C_5L_3L_LR_3g_mr_os^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_LR$
- **10.884** INVALID-ORDER-884 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5$
- 10.885 INVALID-ORDER-885 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_LR_3R_Lr_os^5 + C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_RR_3s^5 + C_3C_5L_3L_5L_RR$
- 10.886 INVALID-ORDER-886 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_LR_3R_Lg_mr_os^5 + 4C$
- 10.887 INVALID-ORDER-887 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_RLg_mr_os^6 + C_3C_5C_LL_3L_5L_RLg_mr_os^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^$
- 10.888 INVALID-ORDER-888 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L\right)$
- $H(s) = -\frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 r_o s^2 L_5 g_m r_o s L_5 L_5 R_3 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_3 R_L g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_3 r_o s^4 + C_3 C_5 L_5 R_3 R_L r_o s^4 + C_3 C_5 L_5 R_5 R_L r_o s^4 + C_3 C_5 L_5 R_5 R_L r_o s^4 + C_3 C_5 L_5 R_5 R_L r_o s^4 + C_5 C_5$
- 10.889 INVALID-ORDER-889 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 r_o s^2 L_5 g_m r_o s L_5 s + r_o \right)}{C_3 C_5 C_L L_3 L_5 R_3 r_o s^5 + 2 C_3 C_5 L_3 L_5 R_3 g_m r_o s^4 + 4 C_3 C_5 L_3 L_5 R_3 s^4 + C_3 C_L L_3 L_5 R_3 g_m r_o s^4 + C_3 C_L L_3 L_5 R_3 r_o s^3 + C_3 L_4 L_5 R_3 r_o s^3 + C_3 L_5 R_5 r$

- 10.890 INVALID-ORDER-890 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_3R_Lr_os^3 + C_3C_LL_3L_5R_3R_Lg_mr_os^4 + C_3C_LL_3L_5R_3R_Lg_mr_os^4 + C_3C_LL_3L_5R_3R_Lr_os^3 + C_3L_3L_5R_3R_Lr_os^3 + C_3L_3L$
- 10.891 INVALID-ORDER-891 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5L_Ll_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3L_5R_3r_os^5$
- 10.892 INVALID-ORDER-892 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5L_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5L_Rr_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3r_os^3 + C_3C_LL_3L_5L_Lg_mr_os^5 + C_3C_$
- 10.893 INVALID-ORDER-893 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3r_os^6 + 2C_3C_5L_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_Lr_os^5 + C_3C_5L_3L_5L_LR_3r_os^4 + C_3C_5L_3L_5L_LR_3g_mr_os^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5L_LR_3r_os^4 + C_3L_3L_5L_LR_3r_os^4 + C_3L_3L_5L_LR$
- 10.894 INVALID-ORDER-894 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}g_{m}r_{o}s^{6} + 4C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}R_{3}s^{6} + C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}r_{o}s^{6} + 2C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}R_{L}g_{m}r_{o}s^{5} + 4C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{3}L_{5}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{3}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3}C_{5}C_{L}L_{5}R_{5}R_{5}r_{o}s^{5} + C_{3$
- 10.895 INVALID-ORDER-895 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lr_os^6 + 2C_3C_5L_3L_5L_LR_3R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_Ls^5 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5L_LR_3r_os^5 + C_3C_5L_3L_5L_LR_3R_Lr_os^4 + C_3C_5L_3L_5L_LR_3R_Lr_os^4 + C_3C_5L_3L_5L_LR_3R_Lr_os^5 + C_3C_5L_3L_5L_RR_3R_Lr_os^5 + C_3C_5L_3L_5L_RR_3R_Lr$
- 10.896 INVALID-ORDER-896 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 + C_3C_5C_LL_3L_5L_Rr$
- 10.897 INVALID-ORDER-897 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 + C_3C_5C_LL_3L_5L_Rr_os$

- 10.898 INVALID-ORDER-898 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3R_3R_5g_mr_os^3 + C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr_os^3 + 4C_3C_5L_3R_Lg_mr$
- 10.899 INVALID-ORDER-899 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5L_4R_3R_5s^4 + C_3C_5L_4R_3r_os^4 + C_3C_5L_3L_5g_mr_os^4 + C_3C_5L_3R_3g_mr_os^4 + C_3C_5L_3R_3g_mr_os^3 + C_3C_5L_3R$
- 10.900 INVALID-ORDER-900 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3g_mr_os^4 + C_3C_5L_3L_5R_3g_mr_os$
- 10.901 INVALID-ORDER-901 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_5g_mr_os^4 + C_3C_5C_LL_3R_3R_Lg_mr_os^4 + C_3C_5C_LL_3R_3R_Lg_mr_os^4$
- 10.902 INVALID-ORDER-902 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3g_mr_os^5 + C_3C_5C_LL_3L_LR_3g_mr_os^5$
- 10.903 INVALID-ORDER-903 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3R_5g_mr_os^5 + C_3C_5C_LL_3L_LR_3r_os^5 + C_3C_5L_3L_5L_Lg_mr_os^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3g_mr_os^4 + C$
- 10.904 INVALID-ORDER-904 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_Lg_mr_os^5$
- 10.905 INVALID-ORDER-905 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

- **10.906** INVALID-ORDER-906 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C$
- 10.907 INVALID-ORDER-907 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_2g_mr_os^6 + C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_Lg_mr$
- **10.908** INVALID-ORDER-908 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_5L_3L_5R_3R_5R_Lr_os^3 + C_3L_3L_5R_3R_5g_mr_os^3 + C_3L_3L_5R_3R_5g_mr_os^3 + 4C_3L_3L_5R_3R_5g_mr_os^3 + 4C_3L_3L_5R_3g_mr_os^3 + 4C$
- 10.909 INVALID-ORDER-909 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5r_os^5 + 2C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3R_5r_os^3 + C_3C_LL_3L_5R_3R_5g_mr_os^4 + C_3C_LL_3L_5R_3R_5s^4 + C_3C_LL_3L_5R_5s^4 + C_3C$
- 10.910 INVALID-ORDER-910 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + 2C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_5L_3L_5R_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_5R_5R_Lr_os^4 + C_3C_5L_5R_5R_5R_Lr_os^4 + C_3C_5L_5R_5R_5R_Lr_os^4 + C_3C_5L_5R_5R_5R_Lr_os^4 + C_3C_5L_5R_5R_5R_Lr_os^4 + C$
- 10.911 INVALID-ORDER-911 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5r_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Lr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Lr_os^4 + 2C_3C_5L_3L_5R_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_5L_3L_5R_5r_os^4 + C_3C_5L_5R_5r_os^4 + C_3C_5L_5R_5r_$
- 10.912 INVALID-ORDER-912 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + C_3C_5C_LL_3L_5L_RR_5r_os^5 + 2C_3C_5L_4L_5L_RR_3R_5g_mr_os^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_3R_5r_os^4 + C_3C_5L_3L_5L_RR_3R_5r_os^5 + 2C_3C_5L_4L_5L_RR_3R_5r_os^5 + 2C_3C_5L_4L_5L_4R_3R_5r_os^5 + 2C_3C_5L_4L_5L_4R_3R_5r_os^5 + 2C_3C_5L_4L_5L_4R_3R_5r_os^5 + 2C_3C_5L_4L_5L_4R_3R_5r_os^5 + 2C_3C_5L_5L_5R_3R_5r_os^5 + 2C_3C_5L_5L_5R_3R_5r_os^5 + 2C_3C_5L_5L_5R_3R_5r_os^5 + 2C_3C_5L_5R_5R_5r_os^5 + 2C_5C_5L_5R_5R_5r_os^5 + 2C_5C_5L_5R_5r_os^5 + 2C_5C_5L_5R_5r_os^5$
- 10.913 INVALID-ORDER-913 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + 2C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_5s^5 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_LL_3L_5L_LR_3R_5s^5 + C_3C_LL_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_LR_3R_5r_os^4 + C_3C_5L_3L_5L_RR_3R_5r_os^4 + C_3C_5L_3L_5L_RR$

- 10.914 INVALID-ORDER-914 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5r_os^6 + 2C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_5r_os^5 + C_3C_5C_LL_3L_5R_5r_os^5 + C_3C_5C_LL_3L_$
- 10.915 INVALID-ORDER-915 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls + \frac{1}{L_Ls}}\right)$
- $H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + 2C_3C_5L_3L_5L_LR_3R_5R_Lg_mr_os^5 + 4C_3C_5L_3L_5L_LR_3R_5R_Ls^5 + C_3C_5L_3L_5L_LR_3R_5r_os^5 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^5 + C_3C_5L_3L_5L_LR_3R_5R_Lr_os^4 + C_3C_5L_3L_5L_RR_3R_5R_Lr_os^4 + C_3C_5L_3L_5L_RR$
- 10.916 INVALID-ORDER-916 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L_RR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L$
- 10.917 INVALID-ORDER-917 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5r_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L_RR_3R_5R_Lr_os^6 + C_3C_5C_LL_3L_5L$
- **10.918** INVALID-ORDER-918 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, R_L\right)$
- 10.919 INVALID-ORDER-919 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5L_Ll_3L_5R_3R_5s^5 + C_3C_5L_Ll_3L_5R_3r_os^5 + 2C_3C_5L_3L_5R_3g_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_3C_5L_5r_os^4 + C_$
- 10.920 INVALID-ORDER-920 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L$
- 10.921 INVALID-ORDER-921 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 +$

- 10.922 INVALID-ORDER-922 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$
- 10.923 INVALID-ORDER-923 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5L_LR_3g_mr_os^5 + 4C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_LR_3s^5 + C_3C_5L_3L_5L_2$
- 10.924 INVALID-ORDER-924 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_$
- 10.925 INVALID-ORDER-925 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5L_3L_5L_LR_3R_Lg_mr_os^5 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_LR_3R_Lg_mr_os^5 + C_3C_5L_3L_5L_Rg_mr_os^5 + C_3C_5L_3L_5L$
- 10.926 INVALID-ORDER-926 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_$
- 10.927 INVALID-ORDER-927 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 + C_3C_5C_LL_3L_$
- 10.928 INVALID-ORDER-928 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L\right)$
- $H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_5s^4 + 2C_3C_5L_3L_5R_3R_Lg_mr_os^4 + 4C_3C_5L_3L_5R_3r_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_3R_5R_Lg_mr_os^4 + C_3C_5L_3R_5R_Lg_mr_os^4 + C_3C_5L_3R_5R_Lg_$
- 10.929 INVALID-ORDER-929 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5q_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + C_3C_5C_LL_3L_5R_3r_os^5 + C_3C_5C_LL_3R_3R_5r_os^4 + 2C_3C_5L_3L_5R_3q_mr_os^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5q_mr_os^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R$

- 10.930 INVALID-ORDER-930 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Lr_os^5 + C_3C_5C_LL_3R_3R_5R_Lr_os^4 + C_3C_5L_3L_5R_3R_5g_mr_os^4 + C_3C_5L_3L_5R_3R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os^4 + C_3C_5L_3L_5R_Lg_mr_os$
- 10.931 INVALID-ORDER-931 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_mr_os^5 + 4C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_$
- 10.932 INVALID-ORDER-932 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$
- 10.933 INVALID-ORDER-933 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5L_3L_5L_LR_3g_mr_os^5 + 2C_3C_5L_3L_5L_LR_3g_mr_os^5 + 2C_3C_5L_3L_5L_RR_3g_mr_os^5 + 2C_3C_5L_3L_5L_$
- 10.934 INVALID-ORDER-934 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_Lr_os^6 + C_3C_5C_LL_3L_5R_3R_5g_mr_os^5 + C_3C_5C_LL_3L_5R_5g_mr_os^5 +$
- **10.935** INVALID-ORDER-935 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Lr_os^6 + C_3C_5L_3L_5L_LR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_RR_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3R_5g_mr_os^5 + C_3C_5L_3L_5L_3R_5g$
- 10.936 INVALID-ORDER-936 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_LR_3r_os^6 + C_3C_5C_LL_3L_5L_Rr_os^6 +$
- 10.937 INVALID-ORDER-937 $Z(s) = \left(\infty, \ \infty, \ \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_mr_os^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_mr_os^6 + 4C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_$