Filter Summary Report: TIA,simple,Z3,Z5,ZL

Generated by MacAnalog-Symbolix

December 5, 2024

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10.27INVALID-ORDER-27 $Z(s) =$	(∞, ∞, R)	$_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$, \frac{R_L}{C_L R_L s}$	$\left(\frac{1}{s+1}\right)$.		 	 	 	 	 	. 90
10.28INVALID-ORDER-28 $Z(s) =$	$\left(\infty, \ \infty, \ R\right)$	$_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$R_L +$	$\frac{1}{C_L s}$. 90
10.29INVALID-ORDER-29 $Z(s) =$	$\left(\infty, \ \infty, \ R\right)$	$_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$, L_L s +$	$-\frac{1}{C_L s}$. 90
10.30INVALID-ORDER-30 $Z(s) =$	$\left(\infty, \ \infty, \ R\right)$	$x_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$, \frac{L_L s}{C_L L_L s}$	$\left(\frac{s}{r^2+1}\right)$. 91
10.31INVALID-ORDER-31 $Z(s) =$	$\left(\infty, \ \infty, \ R\right)$	$_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$, L_L s +$	$R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$. 91
10.32INVALID-ORDER-32 $Z(s) =$	$\left(\infty, \ \infty, \ R\right)$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \overline{C_L s + \overline{I}}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L_L s}}$)	 	 	 	 	 	. 91

10.33INVALID-ORDER-33 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$L_5s + \frac{1}{C_5s}$	$, \frac{L_L s}{C_L L_L s}$	$\frac{1}{2+1} + R_L$)		 	 	 	 	91
10.34INVALID-ORDER-34 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$L_5s + \frac{1}{C_5s}$	$, \frac{R_L \left(L_L + L_L + L_L \right)}{L_L s + L_L s}$	$\left(\frac{s + \frac{1}{C_L s}}{R_L + \frac{1}{C_L s}}\right)$			 	 	 	 	91
10.35INVALID-ORDER-35 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5 s}{C_5 L_5 s^2 + 1}$	$\frac{1}{C_L s}$				 	 	 	 	92
10.36INVALID-ORDER-36 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5 s}{C_5 L_5 s^2 + 1}$,	$\frac{R_L}{C_L R_L s +}$	$\overline{1}$			 	 	 	 	92
10.37INVALID-ORDER-37 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$R_L + \overline{C}$	$\left(\frac{1}{Ls}\right)$			 	 	 	 	92
10.38INVALID-ORDER-38 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$L_L s + \frac{1}{6}$	$\left(\frac{1}{C_L s}\right)$			 	 	 	 	92
10.39INVALID-ORDER-39 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5 s}{C_5 L_5 s^2 + 1}$,	$\frac{L_L s}{C_L L_L s^2}$	$\overline{+1}$)			 	 	 	 	92
10.40INVALID-ORDER-40 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$L_L s + I$	$R_L + \frac{1}{C_L s}$)		 	 	 	 	92
10.41INVALID-ORDER-41 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$\frac{1}{C_L s + \frac{1}{R_I}}$	$\left(\frac{1}{L_L s}\right)$			 	 	 	 	93
10.42INVALID-ORDER-42 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{1} + R_L$			 	 	 	 	93
10.43INVALID-ORDER-43 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1},$	$\frac{R_L \left(L_L s}{L_L s + R_L}\right)$	$\left(\frac{1+\frac{1}{C_L s}}{1+\frac{1}{C_L s}}\right)$			 	 	 	 	93
10.44INVALID-ORDER-44 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}$, \overline{c}	$\left(\frac{1}{C_L s}\right)$			 	 	 	 	93
10.45INVALID-ORDER-45 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}, \ \overline{c}$	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	 	93
10.46INVALID-ORDER-46 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$L_5s + R_5 -$	$+\frac{1}{C_5s}, I$	$R_L + \frac{1}{C_L s}$			 	 	 	 	94
10.47INVALID-ORDER-47 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}, I$	$L_L s + \frac{1}{C_L s}$)		 	 	 	 	94
10.48INVALID-ORDER-48 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}$, \overline{c}	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	 	94
10.49INVALID-ORDER-49 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}, I$	$L_L s + R_L$	$+\frac{1}{C_L s}$)	 	 	 	 	94
10.50INVALID-ORDER-50 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5$	$+\frac{1}{C_5s}$,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$.		 	 	 	 	94
10.51INVALID-ORDER-51 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, L_5s + R_5 -$	$+\frac{1}{C_5s}, \ \overline{c}$	$\frac{L_L s}{C_L L_L s^2 + 1} \cdot$	$+R_L$		 	 	 	 	95
10.52INVALID-ORDER-52 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, L_5s + R_5$	$+\frac{1}{C_5s}$	$\frac{R_L \left(L_L s + \frac{1}{C} \right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{L^s}}{\frac{1}{C_L^s}}\right)$		 	 	 	 	95
10.53INVALID-ORDER-53 $Z(s) = 1$	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L}}$	$\frac{1}{C_L s}$, $\frac{1}{C_L s}$	$) \dots$			 	 	 	 	95

10.54INVALID-ORDER-54 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$		 	 	 95
10.55INVALID-ORDER-55 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$R_L + \frac{1}{C_L s}$		 	 	 95
10.56INVALID-ORDER-56 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + \frac{1}{C_L s}$		 	 	 96
10.57INVALID-ORDER-57 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 96
10.58INVALID-ORDER-58 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + R_L +$	$-\frac{1}{C_L s}$	 	 	 96
10.59INVALID-ORDER-59 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L}}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 	 96
10.60INVALID-ORDER-60 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\tfrac{L_L s}{C_L L_L s^2 + 1} +$	$\left(R_{L} ight)$.	 	 	 96
10.61INVALID-ORDER-61 $Z(s) = ($	$\left(\infty, \ \infty, \ R_3, \ \infty\right)$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L \left(L_L s + \frac{1}{C_L} s $	$\left(\frac{\overline{s}}{\overline{s}}\right)$	 	 	 97
10.62INVALID-ORDER-62 $Z(s) = ($				· · · · · ·	 	 	 97
10.63INVALID-ORDER-63 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$	$\left(\frac{R_L}{C_L R_L s + 1} \right)$		 	 	 97
10.64INVALID-ORDER-64 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$	$R_5, R_L + \frac{1}{C_L s}$)	 	 	 97
10.65INVALID-ORDER-65 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5s}{C_5L_5s^2+1}+R$	$C_5, L_L s + \frac{1}{C_L}$	$\left(\frac{1}{s}\right)$	 	 	 97
10.66INVALID-ORDER-66 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5s}{C_5L_5s^2+1}+R$	$\frac{L_L s}{C_L L_L s^2 + 1}$)	 	 	 98
10.67INVALID-ORDER-67 $Z(s) = ($	>			,	 	 	 98
10.68INVALID-ORDER-68 $Z(s) = \left(\begin{array}{c} 1 & 1 \\ 1 & 1 \end{array}\right)$	$(\infty, \infty, R_3, \infty)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1} + F$	$R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_{L}s}\right)$	 	 	 98
10.69INVALID-ORDER-69 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$\frac{L_5s}{C_5L_5s^2+1}+R$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$	 	 	 98
10.70INVALID-ORDER-70 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, \frac{L_5 s}{C_5 L_5 s^2 + 1} + F$	$R_5, \frac{R_L \left(L_L s + \frac{1}{6} L_L s + R_L + \frac{1}{6} R_L +$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	 98
10.71INVALID-ORDER-71 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{1}{C_L s}$		 	 	 99
10.72INVALID-ORDER-72 $Z(s) = ($	$(\infty, \infty, R_3, \infty)$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$\left(\frac{R_L}{C_L R_L s+1}\right)$		 	 	 99

10.73INVALID-ORDER-73 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$
10.74INVALID-ORDER-74 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$
10.75INVALID-ORDER-75 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.76INVALID-ORDER-76 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
10.77INVALID-ORDER-77 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\right)$
10.78INVALID-ORDER-78 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.79INVALID-ORDER-79 $Z(s) = \left(\infty, \ \infty, \ R_3, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right)$
10.80INVALID-ORDER-80 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, R_L\right)$
10.81INVALID-ORDER-81 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$
10.82INVALID-ORDER-82 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$
10.83INVALID-ORDER-83 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$
10.84INVALID-ORDER-84 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
10.85INVALID-ORDER-85 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, R_5, \frac{L_{Ls}}{C_L L_L s^2 + 1} + R_L\right)'$
10.86INVALID-ORDER-86 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.87INVALID-ORDER-87 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
10.88INVALID-ORDER-88 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.89INVALID-ORDER-89 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.90INVALID-ORDER-90 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.91INVALID-ORDER-91 $Z(s) = \left(\infty, \infty, \frac{1}{C_{3s}}, \infty, \frac{1}{C_{5s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.92INVALID-ORDER-92 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$10.93 \text{INVALID-ORDER-93 } Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $)3
10.94INVALID-ORDER-94 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$)3
10.95INVALID-ORDER-95 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s+1}, R_L + \frac{1}{C_L s}\right)$)3
10.96INVALID-ORDER-96 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$)3
10.97INVALID-ORDER-97 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$)3
10.98INVALID-ORDER-98 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s+1}, L_L s + R_L + \frac{1}{C_L s}\right)$)4
10.99INVALID-ORDER-99 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$)4
10.10 INVALID-ORDER-100 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$)4
10.10INVALID-ORDER-101 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$)4
10.10 2 NVALID-ORDER-102 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$)4
10.10 SNVALID-ORDER-103 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$)5
10.104NVALID-ORDER-104 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$)5
10.10 INVALID-ORDER-105 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$)5
10.10 6 NVALID-ORDER-106 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$)5
10.10 T NVALID-ORDER-107 $Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$)5
10.10 NVALID-ORDER-108 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$)5
10.10 NVALID-ORDER-109 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$)6
10.11 0 NVALID-ORDER-110 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$)6
10.11INVALID-ORDER-111 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$)6
10.112NVALID-ORDER-112 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$)6
10.11\(\text{SNVALID-ORDER-113} \(Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) \] \qquad \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq \qqqq \qqq)6
10.114NVALID-ORDER-114 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$)7

10.11 INVALID-ORDER-115 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	107
10.116NVALID-ORDER-116 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	107
10.11TNVALID-ORDER-117 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	107
10.11 NVALID-ORDER-118 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	107
10.11 9 NVALID-ORDER-119 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	108
10.12@NVALID-ORDER-120 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$	108
10.12INVALID-ORDER-121 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$	108
$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 \dots \dots \dots \dots \dots \dots \dots \dots $	108
10.12 INVALID-ORDER-123 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$	108
10.124NVALID-ORDER-124 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$	109
10.12 INVALID-ORDER-125 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	109
10.126NVALID-ORDER-126 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$	109
10.12 T NVALID-ORDER-127 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	109
10.12 NVALID-ORDER-128 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	109
10.12 NVALID-ORDER-129 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	110
10.13@NVALID-ORDER-130 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots \dots$	110
10.13INVALID-ORDER-131 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	110
10.132NVALID-ORDER-132 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$	110
10.13 NVALID-ORDER-133 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	110
10.134NVALID-ORDER-134 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	111
10.13 INVALID-ORDER-135 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	111
10.136NVALID-ORDER-136 $Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	111

10.13 T NVALID-ORDER-137 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}\right)$	$, \infty,$	$L_5s + R_5 + \frac{1}{C}$	$\frac{1}{c_L s}$, $\frac{1}{C_L s + \frac{1}{R_I}}$	$\left(\frac{1}{L} + \frac{1}{L_L s}\right)$		 	 	 	 111
10.13&NVALID-ORDER-138 $Z(s) = 0$	$(\infty, \infty, \frac{1}{C_3 s},$	∞ ,	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{L_L s}{c_L L_L s^2}$	$\frac{1}{1} + R_L$)	 	 	 	 111
10.13 9 NVALID-ORDER-139 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}\right)$	$, \infty,$	$L_5s + R_5 + \frac{1}{C}$	$\frac{1}{5s}$, $\frac{R_L(L_L s)}{L_L s + R_L}$	$\left(\frac{s + \frac{1}{C_L s}}{L + \frac{1}{C_L s}}\right)$		 	 	 	 112
10.140NVALID-ORDER-140 $Z(s) = 0$	/			\			 	 	 	 112
10.14INVALID-ORDER-141 $Z(s) =$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}\right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s}$)			 	 	 	 112
10.14 2 NVALID-ORDER-142 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	 112
10.14BNVALID-ORDER- 143 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$R_L + \frac{1}{C_L s}$			 	 	 	 112
10.14\(\text{INVALID-ORDER-144}\) $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + \frac{1}{C_L s}$	$\left(\cdot \right) \cdot \cdot \cdot$		 	 	 	 113
10.14 NVALID-ORDER-145 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	 113
10.14 6 NVALID-ORDER-146 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	 113
10.14 T NVALID-ORDER-147 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L^s}\right)$.		 	 	 	 113
10.14\RNVALID-ORDER-148 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$		 	 	 	 113
10.149NVALID-ORDER-149 $Z(s) = 1$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}\right)$	$, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{L^s}}{\frac{1}{C_L^s}}\right)$.		 	 	 	 114
10.15 0 NVALID-ORDER-150 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	(S, R_L) .			 	 	 	 114
10.15 I NVALID-ORDER-151 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\left(\frac{1}{C_L s}\right)$.			 	 	 	 114
10.15 2 NVALID-ORDER-152 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	 114
10.15\$NVALID-ORDER-153 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$_{5}, R_{L}+\frac{1}{C_{L}}$	\overline{s}		 	 	 	 114
10.15#NVALID-ORDER-154 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$L_L s + \overline{C}$	$\left(\frac{1}{L^s}\right)$		 	 	 	 115
10.15 Invalid-order-155 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\frac{L_L s}{C_L L_L s^2 +}$	$\overline{1}$)		 	 	 	 115
10.156NVALID-ORDER-156 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s}, \right.$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$L_L s + R$	$L_L + \frac{1}{C_L s}$)	 	 	 	 115

10.15 T NVALID-ORDER-157 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R_5,$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$		 	 115
10.15 NVALID-ORDER-158 $Z(s) = 0$	$(\infty, \infty,$	$\frac{1}{C_3s}$, ∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \ \frac{L_5 s}{C_5 L_5 s^2 + 1}$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_I$	(a)	 	 115
10.15 9 NVALID-ORDER-159 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 116
10.16 ONVALID-ORDER- $160~Z(s)=10.16$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_5$	$_L$)		 	 116
10.16INVALID-ORDER-161 $Z(s) = 1$	(090	/		 	 116
10.16 2 NVALID-ORDER-162 $Z(s) = 1$	\		- 3 -	/		 	 116
10.16 B NVALID-ORDER-163 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_5$	$_L+rac{1}{C_L s}\biggr)$		 	 116
10.164NVALID-ORDER-164 $Z(s) = 1$	\		090	/		 	 117
10.16 NVALID-ORDER-165 $Z(s) = 1$	\		- 3 -	/		 	 117
10.16 NVALID-ORDER-166 $Z(s) = 1$	(· ·)	 	 117
10.16 T NVALID-ORDER-167 $Z(s) = 1$	\		· ·	L L /		 	 117
10.16 NVALID-ORDER-168 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \overline{C_5}$	$\frac{L_L s}{L_L L_L s^2 + 1} + R_L$		 	 117
10.16 9 NVALID-ORDER-169 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s}$, ∞ ,	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_5}{L}$	$\frac{L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 118
10.17 0 NVALID-ORDER-170 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\tfrac{R_3}{C_3R_3s+1},$	∞ , R_5 , R_L) .			 	 118
10.17 I NVALID-ORDER-171 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\tfrac{R_3}{C_3R_3s+1},$	∞ , R_5 , $\frac{1}{C_L s}$).			 	 118
10.17 2 NVALID-ORDER-172 $Z(s) = 0$	$(\infty, \infty,$	$\frac{R_3}{C_3R_3s+1},$	∞ , R_5 , $\frac{R_L}{C_L R_L s +}$	$\overline{1}$)		 	 118
10.17 3 NVALID-ORDER-173 $Z(s) = 0$	$(\infty, \infty,$	$\tfrac{R_3}{C_3R_3s+1},$	∞ , R_5 , $L_L s + \overline{c}$	$\left(\frac{1}{C_L s}\right) \dots \dots$		 	 118
10.174NVALID-ORDER-174 $Z(s) = 0$	$(\infty, \infty,$	$\frac{R_3}{C_3R_3s+1},$	∞ , R_5 , $L_L s + R_5$	$R_L + \frac{1}{C_L s}$)		 	 118
10.17 5 NVALID-ORDER-175 $Z(s) = 0$	$(\infty, \infty,$	$\tfrac{R_3}{C_3R_3s+1},$	∞ , R_5 , $\frac{L_L s}{C_L L_L s^2 + 1}$	$\frac{1}{1+1} + R_L$		 	 119

10.176NVALID-ORDER-176 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	R_5 ,	$\frac{R_L \left(L_L s + \frac{1}{2}\right)}{L_L s + \frac{1}{2}}$	$\frac{Ls + \frac{1}{C_Ls}}{R_L + \frac{1}{C_L}}$	$\left(\frac{1}{s}\right)$. 119
10.17 T NVALID-ORDER-177 $Z(s) =$	(∞, α)	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	R_L +	$\left(\frac{1}{C_L s}\right)$. 119
10.17\nsupervalid-ORDER-178 $Z(s) =$	(∞, α)	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$L_L s$ -	$+\frac{1}{C_L s}$) .			 	 	 	 	 	 . 119
10.17 9 NVALID-ORDER-179 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$\frac{L_I}{C_L L_L}$	$\left(\frac{s}{s^2+1}\right)$. 119
10.18 ONVALID-ORDER-180 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$L_L s$ -	$+R_L +$	$+\frac{1}{C_L s}$) .		 	 	 	 	 	 . 120
10.18INVALID-ORDER-181 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$\overline{C_L s} +$	$\frac{1}{R_L} + \frac{1}{L_L}$	$\frac{1}{L^s}$. 120
10.18 2 NVALID-ORDER-182 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$\frac{L_I}{C_L L_L}$	$\frac{1}{s^2+1}$ +	$-R_L$. 120
10.18 E NVALID-ORDER-183 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{1}{C_5 s}$,	$\frac{R_L(I)}{L_L s}$	$\frac{C_L s + \frac{1}{C_L}}{R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$. 120
10.18#NVALID-ORDER-184 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$,	$R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$. 120
10.18 INVALID-ORDER-185 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$,	$L_L s +$	$\frac{1}{C_L s}$			 	 • •	 	 	 	 . 121
10.18 6 NVALID-ORDER-186 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$,	$\frac{L_L s}{C_L L_L s^2}$	$\overline{+1}$			 	 • •	 	 	 	 . 121
10.18 T NVALID-ORDER-187 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$,	$L_L s + 1$	$R_L +$	$\frac{1}{C_L s}$) .	 	 	 	 	 	 . 121
10.18 NVALID-ORDER-188 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5}$	$\frac{5}{s+1}$,	$\frac{1}{C_L s + \frac{1}{R}}$	$\frac{1}{\frac{1}{L} + \frac{1}{L L}}$	$\frac{1}{s}$		 	 • •	 	 	 	 . 121
10.18 9 NVALID-ORDER-189 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$,	$\frac{L_L s}{C_L L_L s^2}$	+1 +	R_L		 	 	 	 	 	 . 121
10.19 0 NVALID-ORDER-190 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5}{C_5 R_5}$	$\frac{5}{s+1}$,	$\frac{R_L \left(L_L + R_L\right)}{L_L s + R_L}$	$\frac{s + \frac{1}{C_L s}}{R_L + \frac{1}{C_L}}$	$\left(\frac{1}{s}\right)$. 122
10.19 I NVALID-ORDER-191 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$R_5 +$	$\frac{1}{C_5 s}$,	$R_L +$	$\frac{1}{C_L s}$. 122
10.19 2 NVALID-ORDER-192 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$R_5 +$	$\frac{1}{C_5 s}$,	$L_L s +$	$-\frac{1}{C_L s}$) .		 	 	 	 	 	 . 122
10.19 3 NVALID-ORDER-193 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$R_5 +$	$\frac{1}{C_5 s}$,	$\frac{L_L s}{C_L L_L s}$	$\left(\frac{s}{s^2+1}\right)$			 	 • •	 	 	 	 . 122
10.194NVALID-ORDER-194 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$R_5 +$	$\frac{1}{C_5 s}$,	$L_L s +$	R_L -	$+\frac{1}{C_L}$;)	 	 • •	 	 	 	 . 122
10.195NVALID-ORDER-195 $Z(s) =$,							L -	L" / 、		 	 	 	 	 	 . 123
10.19 6 NVALID-ORDER-196 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$R_5 +$	$\frac{1}{C_5 s}$,	$\frac{L_L s}{C_L L_L s}$	$\frac{s}{s^2+1}$ +	$-R_L$) .	 	 	 	 	 	 . 123

10.19 T NVALID-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) \ \dots $
	$(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, L_5s+\frac{1}{C_5s}, R_L)$
10.19 9 NVALID-ORDER-199 $Z(s) = 0$	$(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s})$
10.20 © NVALID-ORDER-200 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s+1}\right)$
10.20INVALID-ORDER-201 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$
10.20 2 NVALID-ORDER-202 $Z(s) = 0$	$\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 B NVALID-ORDER-203 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.204NVALID-ORDER-204 $Z(s) = 0$	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.20 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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.206NVALID-ORDER-206 $Z(s) = 1$	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.20 T NVALID-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) \ \dots $
10.20\bar{8}\text{NVALID-ORDER-208} $Z(s) = 0$	$(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 +1}, R_L)$
10.20 9 NVALID-ORDER-209 $Z(s) = 0$	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
10.21 0 NVALID-ORDER-210 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 +1}, \ \frac{R_L}{C_L R_L s+1}\right)$
10.21 I NVALID-ORDER-211 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 +1}, \ R_L + \frac{1}{C_L s}\right)$
10.21 2 NVALID-ORDER-212 $Z(s) = 0$	$\left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s+1}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 +1}, \ L_L s + \frac{1}{C_L s}\right)$
10.21 B NVALID-ORDER-213 $Z(s) = 0$	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 +1}, \frac{L_L s}{C_L L_L s^2 +1}\right)$
10.21#NVALID-ORDER-214 $Z(s) = 0$	$\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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.21 INVALID-ORDER-215 $Z(s) = 0$	$\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_L} + \frac{1}{L_L s}}\right) \ \dots \ $
10.21©NVALID-ORDER-216 $Z(s) = 0$	$\left(\infty, \infty, \frac{R_3}{C_3 R_3 s+1}, \infty, \frac{L_5 s}{C_5 L_5 s^2+1}, \frac{L_L s}{C_L L_L s^2+1} + R_L\right)$
10.21 T NVALID-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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.21&NVALID-ORDER-218 $Z(s) = 0$	$\left(\infty, \infty, \frac{R_3}{C_3 R_{3s+1}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

10.21 9 NVALID-ORDER-219 $Z(s)=\left(\right.$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $\frac{1}{C_L s}$		 	 127
10.22 0 NVALID-ORDER-220 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $\frac{R_L}{C_L R_L s + 1}$		 	 128
10.22INVALID-ORDER-221 $Z(s) = ($	$(\infty, \infty,$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $R_L + \frac{1}{C_L s}$)	 	 128
10.22 2 NVALID-ORDER-222 $Z(s)=\langle$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $L_L s + \frac{1}{C_L}$	$\left(\frac{1}{8}\right)$	 	 128
10.22\$NVALID-ORDER-223 $Z(s)=\langle$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $\frac{L_L s}{C_L L_L s^2 + 1}$)	 	 128
10.224NVALID-ORDER-224 $Z(s)=\left(\right.$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $L_L s + R_L$	$+\frac{1}{C_L s}$) .	 	 128
10.225NVALID-ORDER-225 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \infty,$	$L_5s + R_5 + \overline{C}$	$\frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + }$	$\frac{1}{L_L s}$	 	 129
10.22 6 NVALID-ORDER-226 $Z(s)=($	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5}$	$\frac{1}{5s}$, $\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$)	 	 129
10.22 T NVALID-ORDER-227 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \infty,$	$L_5s + R_5 + \overline{C}$	$\frac{1}{L_L s}$, $\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 129
10.22\&NVALID-ORDER-228 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	R_L)		 	 129
10.22 9 NVALID-ORDER-229 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\left(\frac{1}{C_L s}\right)$		 	 129
10.23 0 NVALID-ORDER-230 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$		 	 130
10.23INVALID-ORDER-231 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$R_L + \frac{1}{C_L s}$		 	 130
10.232NVALID-ORDER-232 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + \frac{1}{C_L s}$		 	 130
10.23 3 NVALID-ORDER-233 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 130
10.23#NVALID-ORDER-234 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + R_L +$	$\frac{1}{C_L s}$ \cdots	 	 130
10.23 5 NVALID-ORDER-235 $Z(s)=\langle$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$		 	 133
10.236NVALID-ORDER-236 $Z(s) = 1$	`		-3 3	,	. /	 	 133
10.23 NVALID-ORDER-237 $Z(s) = 1$	$\left(\infty, \ \infty, \right)$	$\frac{R_3}{C_3R_3s+1}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$	 	 131
10.23&NVALID-ORDER-238 $Z(s)=\left(\rule{0mm}{1mm}\right.$						 	 133

10.23 9 NVALID-ORDER-239 <i>Z</i> ($(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	$\left[25, \frac{1}{C_L s} \right]$)		 	 	 	 	131
10.24 0 NVALID-ORDER-240 Z	$(s) = (\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	$\frac{R}{C_L R}$	$\left(\frac{R_L}{L_L s+1}\right)$		 	 	 	 	132
10.24INVALID-ORDER-241 Z	$(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	R_5, R_L -	$+\frac{1}{C_L s}$		 	 	 	 	132
10.24 2 NVALID-ORDER-242 Z	$(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	$C_5, L_L s$	$+\frac{1}{C_L s}$		 	 	 	 	132
10.24 B NVALID-ORDER-243 Z	$(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	$\frac{L}{C_L L}$	$\left(\frac{Ls}{Ls^2+1}\right)$		 	 	 	 	132
10.24 1 NVALID-ORDER-244 Z	$(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$	$\mathcal{L}_5, \ L_L s$	$+R_L +$	$-\frac{1}{C_L s}$	 	 	 	 	132
10.24 5 NVALID-ORDER-245 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + I$	$R_5, \ {C_L s}$	$\frac{1}{+\frac{1}{R_L}+\frac{1}{L_L}}$	$\left(\frac{\Box}{L^s}\right)$	 	 	 	 	133
10.24 6 NVALID-ORDER-246 Z	$(s) = \Big(\infty,$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$	$\frac{L}{C_L L}$	$\frac{c_L s}{L s^2 + 1} +$	R_L	 	 	 	 	133
10.24 T NVALID-ORDER-247 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + I$	$R_5, \frac{R_L(}{L_L s}$	$\frac{L_L s + \frac{1}{C_L}}{s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$	 	 	 	 	133
10.24 % NVALID-ORDER-248 Z									 	 	 	 	133
10.24 9 NVALID-ORDER-249 <i>Z</i> ($(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{1}{C_L s}$			 	 	 	 	133
10.25 0 NVALID-ORDER-250 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{R_L}{C_L R_L}$	$\left(\frac{1}{s+1}\right)$		 	 	 	 	134
10.25INVALID-ORDER- 251 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$R_L +$	$\frac{1}{C_L s}$		 	 	 	 	134
10.25 2 NVALID-ORDER-252 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, L_L s +$	$+\frac{1}{C_L s}$		 	 	 	 	134
10.25 3 NVALID-ORDER-253 Z	$(s) = \left(\infty,\right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{L_L}{C_L L_L s}$	$\left(\frac{s}{s^2+1}\right)$		 	 	 	 	134
10.25 4 NVALID-ORDER-254 Z									 	 	 	 	134
10.25 5 NVALID-ORDER-255 Z									 	 	 	 	135
10.25 6 NVALID-ORDER-256 Z	$(s) = \left(\infty, \right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{L_L}{C_L L_L s}$	$\frac{s}{s^2+1} + 1$	R_L	 	 	 	 	135
10.25 T NVALID-ORDER-257 Z	$(s) = \left(\infty, \right.$	∞ ,	$\frac{R_3}{C_3R_3s+1},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$, \frac{R_L \left(L_L \right)}{L_L s + 1}$	$\frac{Ls + \frac{1}{C_L s}}{R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)^{\frac{1}{2}}$.	 	 	 	 	135

10.25 NVALID-ORDER-258 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	∞ , R_5 ,	R_L)			 	 	 	135
10.259NVALID-ORDER- $259 Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , R_5 ,	$L_L s + \frac{1}{C_L s}$)		 	 	 	135
10.26 ONVALID-ORDER- $260 Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , R_5 ,	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	136
10.26INVALID-ORDER-261 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , R_5 ,	$L_L s + R_L +$	$+\frac{1}{C_L s}$		 	 	 	136
10.26 2 NVALID-ORDER-262 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s},$	$, \infty, R_5,$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L^s}$ · ·		 	 	 	136
10.26 B NVALID-ORDER-263 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , R_5 ,	$\frac{L_L s}{C_L L_L s^2 + 1} +$	$-R_L$).		 	 	 	136
10.264NVALID-ORDER-264 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s},$	$, \infty, R_5,$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{1}{L^{s}}\right)$		 	 	 	136
10.265NVALID-ORDER- $265 Z(s) =$, ·			`			 	 	 	137
10.26 6 NVALID-ORDER-266 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	$\infty, \frac{1}{C_5 s}$	$, \frac{R_L}{C_L R_L s + 1}$			 	 	 	137
10.26 T NVALID-ORDER-267 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 s}$	$R_L + \frac{1}{C_L s}$			 	 	 	137
10.268NVALID-ORDER- 268 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	$\infty, \frac{1}{C_5 s}$	$, L_L s + \frac{1}{C_L s}$			 	 	 	137
10.269NVALID-ORDER-269 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 s}$	$, \frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	137
10.27 ONVALID-ORDER-270 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	$\infty, \frac{1}{C_5 s}$	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	137
10.27INVALID-ORDER-271 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s},$	$, \infty, \frac{1}{C_5 s}$	$, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$.		 	 	 	138
10.27 2 NVALID-ORDER-272 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 s}$	$, \frac{L_L s}{C_L L_L s^2 + 1} $	$+ R_L$		 	 	 	138
10.278NVALID-ORDER-273 $Z(s) =$	$\left(\infty, \infty\right)$	$R_3 + \frac{1}{C_3 s},$	$, \infty, \frac{1}{C_5 s}$	$, \frac{R_L \left(L_L s + \frac{C}{C}\right)}{L_L s + R_L + \frac{C}{C}}$	$\left(\frac{1}{L^s}\right) \over \left(\frac{1}{C_L^s}\right)$.		 	 	 	138
10.274NVALID-ORDER-274 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\left(\frac{R_5}{C_5s+1}, \frac{1}{C_Ls}\right)$			 	 	 	138
10.275NVALID-ORDER-275 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\frac{R_5}{C_5s+1}$, $\frac{R_L}{C_LR_Ls}$	$\overline{s+1}$) .		 	 	 	138
10.276NVALID-ORDER-276 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\frac{R_5}{R_5s+1}, R_L +$	$\frac{1}{C_L s}$).		 	 	 	139
10.27 T NVALID-ORDER-277 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\frac{R_5}{R_5s+1}, \ L_Ls +$	$-\frac{1}{C_L s}$		 	 	 	139
10.278NVALID-ORDER-278 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\frac{R_5}{C_5s+1}$, $\frac{L_L}{C_LL_Ls}$	$\left(\frac{s}{s^2+1}\right)$.		 	 	 	139
10.27 9 NVALID-ORDER-279 $Z(s) =$	(∞, ∞)	$R_3 + \frac{1}{C_3 s}$	∞ , $\frac{1}{C_5 R}$	$\frac{R_5}{R_5s+1}, L_Ls +$	$-R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$.	 	 	 	139

10.28 0 NVALID-ORDER-280 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\overline{C_5}$	$\frac{R_5}{R_5s+1}$,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_R}}$	$\left(\frac{1}{\sqrt{s}}\right)$		 	 	 	139
10.28INVALID-ORDER-281 $Z(s) = ($	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{1}{C_5}$	$\frac{R_5}{R_5s+1}$, $\frac{R_5}{R_5s+1}$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	R_L		 	 	 	139
10.28 2 NVALID-ORDER-282 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\overline{C_5}$	$\frac{R_5}{R_5s+1}$,	$\frac{R_L \left(L_L s + \frac{1}{C_L} L_L s + \frac{1}{C_L} L_L s + R_L + \frac{1}{C_L} L_L s + \frac{1}{C$	$\left(\frac{\overline{s}}{\overline{s}}\right)$		 	 	 	140
10.28 B NVALID-ORDER-283 $Z(s)=($	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$\frac{1}{C_L s}$)			 	 	 	140
10.284NVALID-ORDER-284 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	140
10.28 NVALID-ORDER-285 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$R_L + \frac{1}{C_L s}$			 	 	 	140
10.286NVALID-ORDER-286 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$L_L s + \frac{1}{C_L s}$)		 	 	 	140
10.28 T NVALID-ORDER-287 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$\frac{L_L s}{C_L L_L s^2 + 1} \bigg)$			 	 	 	140
10.28\NVALID-ORDER-288 $Z(s) = 0$	$\left(\infty, \infty, \right)$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	141
10.28¶NVALID-ORDER-289 $Z(s)=\langle$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$\frac{1}{C_5 s}$,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\frac{1}{L^s}$		 	 	 	141
10.29©NVALID-ORDER-290 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$+\frac{1}{C_5s}$,	$\frac{L_L s}{C_L L_L s^2 + 1} -$	$+R_L$		 	 	 	141
10.29 INVALID-ORDER-29 1 $\boldsymbol{Z}(s) = (s)^{-1}$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , R_5	$\frac{1}{C_5s}$,	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{L^s}}{\frac{1}{C_L^s}}\right)$		 	 	 	141
10.29 2 NVALID-ORDER-292 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	R_L)			 	 	 	141
10.29 B NVALID-ORDER-293 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$\frac{1}{C_L s}$)			 	 	 	142
10.294NVALID-ORDER-294 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	142
10.29 SNVALID-ORDER-295 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$R_L + \frac{1}{C_L s}$)		 	 	 	142
10.296NVALID-ORDER-296 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$L_L s + \frac{1}{C_L}$	$\left(\frac{1}{s}\right)$.		 	 	 	142
10.29 T NVALID-ORDER-297 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	 	142
10.29&NVALID-ORDER-298 $Z(s) = ($	$\left(\infty, \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$L_L s + R_L$	$+\frac{1}{C_L s}$)	 	 	 	142
10.29 9 NVALID-ORDER-299 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s}$	$, \frac{1}{C_L s + \frac{1}{R_L} + }$	$\frac{1}{L_L s}$		 	 	 	143
10.30 © NVALID-ORDER-300 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$		 	 	 	143
10.30 INVALID-ORDER-30 1 $\boldsymbol{Z}(s) = ($	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5	$s + \frac{1}{C_5 s}$	$\frac{R_L \left(L_L s + \frac{1}{6}\right)}{L_L s + R_L + \frac{1}{6}}$	$\left(\frac{1}{C_L s}\right) \over \frac{1}{C_L s}$		 	 	 	143

10.30 2 NVALID-ORDER- $302 Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5 s}{C_5 L_5 s^2}$	$\frac{1}{2+1}$, R_L	<u>.</u>)			 	 	 	143
10.30 3 NVALID-ORDER-303 $Z(s) = 0$	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5 s}{C_5 L_5 s^2}$	$\frac{1}{C_L}$, $\frac{1}{C_L}$	$\frac{1}{s}$)			 	 	 	143
10.30 4 NVALID-ORDER-304 $Z(s) = 0$	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5 s}{C_5 L_5 s^2}$	$\frac{1}{C_L}$, $\overline{C_L}$	$\frac{R_L}{R_L s+1}$			 	 	 	144
10.30 NVALID-ORDER-305 $Z(s) = 1$	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5 s}{C_5 L_5 s^2}$	R_L	$\left(1 + \frac{1}{C_L s}\right)$			 	 	 	144
10.30 6 NVALID-ORDER-306 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5s}{C_5L_5s^2}$	L_L	$s + \frac{1}{C_L s}$			 	 	 	144
10.30 T NVALID-ORDER-307 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5 s}{C_5 L_5 s^2}$	$\frac{1}{C_L}$, $\overline{C_L}$	$\frac{L_L s}{L_L s^2 + 1}$			 	 	 	144
10.30\(\text{NVALID-ORDER-308} \(Z(s) = 1 \)	$\left(\infty, \ \infty, \right)$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5s}{C_5L_5s^2}$	L_L	$s + R_L +$	$-\frac{1}{C_L s}$		 	 	 	144
10.30 9 NVALID-ORDER-309 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5s}{C_5L_5s}$	$\frac{s}{2+1}$, $\overline{C_I}$	$\frac{1}{Ls + \frac{1}{R_L} + \frac{1}{L_I}}$	$\left(\frac{\Box}{\Box}\right)$.		 	 	 	145
10.31 0 NVALID-ORDER-310 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5s}{C_5L_5s^2}$	$\frac{1}{C_L}$, $\overline{C_L}$	$\frac{L_L s}{L_L s^2 + 1}$ +	R_L		 	 	 	145
10.31INVALID-ORDER-311 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{L_5s}{C_5L_5s}$	$\frac{R_I}{2+1}, \frac{R_I}{L_I}$	$\frac{L\left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$.		 	 	 	145
10.31 2 NVALID-ORDER-312 $Z(s) = 0$	$(\infty, \infty,$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_{5}s}$, R_L			 	 	 	145
10.31 B NVALID-ORDER-313 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\left(\frac{1}{C_5 s}, \frac{1}{C_L s}\right)$			 	 	 	145
10.31#NVALID-ORDER-314 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $\frac{R_1}{C_L R_L}$	$\left(\frac{L}{s+1}\right)$		 	 	 	146
10.315NVALID-ORDER-315 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_{5}s}, R_L +$	$-\frac{1}{C_L s}$		 	 	 	146
10.316NVALID-ORDER-316 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $L_L s$	$+\frac{1}{C_L s}$		 	 	 	146
10.31 T NVALID-ORDER-317 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $\frac{L_I}{C_L L_L}$	$\left(\frac{s}{s^2+1}\right)$		 	 	 	146
10.31&NVALID-ORDER-318 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_{5s}}$, $L_L s$	$+R_L+$	$\frac{1}{C_L s}$	 	 	 	146
10.31 9 NVALID-ORDER-319 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $\overline{C_L s}$	$\frac{1}{R_L} + \frac{1}{L_L}$	$\left(\frac{1}{s}\right)$.	 	 	 	147
10.32 ONVALID-ORDER- 320 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$R_5 + \overline{c}$	$\frac{1}{C_5 s}, \frac{L_L}{C_L L_L}$	$\frac{Ls}{ds^2+1} + \frac{Ls}{ds^2+1}$	$R_L\Big)$	 	 	 	147
10.32INVALID-ORDER-321 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , L_5s +	$-R_5+\overline{c}$	$\frac{1}{C_5 s}, \frac{R_L(I)}{L_L s}$	$\frac{L_L s + \frac{1}{C_L s}}{+R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{s}\right)$.	 	 	 	147
10.322NVALID-ORDER-322 $Z(s) = 1$	/				\			 	 	 	147
10.32\(\textbf{S}\)NVALID-ORDER-323 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	∞ , $\frac{1}{C_5 s + \frac{1}{2}}$	$\frac{1}{\frac{1}{R_5} + \frac{1}{L_5 s}}$	$\frac{1}{C_L s}$			 	 	 	147

10.34\(\bar{4}\)NVALID-ORDER-344 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$			 	 	 	 152
10.345NVALID-ORDER-345 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$R_L + \frac{1}{C_L s}$)		 	 	 	 152
10.346NVALID-ORDER-346 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$L_L s + \frac{1}{C_L}$	\overline{s} .		 	 	 	 152
10.34 INVALID-ORDER-347 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	 	 152
10.34&NVALID-ORDER-348 $Z(s) =$							$\left(\frac{1}{s}\right)$.	 	 	 	 152
10.34 9 NVALID-ORDER-349 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \cdots}$	$\frac{1}{L_L s}$		 	 	 	 153
10.35 ONVALID-ORDER- $350 Z(s) =$	\			9			/	 	 	 	 153
10.35INVALID-ORDER-351 $Z(s) =$	$\left(\infty, \infty, \right.$	$R_3 + \frac{1}{C_3 s},$	$\infty, \frac{R}{R}$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$		 	 	 	 153
10.35 2 NVALID-ORDER- 352 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ , I	$R_5, \frac{1}{C_L s}$).				 	 	 	 153
10.353NVALID-ORDER- 353 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ , I	$R_5, \frac{R_L}{C_L R_L s + 1}$	<u>-</u>)			 	 	 	 153
10.35 INVALID-ORDER- 354 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ , I	$R_5, R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$			 	 	 	 154
10.35 Invalid-order-355 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ , I	$R_5, L_L s + \overline{C}$	$\left(\frac{1}{L^s}\right)$			 	 	 	 154
10.35 CNVALID-ORDER- 356 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ , I	$R_5, \frac{L_L s}{C_L L_L s^2 +}$	$_{\overline{1}})^{'}$			 	 	 	 154
10.35 T NVALID-ORDER- 357 $Z(s) =$	>				,						
10.35&NVALID-ORDER-358 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$R_5, \ \frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{1+\frac{1}{L_{LS}}}$			 	 	 	 154
10.35 9 NVALID-ORDER-359 $Z(s) =$	>			· L	L /			 	 	 	 155
10.36 ONVALID-ORDER- $360 Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$R_5, \frac{R_L(L_L s + L_L s + R_L s)}{L_L s + R_L s}$	$\left(+ \frac{1}{C_L s} \right) + \frac{1}{C_L s} $			 	 	 	 155
10.36INVALID-ORDER- 361 $Z(s) =$,				,			 	 	 	 155
10.36 2 NVALID-ORDER-362 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{1}{C_5 s}, \frac{1}{C_L s}$				 	 	 	 155
10.36 B NVALID-ORDER- 363 $Z(s) =$	>			,	`						

10.364NVALID-ORDER- 364 $Z(s)$ =	$=$ $\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}$, R_L +	$-\frac{1}{C_L s}$.		 	 	 	 . 156
10.36 INVALID-ORDER-365 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}$, $L_L s$	$+\frac{1}{C_L s}$		 	 	 	 156
10.36 ENVALID-ORDER-366 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}, \ \frac{L_1}{C_L L_L}$	$\left(\frac{Ls}{Ls^2+1}\right)$.		 	 	 	 156
10.36 T NVALID-ORDER- 367 $Z(s) =$	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}$, $L_L s$	$+R_L + \frac{1}{C_L}$	$\left(\frac{1}{Ls}\right)$.	 	 	 	 156
10.36\(\) NVALID-ORDER-368 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}, \ \overline{C_L s}$	$\frac{1}{R_{L}+\frac{1}{L_{L}s}}$		 	 	 	 156
10.36 9 NVALID-ORDER-369 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}, \ \frac{L_1}{C_L L_L}$	$\frac{L^s}{L^{s^2+1}} + R_1$	L)	 	 	 	 157
10.37 0 NVALID-ORDER-370 $Z(s)$ =	$=$ $\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{1}{C_5 s}, \frac{R_L(1)}{L_L s}$	$\frac{L_L s + \frac{1}{C_L s}}{+R_L + \frac{1}{C_L s}}$)	 	 	 	 157
10.37INVALID-ORDER-371 $Z(s)$ =	,				`		 	 	 	 157
10.37 2 NVALID-ORDER- $372 Z(s) =$	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{1}{C_L s}$)		 	 	 	 157
10.37 B NVALID-ORDER-373 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{R_L}{C_L R_L s + 1}$		 	 	 	 157
10.374NVALID-ORDER-374 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$R_L + \frac{1}{C_L s}$)	 	 	 	 158
10.375NVALID-ORDER-375 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$L_L s + \frac{1}{C_L s}$	$\left(\frac{1}{5}\right)$	 	 	 	 158
10.37 6 NVALID-ORDER-376 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L s}{C_L L_L s^2 + 1}$)	 	 	 	 158
10.37 T NVALID-ORDER- 377 $Z(s) =$	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$L_L s + R_L$	$+\frac{1}{C_L s}$. 158
10.37\NVALID-ORDER-378 $Z(s)$ =	$=$ $\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{1}{C_L s + \frac{1}{R_L} + \cdots}$	$\frac{1}{L_L s}$. 158
10.37 9 NVALID-ORDER-379 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$	 	 	 	 159
10.38 0 NVALID-ORDER-380 $Z(s)$ =	$=$ $\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	 	 159
10.38INVALID-ORDER-381 $Z(s)$ =	,				``		 	 	 	 . 159
10.38 2 NVALID-ORDER-382 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s}$) .		 	 	 	 159
10.38 B NVALID-ORDER-383 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L}{C_L R_L s + 1}$)	 	 	 	 . 159
10.384NVALID-ORDER-384 $Z(s)$ =	$=(\infty, \infty)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$R_L + \frac{1}{C_L s}$	$\left(\frac{1}{s}\right)$	 	 	 	 160
10.385NVALID-ORDER-385 $Z(s)$ =	$=$ (∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$L_L s + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$.	 	 	 	 160

10.38 6 NVALID-ORDER-386 $Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$R_5 + \frac{1}{C_5 s}$,	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	 	. 160
10.38 Invalid-order-387 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$R_5 + \frac{1}{C_5 s},$	$L_L s + R_L$	$+\frac{1}{C_L s}$		 	 	 	160
10.38 NVALID-ORDER-388 $Z(s) =$	$\left(\infty, \infty\right)$	$, L_3s + \frac{1}{C_3s},$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s + \frac{1}{R_L} +}$	$\frac{1}{L_L s}$. 160
10.38 9 NVALID-ORDER-389 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$R_5 + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$+\stackrel{'}{R_L}$. 161
10.39©NVALID-ORDER-390 $Z(s) =$	$\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{1}{C_L s}\right) \over \frac{1}{C_L s}$. 161
10.39INVALID-ORDER-391 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$, R_L$)			 	 	 	. 161
10.39 2 NVALID-ORDER-392 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5s + \frac{1}{C_5s}$	$, \frac{1}{C_L s}$)			 	 	 	. 161
10.39 3 NVALID-ORDER-393 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$\frac{R_L}{C_L R_L s + 1}$)		 	 	 	. 161
10.394NVALID-ORDER-394 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$R_L + \frac{1}{C_L s}$	$\left(\frac{1}{s}\right)$. 162
10.395NVALID-ORDER- 395 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$L_L s + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$. 162
10.39 6 NVALID-ORDER-396 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	<u> </u>		 	 	 	. 162
10.39TNVALID-ORDER- 397 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$L_L s + R_L$	$L + \frac{1}{C_L s}$)	 	 	 	. 162
10.39 NVALID-ORDER-398 $Z(s) =$	$\left(\infty, \infty\right)$	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{L_L s}$		 	 	 	162
10.39 9 NVALID-ORDER-399 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$, \frac{L_L s}{C_L L_L s^2 + 1}$	$\left(1 + R_L\right)$. 163
10.40 ONVALID-ORDER- $400 Z(s) =$	(∞, ∞)	$L_3s + \frac{1}{C_3s}$	$, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, R_L \left(L_L s + \frac{L_L s + R_L + L_L s + R_L s + R_$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$		 	 	 	163
10.40 I NVALID-ORDER-401 $Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	R_L)			 	 	 	. 163
10.40 2 NVALID-ORDER- 402 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	$\frac{1}{C_L s}$)			 	 	 	. 163
10.408NVALID-ORDER- 403 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L}{C_L R_L s + 1}$. 163
10.40 INVALID-ORDER- 404 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	$R_L + \frac{1}{C_L s}$)		 	 	 	. 164
10.405NVALID-ORDER- 405 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	$L_L s + \frac{1}{C_L s}$	<u>,</u>		 	 	 	. 164
10.406NVALID-ORDER- 406 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\tfrac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	 	. 164
10.40TNVALID-ORDER- 407 $Z(s) =$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$L_L s + R_L$	$+\frac{1}{C_L s}$. 164

10.40&NVALID-ORDER-408 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$		 	 164
10.40 9 NVALID-ORDER-409 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_L$	<i>a</i>)	 	 165
10.41 0 NVALID-ORDER-410 $Z(s) = ($	$\left(\infty,\ \infty,\ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$		 	 165
10.41 I NVALID-ORDER-411 $Z(s)=\left(\right.$	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, R_L$).		 	 165
10.41 2 NVALID-ORDER-412 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, \frac{1}{C_L s}$		 	 165
10.41 3 NVALID-ORDER-413 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}$	$\left(\cdot \right) \cdot \cdot \cdot \cdot \cdot$	 	 165
10.41 4 NVALID-ORDER-414 $Z(s) = ($	$(\infty, \; \infty, \; L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, \ R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$	 	 166
10.41 5 NVALID-ORDER-415 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$, $L_L s + \overline{C}$	$\left(\frac{1}{Ls}\right)$	 	 166
10.416NVALID-ORDER-416 $Z(s) = ($	$\stackrel{ ho}{(}\infty,\;\infty,\;L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 +}$	$\overline{1}$)	 	 166
10.41 T NVALID-ORDER-417 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$, $L_L s + R$	$C_L + \frac{1}{C_L s}$	 	 166
10.41&NVALID-ORDER-418 $Z(s) = 1$	∞, ∞, L_3s	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, \frac{1}{C_Ls+\frac{1}{R_L}}$	$\frac{1}{1+\frac{1}{L_L s}}$	 	 166
10.41 9 NVALID-ORDER-419 $Z(s) = ($	$(\infty, \ \infty, \ L_3s$ -	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5 +$	$-\frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 +}$	$\frac{1}{1} + R_L$) .	 	 167
10.42 0 NVALID-ORDER-420 $Z(s) = 0$	∞, ∞, L_3s	$+\frac{1}{C_3s}, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{L_L s + R_L}\right)}{L_L s + R_L}$	$\left(-\frac{1}{C_L s}\right)$ $\left(-\frac{1}{C_L s}\right)$	 	 167
10.42INVALID-ORDER-421 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$\frac{1}{5^s}$, R_L)		 	 167
10.42 2 NVALID-ORDER-422 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$\frac{1}{5^s}$, $\frac{1}{C_L s}$		 	 167
10.42 B NVALID-ORDER-423 $Z(s) = 0$	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$\frac{R_L}{C_L R_L s + 1}$		 	 167
10.42 1 NVALID-ORDER-424 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$\frac{1}{5^s}$, $R_L + \frac{1}{C_L s}$		 	 168
10.42 5 NVALID-ORDER-425 $Z(s) = 0$	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$L_L s + \frac{1}{C_L s}$		 	 168
10.42 6 NVALID-ORDER-426 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	`		105 25	,		 	 168
10.42 T NVALID-ORDER-427 $Z(s) = ($	$\left(\infty, \ \infty, \ L_3s\right)$	$+\frac{1}{C_3s}, \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5}}$	$L_L s + R_L + R_$	$+\frac{1}{C_L s}$	 	 168

10.42\(\text{NVALID-ORDER-428} \) $Z(s) = \left(\frac{1}{2} \right)$	$\left(\infty, \ \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	_)	 	 	 	 . 168
10.42 9 NVALID-ORDER-429 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + $	R_L	 	 	 	 . 169
10.43 0 NVALID-ORDER-430 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)$.	 	 	 	 . 169
10.43 I NVALID-ORDER-431 $Z(s) = ($	/				`		 	 	 	 . 169
10.43 2 NVALID-ORDER-432 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\left(\frac{1}{C_L s} \right)$. 169
10.43 B NVALID-ORDER-433 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\left(\frac{R_L}{C_L R_L s + 1}\right)$. 169
10.43 4 NVALID-ORDER-434 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$R_L + \frac{1}{C_L s}$. 170
10.43 5 NVALID-ORDER-435 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$L_L s + \frac{1}{C_L s}$)	 	 	 	 . 170
10.43 6 NVALID-ORDER-436 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R_5$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right)$. 170
10.43 T NVALID-ORDER-437 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$, $L_L s + R_L$	$+\frac{1}{C_L s}$. 170
10.43 NVALID-ORDER-438 $Z(s) = 0$	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R_5$	$\overline{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L_L s}$. 170
10.43 9 NVALID-ORDER-439 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{L_L s}{C_L L_L s^2 + 1} -$	$+R_L$. 171
10.44©NVALID-ORDER-440 $Z(s) = \langle 10.440000000000000000000000000000000000$	$\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$\frac{R_L \left(L_L s + \frac{1}{C}\right)}{L_L s + R_L + \frac{1}{C}}$	$\left(\frac{\frac{1}{L^s}}{\frac{1}{C_{L^s}}}\right)$. 171
10.44INVALID-ORDER-441 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	R_L)		 	 	 	 . 171
10.442NVALID-ORDER-442 $Z(s) = 0$. 171
10.448NVALID-ORDER-443 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$. 171
10.44¶NVALID-ORDER-444 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$R_L + \frac{1}{C_L s}$. 172
10.445NVALID-ORDER-445 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$L_L s + \frac{1}{C_L s}$. 172
10.44 6 NVALID-ORDER-446 $Z(s) = ($	$(\infty, \infty,$	$L_3s + \frac{1}{C_3s},$	∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$. 172

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10.46 & N	VALID-OR	DER-468	Z(s) =	$\Big(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$\frac{R_L}{C_L R_L}$	$\frac{1}{s+1}$			 	 	 	 	 	176
10.46 9 N	VALID-OR	DER-469	Z(s) =	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$R_L +$	$\frac{1}{C_L s}$			 	 	 	 	 	176
10.47 0 N	VALID-OR	DER-470	Z(s) =	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$L_L s +$	$-\frac{1}{C_L s}$			 	 	 	 	 	176
10.47 I N	VALID-OR	DER-471	Z(s) =	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L}{C_L L_L s}$	$\left(\frac{s}{s^2+1}\right)$			 	 	 	 	 	177
10.47 2 N	VALID-OR	DER-472	Z(s) =	$\left(\infty,\right.$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$L_L s +$	$-R_L +$	$\frac{1}{C_L s}$		 	 	 	 	 	177
10.47 B N	VALID-OR	DER-473	Z(s) =	$\left(\infty, \right.$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$\overline{C_L s+}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L_L}}$	$\frac{1}{\overline{s}}$.		 	 	 	 	 	177
10.47 4 N	VALID-OR	DER-474	Z(s) = 0	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L}{C_L L_L s}$	$\frac{s}{s^2+1}$ +	(R_L)		 	 	 	 	 	177
10.47 5 N	VALID-OR	DER-475	Z(s) =	$\left(\infty,\right.$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{R_5}{C_5R_5s+1},$	$\frac{R_L \left(L\right)}{L_L s + 1}$	$\frac{L}{R_L} s + \frac{1}{C_L} s$ $R_L + \frac{1}{C_L} s$	$\left(\frac{1}{s}\right)$		 	 	 	 	 	177
10.47 6 N	VALID-OR	DER-476	Z(s) =	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$, R_L$				 	 	 	 	 	178
10.47 T N	VALID-OR	DER-477	Z(s) = 0	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$, \frac{1}{C_L s}$				 	 	 	 	 	178
10.47 8 N	VALID-OR	DER-478	Z(s) =	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$, \frac{R}{C_L R_I}$	$\left(\frac{L}{s+1}\right)$			 	 	 	 	 	178
10.47 9 N	VALID-OR	DER-479	Z(s) =	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$R_L +$	$-\frac{1}{C_L s}$			 	 	 	 	 	178
10.48 0 N	VALID-OR	DER-480	Z(s) =	$(\infty,$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$, $L_L s$	$+\frac{1}{C_L s}$)		 	 	 	 	 	178
10.48 I N	VALID-OR	DER-481	Z(s) =	$\left(\infty,\right.$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$, \frac{L_{I}}{C_{L}L_{I}}$	$\left(\frac{Ls}{Ls^2+1}\right)$			 	 	 	 	 	178
10.48 2 N	VALID-OR	DER-482	Z(s) =	$\left(\infty,\right.$	∞ ,	$\tfrac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$, $L_L s$	$+R_L$ -	$+\frac{1}{C_L s}$)	 	 	 	 	 	179
10.48 B N	VALID-OR	DER-483	Z(s) =	$\left(\infty,\right.$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$, \overline{C_L s}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L^s}$		 	 	 	 	 	179
	VALID-OR			,							- / 、		 	 	 	 	 	179
10.48 5 N	VALID-OR	DER-485	Z(s) =	$\left(\infty,\right.$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$R_5 + \frac{1}{C_5 s}$	$\frac{R_L(1)}{L_L s}$	$\frac{L_L s + \frac{1}{C_L}}{+R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$		 	 	 	 	 	179
	VALID-OR												 	 	 	 	 	179
10.48 T N	VALID-OR	DER-487	Z(s) = 0	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + \frac{1}{C_5s}$	$\frac{1}{S}$, $\frac{1}{C_L s}$)			 	 	 	 	 	180
10.48 & N	VALID-OR	DER-488	Z(s) =	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + \frac{1}{C_5s}$	$\frac{1}{S}$, $\frac{I}{C_L R}$	$\left(\frac{R_L}{R_L s+1}\right)$			 	 	 	 	 	180
10.48 9 N	VALID-OR	DER-489	Z(s) =	$(\infty,$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + \frac{1}{C_5s}$	$\frac{1}{s}$, R_L	$+\frac{1}{C_L s}$)		 	 	 	 	 	180

10.49 0 NVALID-ORDER-49	0 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + \frac{1}{C_5s},$	$L_L s$ -	$+\frac{1}{C_L s}$			 	 	 	 	 180
10.49INVALID-ORDER-49	1 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5 s + \frac{1}{C_5 s},$	$\frac{L_L}{C_L L_L}$	$\left(\frac{s}{s^2+1}\right)$			 	 	 	 	 180
10.49 2 NVALID-ORDER-499	2 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + \frac{1}{C_5s},$	$L_L s$ -	$+R_L +$	$\frac{1}{C_L s}$)	 	 	 	 	 180
10.49 B NVALID-ORDER-49	3 Z(s) = ($\bigg(\infty, \ \circ$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$\overline{C_L s} +$	$\frac{1}{R_L} + \frac{1}{L_L}$	$\frac{1}{2}$.		 	 	 	 	 181
10.49 4 NVALID-ORDER-49	4 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5 s + \frac{1}{C_5 s},$	$\frac{L_L}{C_L L_L}$	$\frac{s}{s^2+1} + 1$	(R_L)		 	 	 	 	 181
10.495NVALID-ORDER-49	5 Z(s) = ($\left(\infty,\right)$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5 s + \frac{1}{C_5 s}$	$R_L \left(L \right)$	$\frac{c_L s + \frac{1}{C_L s}}{-R_L + \frac{1}{C_L s}}$	$\frac{)}{\bar{s}}$		 	 	 	 	 181
10.49 6 NVALID-ORDER-49											 	 	 	 	 181
10.49 T NVALID-ORDER-49	7 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{1}{C_L s}$				 	 	 	 	 181
10.498NVALID-ORDER-498	8 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L}{C_L R_L s}$	$\overline{+1}$) .			 	 	 	 	 182
10.49 9 NVALID-ORDER-49	9 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$R_L + \epsilon$	$\frac{1}{C_L s}$			 	 	 	 	 182
10.50 0 NVALID-ORDER-50	0 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$L_L s +$	$\frac{1}{C_L s}$			 	 	 	 	 182
10.50INVALID-ORDER-50	1 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2}$	$(\frac{1}{2+1})$.			 	 	 	 	 182
10.502NVALID-ORDER-50	2 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$L_L s +$	$R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$		 	 	 	 	 182
10.50 B NVALID-ORDER-50	3 Z(s) = (∞ , (∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\overline{C_L s + \overline{I_I}}$	$\frac{\frac{1}{R_L} + \frac{1}{L_L s}}{\frac{1}{R_L} + \frac{1}{L_L s}}$	$\Big)$.		 	 	 	 . 	 183
10.504NVALID-ORDER-50	4 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{2+1} + R$	(R_L)		 	 	 	 	 183
10.50 5 NVALID-ORDER-50	5 Z(s) = ($\left(\infty,\right)$	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L \left(L_L + L_L + L_L \right)}{L_L s + L_L s}$	$\frac{\left(s + \frac{1}{C_L s}\right)}{R_L + \frac{1}{C_L s}}$			 	 	 	 	 183
10.50 6 NVALID-ORDER-50	6 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$,	R_L).			 	 	 	 	 183
10.50 T NVALID-ORDER-50	7 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$,	$\frac{1}{C_L s}$			 	 	 	 	 183
10.50&NVALID-ORDER-50	8 Z(s) = ((∞, \circ)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$,	$\frac{R_L}{C_L R_L s +}$	$\overline{-1}$		 	 	 	 	 184
10.50 9 NVALID-ORDER-509	9 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$,	$R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$		 	 	 	 	 184
10.51 0 NVALID-ORDER-51	0 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$	$L_L s + \frac{1}{2}$	$\frac{1}{C_L s}$		 	 	 	 	 184
10.51 I NVALID-ORDER-51	1 Z(s) = ((∞, c)	∞ ,	$\frac{L_3s}{C_3L_3s^2+1},$	∞ ,	$L_5s + R_5 +$	$-\frac{1}{C_5 s}$	$\frac{L_L s}{C_L L_L s^2}$	$\frac{1}{+1}$		 	 	 	 	 184

10.51 2 NVALID-ORDER- $512 Z(s) =$	$=\left(\infty, \ \infty, \ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \ \infty, \ L_{5}s+R_{5}+\frac{1}{C_{5}s}, \ L_{L}s+R_{L}+\frac{1}{C_{L}s}\right)$. 184
10.518NVALID-ORDER- 513 $Z(s) =$	$=\left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ L_5s+R_5+\frac{1}{C_5s}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$. 185
10.514NVALID-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) \ \dots $. 185
10.515NVALID-ORDER-515 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ L_{5}s+R_{5}+\frac{1}{C_{5}s},\ \frac{R_{L}\left(L_{L}s+\frac{1}{C_{L}s}\right)}{L_{L}s+R_{L}+\frac{1}{C_{L}s}}\right)$. 185
10.51 6 NVALID-ORDER-516 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}},\ R_{L}\right)$. 185
10.51 T NVALID-ORDER-517 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}},\ \frac{1}{C_{L}s}\right)$. 185
10.51&NVALID-ORDER-518 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}},\ \frac{R_{L}}{C_{L}R_{L}s+1}\right)$. 186
10.51 9 NVALID-ORDER-519 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}},\ R_{L}+\frac{1}{C_{L}s}\right)$. 186
10.52 0 NVALID-ORDER- 520 $Z(s) =$	$=\left(\infty,\ \infty,\ rac{L_3s}{C_3L_3s^2+1},\ \infty,\ rac{1}{C_5s+rac{1}{R_5}+rac{1}{L_5s}},\ L_Ls+rac{1}{C_Ls} ight)$. 186
10.52INVALID-ORDER-521 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{1}{C_{5}s+\frac{1}{R_{5}}+\frac{1}{L_{5}s}},\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1} ight)$. 186
10.52 2 NVALID-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) $. 186
10.528NVALID-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) \dots $. 187
10.524NVALID-ORDER-524 $Z(s) =$	$= \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} + R_L \right) \dots $. 187
10.52 NVALID-ORDER-525 $Z(s) =$	$= \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{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \dots $. 187
		. 187
10.52 T NVALID-ORDER- 527 $Z(s) =$	$+\left(\infty, \ \infty, \ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1}, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5}, \ \frac{1}{C_{L}s}\right)$. 187
10.528NVALID-ORDER- 528 $Z(s) =$	$= (\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1})$. 188
10.529NVALID-ORDER- 529 $Z(s) =$	$=\left(\infty,\ \infty,\ \frac{L_{3}s}{C_{3}L_{3}s^{2}+1},\ \infty,\ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}+R_{5},\ R_{L}+\frac{1}{C_{L}s}\right)$. 188
		. 188
	$=\left(\infty, \ \infty, \ \frac{L_{3}s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}+R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)'$. 188

$$\begin{array}{ll} 10.53 \\ 10.53$$

10.55INVALID-ORDER-551 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , I	R_5, L	$Ls + R_I$	$L + \frac{1}{C_L s}$	$\left(\overline{s}\right)$.		 	 	 	 	. 192
10.55 2 NVALID-ORDER-552 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$L_3s + R$	$R_3 + \frac{1}{C_3 s},$	∞ , I	$R_5, \ \overline{c}$	$\frac{1}{C_L s + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$. 192
10.55\(\mathbb{B}\) NVALID-ORDER-553 $Z(s) = ($	`						/)		 	 	 	 	. 193
10.554NVALID-ORDER-554 $Z(s) = ($	$\left(\infty, \infty, \right.$	$L_3s + R$	$R_3 + \frac{1}{C_3 s},$	∞ , I	$R_5, \frac{R}{I}$	$R_L \left(L_L s + L_L s + R_L + R_L \right)$	$\left(\frac{\frac{1}{C_L s}}{+\frac{1}{C_L s}}\right)$. 193
10.55 INVALID-ORDER-555 $Z(s) = ($. 193
10.55 6 NVALID-ORDER-556 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \overline{c}	$\frac{1}{C_5 s}$, \overline{C}	$\left(\frac{1}{C_L s}\right)$.				 	 	 	 	. 193
10.55 T NVALID-ORDER-557 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{1}{C_5 s}$, \overline{c}	$\frac{R_L}{C_L R_L s + 1}$	$_{\bar{1}})$. 193
10.55\nabla NVALID-ORDER-558 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{1}{C_5 s}$, I	$R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$.			 	 	 	 	. 194
10.55 9 NVALID-ORDER-559 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{1}{C_5 s}$, I	$L_L s + \overline{c}$	$\left(\frac{1}{T_L s}\right)$.			 	 	 	 	. 194
10.56 0 NVALID-ORDER-560 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s}$	∞ , \overline{c}	$\frac{1}{C_5 s}$, \overline{c}	$\frac{L_L s}{C_L L_L s^2 +}$	$_{\overline{1}}$)			 	 	 	 	. 194
10.56INVALID-ORDER-561 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \overline{c}	$\frac{1}{C_5 s}$, I	$L_L s + R$	$R_L + \frac{1}{C_L}$	$\left(\frac{1}{s} \right)$.		 	 	 	 	. 194
10.562NVALID-ORDER-562 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$L_3s + R$	$R_3 + \frac{1}{C_3 s},$	∞ , $\overline{\epsilon}$	$\frac{1}{C_5 s}$,	$\frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{+\frac{1}{L_L s}}$. 194
10.56\(\mathbb{B}\) NVALID-ORDER-563 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{1}{C_5 s}$, \overline{C}	$\frac{L_L s}{C_L L_L s^2 +}$	$\overline{1} + R_L$,)		 	 	 	 	. 195
10.564NVALID-ORDER-564 $Z(s) = ($	$\left(\infty, \infty, \right.$	$L_3s + R$	$R_3 + \frac{1}{C_3 s},$	∞ , $\bar{\epsilon}$	$\frac{1}{C_5 s}$,	$\frac{R_L \left(L_L s - L_L s + R_L\right)}{L_L s + R_L}$	$\left(\frac{+\frac{1}{C_L s}}{+\frac{1}{C_L s}}\right)$. 195
10.56 INVALID-ORDER-565 $Z(s) = ($	<i>ì</i>					\				 	 	 	 	. 195
10.56 6 NVALID-ORDER-566 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \overline{c}	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{C_L s}$	$\left(\cdot \right)$. 195
10.56 T NVALID-ORDER-567 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{+1}$, $\frac{1}{C_L R}$	$\left(\frac{R_L}{R_L s+1}\right)$. 195
10.56\nabla NVALID-ORDER-568 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{R_5}{C_5 R_5 s}$	$\overline{+1}$, R_L	$+\frac{1}{C_L s}$. 196
10.56 9 NVALID-ORDER-569 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s}$	∞ , \bar{c}	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{1}$, $L_L s$	$s + \frac{1}{C_L s}$)		 	 	 	 	. 196
10.57 0 NVALID-ORDER-570 $Z(s) = ($	$(\infty, \infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{1}$, $\frac{1}{C_L I}$	$\left(\frac{L_L s}{L_L s^2 + 1}\right)$. 196
10.57INVALID-ORDER-571 $Z(s) = ($	$(\infty, \infty,$	$L_3s + R$	$C_3 + \frac{1}{C_3 s},$	∞ , \bar{c}	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{1}$, $L_L s$	$s + R_L$	$+\frac{1}{C_L s}$	<u>,</u> .	 	 	 	 	. 196
10.572NVALID-ORDER-572 $Z(s) = ($	$\left(\infty, \infty, \right.$	$L_3s + R$	$R_3 + \frac{1}{C_3 s},$	∞ , $\bar{\epsilon}$	$\frac{R_5}{C_5 R_5 s}$	$\overline{+1}$, $\overline{C_L}$	$\frac{1}{s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L^s}\right)$. 196

10.578NVALID-ORDER- 573 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$\frac{1}{C_3s}$, ∞	$, \frac{R_5}{C_5R_5s+1},$	$\frac{L_L s}{C_L L_L s^2 + 1} + 1$	R_L)	 	 197
10.57 INVALID-ORDER-574 $Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \propto$	$\frac{R_5}{C_5 R_5 s + 1}$,	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\frac{1}{\overline{s}}$ \cdots	 	 197
10.575NVALID-ORDER-575 $Z(s) = 1$	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3 s}$, ∞	$R_5 + \frac{1}{C_5 s}$	R_L)		 	 197
10.576NVALID-ORDER- 576 $Z(s) = 1$	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3 s}$, ∞	$R_5 + \frac{1}{C_5 s}$	$\frac{1}{C_L s}$)		 	 197
10.57TNVALID-ORDER- $577 Z(s) = 10.57$ TNVALID-ORDER	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3s}$, ∞	$R_5 + \frac{1}{C_5 s}$	$\frac{R_L}{C_L R_L s + 1}$		 	 197
10.57\NVALID-ORDER-578 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$R_5 + \frac{1}{C_5 s}$	$R_L + \frac{1}{C_L s}$		 	 198
10.57 9 NVALID-ORDER-579 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$R_5 + \frac{1}{C_5 s}$	$L_L s + \frac{1}{C_L s}$		 	 198
10.58 ONVALID-ORDER- $580 Z(s) = 10.58$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$R_5 + \frac{1}{C_5 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 198
10.58INVALID-ORDER-581 $Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$R_5 + \frac{1}{C_5 s}$	$L_L s + R_L +$	$-\frac{1}{C_L s}$)	 	 198
10.58 2 NVALID-ORDER-582 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \propto$	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L}}$	$\left(\frac{1}{2s}\right) \dots$	 	 198
10.58 Invalid-order-583 $Z(s) = 10.58$	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3s}$, ∞	$R_5 + \frac{1}{C_5 s}$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	(R_L)	 	 199
10.584NVALID-ORDER-584 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L \left(L_L s + \frac{1}{C_L} + $	$\left(\frac{\overline{s}}{\overline{s}}\right)$	 	 199
10.585NVALID-ORDER- 585 $Z(s) = 1$	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3 s}$, ∞	$L_5s + \frac{1}{C_5s}$	R_L		 	 199
10.58 CNVALID-ORDER-586 $Z(s) = 10.58$	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3s}$, ∞	$L_5s + \frac{1}{C_5s}$	$\left(\frac{1}{C_L s}\right)$		 	 199
10.58TNVALID-ORDER- $587 Z(s) = 10.58$ TNVALID-ORDER	$(\infty, \infty,$	$L_3s + R_3$	$\frac{1}{C_3s}$, ∞	$L_5s + \frac{1}{C_5s}$	$\frac{R_L}{C_L R_L s + 1}$		 	 199
10.58\(\text{NVALID-ORDER-588} \(Z(s) = \)	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$\frac{1}{C_3 s}$, ∞	$L_5s + \frac{1}{C_5s}$	$R_L + \frac{1}{C_L s}$		 	 200
10.589NVALID-ORDER- 589 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$\frac{1}{C_3 s}$, ∞	$L_5s + \frac{1}{C_5s}$	$L_L s + \frac{1}{C_L s}$)	 	 200
10.59 ONVALID-ORDER-590 $Z(s) = 10.59$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$L_5s + \frac{1}{C_5s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 200
10.59INVALID-ORDER-591 $Z(s) =$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$L_5s + \frac{1}{C_5s}$	$L_L s + R_L$	$+\frac{1}{C_L s}\Big)$.	 	 200
10.59 2 NVALID-ORDER-592 $Z(s) =$	$\left(\infty, \ \infty, \right)$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$L_5s + \frac{1}{C_5s}$	$, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\left(\frac{1}{L^s}\right)$	 	 200
10.59\(\text{SNVALID-ORDER-593} \) $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \ \infty$	$L_5s + \frac{1}{C_5s}$	$\frac{L_L s}{C_L L_L s^2 + 1} -$	$+R_L$)	 	 201
10.59 4 NVALID-ORDER-594 $Z(s) =$	$\left(\infty, \infty, \right.$	$L_3s + R_3$	$_3+\frac{1}{C_3s}, \propto$	$L_5s + \frac{1}{C_5s}$	$, \frac{R_L \left(L_L s + \frac{1}{C_L} $	$\left(\frac{\frac{L}{s}}{\frac{1}{U_L s}}\right)$	 	 201

10.59 INVALID-ORDER-595 $Z(s) = 0$	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}$, R_L)
10.596NVALID-ORDER-596 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}$, $\frac{1}{C_Ls}$
10.59 T NVALID-ORDER-597 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}$, $\frac{R_L}{C_LR_Ls+1}$
10.59\newline NVALID-ORDER-598 $Z(s) = 0$	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1}$, $R_L + \frac{1}{C_L s}$
10.59 9 NVALID-ORDER-599 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}$
10.60 0 NVALID-ORDER-600 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}$, $\frac{L_Ls}{C_LL_Ls^2+1}$ $\left(\frac{L_2s}{C_LL_Ls^2+1} \right)$
10.60INVALID-ORDER-601 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1}$, $L_L s + R_L + \frac{1}{C_L s}$
10.60 2 NVALID-ORDER-602 $Z(s) = 1$	$0, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty,$	$, \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}} $
10.60 NVALID-ORDER-603 $Z(s) = 0$	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L$)
10.604NVALID-ORDER-604 $Z(s) = 1$	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$\frac{L_{5s}}{C_5L_5s^2+1}, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}$
10.605NVALID-ORDER-605 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, R_L$)
10.60 6 NVALID-ORDER-606 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}$
10.60 T NVALID-ORDER-607 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}$
10.60\(\mathbb{E}\)NVALID-ORDER-608 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}$
10.60 9 NVALID-ORDER-609 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}$
10.61 0 NVALID-ORDER-610 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}$
10.61INVALID-ORDER-611 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}$
10.61 2 NVALID-ORDER-612 $Z(s) = 1$	$0, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}$
10.61 B NVALID-ORDER-613 $Z(s) = ($	$, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L$
10.614NVALID-ORDER-614 $Z(s) = 1$	$c, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty,$	$L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}$
10.61 NVALID-ORDER-615 $Z(s) = 1$	$c, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty,$	$\left(\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L \right)$
10.61 6 NVALID-ORDER-616 $Z(s) = 1$	$, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty,$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}$

$$\begin{aligned} &10.61\text{NVALID-ORDER}.617 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ \frac{R_L}{c_2s + \frac{1}{b_3} + \frac{1}{b_3}} \right) & 205 \\ &10.61\text{NVALID-ORDER}.618 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ L_Ls + \frac{1}{c_Ls} \right) & 206 \\ &10.62\text{NVALID-ORDER}.620 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{1}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ L_Ls + R_L + \frac{1}{c_Ls} \right) & 206 \\ &10.62\text{NVALID-ORDER}.621 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{1}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ L_Ls + R_L + \frac{1}{c_Ls} \right) & 206 \\ &10.62\text{NVALID-ORDER}.622 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{1}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ L_Ls + R_L + \frac{1}{c_Ls} \right) & 206 \\ &10.62\text{NVALID-ORDER}.622 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{1}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ L_Ls + R_L + \frac{1}{c_Ls} \right) & 206 \\ &10.62\text{NVALID-ORDER}.622 \ Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{c_3s}, \ \infty, \frac{1}{c_3s + \frac{1}{b_3} + \frac{1}{b_3}}, \ \frac{c_Ls + \frac{1}{b_3} + \frac{1}{b_3}}{c_2s + \frac{1}{b_3} + \frac{1}{b_3}}, \ 2c_Ls + \frac{1}{b_3} + \frac{1}{b_3}, \ 2c_$$

$$\begin{array}{lll} 10.63 \text{Invalid-order-637} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_3 s} \right)}{L_2 s + R_3 + \frac{1}{C_2 s}}, \frac{R_5}{R_5 + R_3 + \frac{1}{C_2 s}} \right) & 210 \\ 10.63 \text{Invalid-order-639} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_2 s + R_3 + \frac{1}{C_2 s}}, R_L + \frac{1}{C_L s} \right) & 210 \\ 10.63 \text{Invalid-order-639} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_3 s + R_3 + \frac{1}{C_2 s}}, L_L s + \frac{1}{C_L s} \right) & 210 \\ 10.64 \text{Invalid-order-640} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_2 s + R_3 + \frac{1}{C_2 s}}, \frac{1}{C_L L_4 s^2 + 1} \right) & 210 \\ 10.64 \text{Invalid-order-641} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_2 s + R_3 + \frac{1}{C_2 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 210 \\ 10.64 \text{Invalid-order-642} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_5 s + R_3 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 210 \\ 10.64 \text{Invalid-order-642} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_5 s + R_3 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 210 \\ 10.64 \text{Invalid-order-642} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_5 s + R_3 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 211 \\ 10.64 \text{Invalid-order-642} \ Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \frac{R_3 \left(L_5 s + \frac{1}{C_2 s} \right)}{L_5 s + R_3 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 211 \\ 10.64 \text{Invalid-order-642} \ Z(s) = \left(\infty, \ \infty, \frac{1}{C_3 s + \frac{1}{R_3 + \frac{1}{L_3 s}}, \infty, \frac{1}{R_5 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 211 \\ 10.64 \text{Invalid-order-646} \ Z(s) = \left(\infty, \ \infty, \frac{1}{C_3 s + \frac{1}{R_3 + \frac{1}{L_3 s}}, \infty, \frac{1}{R_5 + \frac{1}{C_4 s}}, \frac{1}{C_4 s + \frac{1}{C_4 s}} \right) & 211 \\ 10.64 \text{Invalid-order-647} \ Z(s) = \left(\infty, \ \infty, \frac{1}{C_3 s + \frac{1}{R_3 + \frac{1}{L_3 s}}, \infty, \frac{1}{R_5 + \frac{1}{C_4 s + \frac{1}{C_4 s}}} \right) & 211 \\ 1$$

10.654NVALID-ORDER-654 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$o, \frac{1}{C_5 s}, L_L$	$s + \frac{1}{C_L s}$.		 	 	213
10.65 NVALID-ORDER-655 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ $	\overline{C} , $\frac{1}{C_5 s}$, $\overline{C}_L \overline{D}$	$\frac{L_L s}{L_L s^2 + 1}$		 	 	213
10.65 6 NVALID-ORDER-656 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$o, \frac{1}{C_5 s}, L_L s$	$s + R_L + \frac{1}{C_L s}$	$\left(\frac{1}{8}\right)$	 	 	213
10.65 T NVALID-ORDER-657 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	\overline{C} , $\frac{1}{C_5 s}$, $\overline{C}_{L s}$	$\frac{1}{s + \frac{1}{R_L} + \frac{1}{L_L s}} $		 	 	213
10.65 NVALID-ORDER-658 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty$	\overline{C} , $\frac{1}{C_5 s}$, $\overline{C}_L \overline{D}$	$\frac{L_L s}{L_L s^2 + 1} + R_L$)	 	 	214
10.65 9 NVALID-ORDER-659 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ $	$ \bigcirc, \frac{1}{C_5 s}, \frac{R_L}{L_L} $	$\frac{\left(L_L s + \frac{1}{C_L s}\right)}{s + R_L + \frac{1}{C_L s}}$		 	 	214
10.66©NVALID-ORDER-660 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ $	$0, \frac{R_5}{C_5 R_5 s + 1},$	$, R_L $		 	 	214
10.66INVALID-ORDER-661 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$0, \frac{R_5}{C_5 R_5 s + 1},$	$, \frac{1}{C_L s} $		 	 	214
10.66 2 NVALID-ORDER-662 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty$	$0, \frac{R_5}{C_5 R_5 s + 1},$	$, \frac{R_L}{C_L R_L s + 1}$		 	 	214
10.66 B NVALID-ORDER-663 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$\bigcirc, \ \frac{R_5}{C_5 R_5 s + 1},$	$R_L + \frac{1}{C_L s}$		 	 	215
10.664NVALID-ORDER-664 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$\bigcirc, \ \frac{R_5}{C_5 R_5 s + 1},$	$L_L s + \frac{1}{C_L s}$)	 	 	215
10.66 NVALID-ORDER-665 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$\bigcirc, \ \frac{R_5}{C_5 R_5 s + 1},$	$, \frac{L_L s}{C_L L_L s^2 + 1} \right)$		 	 	215
10.666NVALID-ORDER-666 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$\bigcirc, \ \frac{R_5}{C_5 R_5 s + 1},$	$L_L s + R_L -$	$+\frac{1}{C_L s}$.	 	 	215
10.66 T NVALID-ORDER-667 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$\bigcirc, \ \frac{R_5}{C_5 R_5 s + 1},$	$C_L s + \frac{1}{R_L} + \frac{1}{L_R}$	$\left[\frac{1}{2} \right] \cdot \cdot \cdot$	 	 	215
10.66NVALID-ORDER-668 $Z(s) = 0$	`				. /	 	 	216
10.66 9 NVALID-ORDER-669 $Z(s) = ($	$\left(\infty, \ \infty, \right)$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \ \infty$	$0, \frac{R_5}{C_5 R_5 s + 1},$	$\frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\overline{s}}{L}\right)$	 	 	216
10.67 0 NVALID-ORDER-670 $Z(s) = ($	/			\		 	 	216
10.67INVALID-ORDER-671 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ $	$c, R_5 + \frac{1}{C_5 s}$	$\left(\frac{1}{C_L s}\right)$.		 	 	216

$$\begin{array}{lll} 10.67 \text{ENVALID-ORDER-672} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_2 s + \frac{1}{16_3 + \frac{1}{12^3}}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_5}{C_R s + 1} \right) & 216 \\ 10.67 \text{ENVALID-ORDER-673} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_1 + \frac{1}{C_1 s} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-674} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_1 s + \frac{1}{C_1 s} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-675} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_1 s}{C_1 L_1 s^2 + 1} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-676} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_1 s}{C_1 L_1 s^2 + 1} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-676} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_1 s}{C_1 s + \frac{1}{11} + \frac{1}{11^3}} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-677} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_1 s}{C_1 s + \frac{1}{11^3} + \frac{1}{11^3}}, \ \end{array} \right) & 217 \\ 10.67 \text{ENVALID-ORDER-678} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_1 s}{C_1 s + \frac{1}{11^3} + \frac{1}{11^3}}, \ \end{array} \right) & 218 \\ 10.68 \text{ENVALID-ORDER-679} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_1 \left(L_1 s + R_1 \right)}{L_1 s + R_1 + \frac{1}{C_1 s}} \right) & 218 \\ 10.68 \text{ENVALID-ORDER-681} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{12^3}}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_1 s}{L_1 s + R_2 + \frac{1}{C_2 s}} \right) & 218 \\ 10.68 \text{ENVALID-ORDER-682} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{L_1 s}}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_1 s}{L_1 s + \frac{1}{C_5 s}} \right) & 219 \\ 10.68 \text{ENVALID-ORDER-686} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{L_1 s}}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_1 s}{L_1 s + \frac{1}{C_5 s}} \right) & 219 \\ 10.68 \text{ENVALID-ORDER-686} \ Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{16_3} + \frac{1}{L_1 s}}, \ \infty, \ L_5 s + \frac{1}{C_5$$

10.69©NVALID-ORDER-690 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L\right)$. 220
10.69INVALID-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) \ \dots $. 220
10.69 2 NVALID-ORDER-692 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$. 220
10.69 & NVALID-ORDER-693 $Z(s) = ($	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$. 221
10.69#NVALID-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 $. 221
10.69 NVALID-ORDER-695 $Z(s) = 0$	$\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 $. 221
10.696NVALID-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) \dots $. 221
10.69 T NVALID-ORDER-697 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\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) \right) $. 221
10.69 NVALID-ORDER-698 $Z(s) = 0$	$\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 $. 222
10.69 9 NVALID-ORDER-699 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\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) \ \dots $. 222
10.70 © NVALID-ORDER-700 $Z(s) = ($	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L\right)$. 222
10.70INVALID-ORDER-701 $Z(s) = ($	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right) \dots \dots$. 222
10.70 2 NVALID-ORDER-702 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$. 222
10.70 B NVALID-ORDER-703 $Z(s) = \left(\frac{1}{2}\right)$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$. 223
10.704NVALID-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) \dots $. 223
10.70 NVALID-ORDER-705 $Z(s) = 0$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots$. 223
10.70 6 NVALID-ORDER-706 $Z(s) = \begin{pmatrix} 1 & 1 & 1 \\ 1 & 1 & 1 \end{pmatrix}$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots$. 223
10.70 T NVALID-ORDER-707 $Z(s) = 0$	$\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) \ \dots $. 223

10.70 NVALID-ORDER-708 $Z(s) = 1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	24
10.70 9 NVALID-ORDER-709 $Z(s) = 1$	$\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 \dots \dots \dots \dots \dots \dots \dots \dots $	24
10.71 0 NVALID-ORDER-710 $Z(s) = 1$		24
10.71INVALID-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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	24
10.71 2 NVALID-ORDER-712 $Z(s) = 1$	$\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 \dots \dots \dots \dots \dots \dots \dots \dots $	24
10.71 B NVALID-ORDER-713 $Z(s) = 1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$	25
10.71\PVALID-ORDER-714 $Z(s) = 1$	$\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 \dots \dots \dots \dots \dots \dots \dots \dots $	25
10.71 NVALID-ORDER-715 $Z(s) = 1$	$\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 \dots \dots \dots \dots \dots \dots \dots \dots $	25
10.71 6 NVALID-ORDER-716 $Z(s) = 1$	$\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 $	25
10.71 T NVALID-ORDER-717 $Z(s) = 1$	$\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) \qquad \dots $	25
10.71 NVALID-ORDER-718 $Z(s) = 1$	$\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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	26
10.71 9 NVALID-ORDER-719 $Z(s) = 1$	$\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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	26
10.72 0 NVALID-ORDER-720 $Z(s) = 1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$	26
10.72INVALID-ORDER-721 $Z(s) = 1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$	26
10.72 2 NVALID-ORDER-722 $Z(s) = 1$	$\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 $	26
10.72 B NVALID-ORDER-723 $Z(s) = 1$	$\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) \dots \dots \dots \dots \dots \dots \dots \dots \dots $	27
10.724NVALID-ORDER-724 $Z(s) = 1$	$\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) \ \dots \ $	27
10.72 δ NVALID-ORDER-725 $Z(s)=1$	$\left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	27

10.726NVALID-ORDER-726 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{L_{5s}}{C_{5}L_{5}s^{2}+1} + R_{5}$	$, L_L s + R_L + \overline{c}$	$\left(\frac{1}{C_L s}\right)$	 	22
10.72 T NVALID-ORDER-727 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$		 	
10.72\NVALID-ORDER-728 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{L_L s}{C_L L_L s^2 + 1} + R$	R_L)	 	
10.72 9 NVALID-ORDER-729 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5$	$, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$)	 	
10.73 0 NVALID-ORDER-730 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	R_L)		 	
10.73INVALID-ORDER-731 $Z(s) = 1$						 	
10.732NVALID-ORDER-732 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{R_L}{C_L R_L s + 1}$		 	
10.73 B NVALID-ORDER-733 $Z(s) = 1$						 	
10.734NVALID-ORDER-734 $Z(s) = 1$						 	
10.73 NVALID-ORDER-735 $Z(s) = 1$	$\infty, \infty,$	$\frac{1}{C_3s + \frac{1}{R_3} + \frac{1}{L_3s}}, \ \infty,$	$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	
10.736NVALID-ORDER-736 $Z(s) = 1$	$\infty, \infty,$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$L_L s + R_L + \frac{1}{C_L}$	\overline{s} \cdots	 	
10.73 T NVALID-ORDER-737 $Z(s) = 1$						 	
10.73\NVALID-ORDER-738 $Z(s) = 1$	$(\infty, \infty,$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_L$)	 	23
10.73 9 NVALID-ORDER-739 $Z(s) = 1$	$(\infty, \infty,$	$\frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty,$	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$		 	23
10.74 0 NVALID-ORDER-740 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R_3, \ \propto$	$(c, R_5, \frac{1}{C_L s})$			 	23
10.74INVALID-ORDER-741 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R_3$, \propto	$c, R_5, \frac{R_L}{C_L R_L s + 1}$	<u> </u>		 	23
10.74 2 NVALID-ORDER-742 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R_3, \ \propto$	$0, R_5, R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$		 	23
10.74 3 NVALID-ORDER-743 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_{3s}}{C_3L_3s^2+1} + R_3$, \propto	c , R_5 , $L_L s + \overline{c}$	$\left(\frac{1}{N_L s}\right)$		 	23
10.74INVALID-ORDER-744 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R_3, \ \propto$	$c, R_5, \frac{L_L s}{C_L L_L s^2 + 1}$	$\overline{\cdot 1}$)		 	23

10.74 5 NVALID-ORDER-745 $Z(s)$	$)=\Big(\infty,\ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	R_5, I	$L_L s + R_L + \bar{c}$	$\left(\frac{1}{C_L s}\right)$		 	 	 	231
10.74 6 NVALID-ORDER-746 $Z(s)$	$=\left(\infty,\ \infty\right)$	$, \frac{L_3s}{C_3L_3s^2+1} +$	$R_3, \infty,$	$R_5, \frac{1}{6}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$)		 	 	 	231
10.74 T NVALID-ORDER-747 $Z(s)$	$)=ig(\infty,\ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	R_5, \bar{c}	$\frac{L_L s}{C_L L_L s^2 + 1} + R$	$\stackrel{'}{R}_L \Big)$.		 	 	 	231
10.74 & NVALID-ORDER-748 Z(s)	$=\left(\infty,\ \infty\right)$	$, \frac{L_3s}{C_3L_3s^2+1} +$	$R_3, \infty,$	R_5 ,	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	-) .		 	 	 	232
10.74 9 NVALID-ORDER-749 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	R_L)	·		 	 	 	232
10.75 0 NVALID-ORDER- $750~Z(s)$	$=\left(\infty,\ \infty,\right.$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\left(\frac{1}{C_L s}\right) \cdot \cdot \cdot$			 	 	 	232
10.75INVALID-ORDER-751 $Z(s)$	$)=(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\frac{R_L}{C_L R_L s + 1}$.			 	 	 	232
10.75 2 NVALID-ORDER-752 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$R_L + \frac{1}{C_L s}$			 	 	 	232
10.75 B NVALID-ORDER-753 $Z(s)$	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$L_L s + \frac{1}{C_L s}$			 	 	 	233
10.75 4 NVALID-ORDER-754 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\frac{L_L s}{C_L L_L s^2 + 1}$			 	 	 	233
10.75 INVALID-ORDER-755 $Z(s)$	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$L_L s + R_L +$	$\frac{1}{C_L s}$		 	 	 	233
10.75 6 NVALID-ORDER-756 Z(s)	$=$ $\left(\infty, \ \infty\right)$	$, \frac{L_3s}{C_3L_3s^2+1} +$	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	$\left(\frac{1}{s}\right)$.		 	 	 	233
10.75 T NVALID-ORDER- 757 $Z(s)$	$)=ig(\infty,\ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\frac{L_L s}{C_L L_L s^2 + 1} + 1$	$(\hat{R_L})$		 	 	 	233
10.75 & NVALID-ORDER-758 Z(s)	$= \left(\infty, \ \infty\right)$	$, \frac{L_3s}{C_3L_3s^2+1} +$	$R_3, \infty,$	$\frac{1}{C_5 s}$,	$\frac{R_L \left(L_L s + \frac{1}{C_L s} $	$\left(\frac{1}{s}\right)$.		 	 	 	234
10.75 9 NVALID-ORDER-759 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\overline{R_{+1}}, R_L$)			 	 	 	234
10.76 0 NVALID-ORDER- $760~Z(s)$	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{c+1}, \frac{1}{C_L s}$.			 	 	 	234
10.76INVALID-ORDER-761 $Z(s)$	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{R_L}{C_L R_L s + 1}$	$_{\bar{1}}$) .		 	 	 	234
10.76 2 NVALID-ORDER-762 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{C_L}$, $R_L + \frac{1}{C_L}$	$\left(\frac{1}{2s}\right)$.		 	 	 	234
10.76 \$ NVALID-ORDER-763 Z(s)	$)=ig(\infty,\ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$, $L_L s + \overline{c}$	$\left(\frac{1}{C_L s}\right)$		 	 	 	235
10.76 4 NVALID-ORDER-764 Z(s)	$)=(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$	$_{\overline{-1}})$.		 	 	 	235
10.76 5 NVALID-ORDER-765 $Z(s)$	$)=ig(\infty, \ \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$ +	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}$, $L_L s + R$	$R_L + \overline{C}$	$\left(\frac{1}{C_L s}\right)$	 	 	 	235
10.76 6 NVALID-ORDER-766 Z(s)	(∞, ∞)	$, \frac{L_3s}{C_3L_3s^2+1} +$	$R_3, \infty,$	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{s+1}, \frac{1}{C_L s + \frac{1}{R_L}}$	$+\frac{1}{L_L s}$)	 	 	 	235

10.76 T NVALID-ORDER-767 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L s}{C_L L_L s^2 + 1} +$	R_L)	 	 	 235
10.76&NVALID-ORDER-768 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{R_L \left(L_L s + \frac{1}{C_L s} $	$\left(\frac{\overline{s}}{\sqrt{s}}\right)$	 	 	 236
10.76 9 NVALID-ORDER-769 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	R_L)		 	 	 236
10.77 0 NVALID-ORDER-770 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s}$)		 	 	 236
10.77INVALID-ORDER-771 $\boldsymbol{Z}(s) = (s)$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L}{C_L R_L s + 1}$		 	 	 236
10.77 2 NVALID-ORDER-772 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$R_L + \frac{1}{C_L s}$	• • • • ·	 	 	 236
10.77 & NVALID-ORDER-773 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$L_L s + \frac{1}{C_L s}$)	 	 	 237
10.77\PVALID-ORDER-774 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3 s}{C_3 L_3 s^2 + 1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 237
10.77 NVALID-ORDER-775 $Z(s) = 0$	$\left(\infty, \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 237
10.776NVALID-ORDER-776 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L}}$	$\left(\frac{1}{L^s}\right)$	 	 	 237
10.77 T NVALID-ORDER-777 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1} -$	$+R_L\Big)$	 	 	 237
10.77&NVALID-ORDER-778 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$R_5 + \frac{1}{C_5 s}$	$\frac{R_L \left(L_L s + \frac{1}{C_L} \right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\frac{1}{L_s}}{\frac{1}{L_s}}\right)$	 	 	 238
10.77 9 NVALID-ORDER-779 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, R_L $ \ldots		 	 	 238
10.78 0 NVALID-ORDER-780 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \frac{1}{C_L s} $		 	 	 238
10.78INVALID-ORDER-781 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \frac{R_L}{C_L R_L s + 1}$	• • • • ·	 	 	 238
10.78 2 NVALID-ORDER-782 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, R_L + \frac{1}{C_L s}$)	 	 	 238
10.78\mathbb{B}\mathbb{N}\mathbb{V}\mathbb{A}\mathbb{L}\mathbb{I}\mathbb{O}\mathbb{R}\mathbb{D}\mathbb{E}\mathbb{R}-783 \ Z(s) = 0	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$, $L_L s + \frac{1}{C_L s}$	$\left(\frac{1}{5}\right)$	 	 	 239
10.784NVALID-ORDER-784 $Z(s) = 0$	$\left(\infty, \ \infty, \right)$	$\frac{L_3 s}{C_3 L_3 s^2 + 1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \frac{L_L s}{C_L L_L s^2 + 1} $)	 	 	 239
10.785NVALID-ORDER-785 $Z(s) = 0$	$\left(\infty, \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$, $L_L s + R_L$	$+\frac{1}{C_L s}$	 	 	 239
10.786NVALID-ORDER-786 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\left(\frac{1}{L_L s}\right)$	 	 	 239
10.78¶NVALID-ORDER-787 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + I$	$R_3, \infty,$	$L_5 s + \frac{1}{C_5 s}$	$, \frac{L_L s}{C_L L_L s^2 + 1}$	$+R_L$) .	 	 	 239
10.78\NVALID-ORDER-788 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+I$	$R_3, \infty,$	$L_5s + \frac{1}{C_5s}$	$\frac{R_L \left(L_L s + \overline{c}_L + c$	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$	 	 	 240

10.78 9 NVALID-ORDER-789 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	R_L) .			 	 	 240
10.79 0 NVALID-ORDER-790 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{1}{C_L s}$).			 	 	 240
10.79INVALID-ORDER-791 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L}{C_L R_L s + 1}$	·		 	 	 240
10.79 2 NVALID-ORDER-792 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$R_L + \frac{1}{C_L}$	$\left(\frac{1}{\sqrt{s}}\right)$		 	 	 240
10.79 Invalid-order-793 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$L_L s + \overline{C}$	$\left(\frac{1}{Ls}\right)$		 	 	 241
10.794NVALID-ORDER-794 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2 +}$	$\overline{1}$)		 	 	 241
10.79 INVALID-ORDER-795 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$L_L s + R$	$C_L + \frac{1}{C_L s}$		 	 	 241
10.79 NVALID-ORDER-796 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	R_3, ∞	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{1}{C_L s + \frac{1}{R_L}}$	$\frac{1}{L_L s}$		 	 	 241
10.79 T NVALID-ORDER-797 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{L_L s}{C_L L_L s^2 +}$	$\overline{1} + R_L$		 	 	 241
10.79&NVALID-ORDER-798 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	R_3, ∞	$\frac{L_5s}{C_5L_5s^2+1},$	$\frac{R_L \left(L_L s - L_L s + R_L\right)}{L_L s + R_L}$	$\left(\frac{1}{C_L s}\right) + \frac{1}{C_L s}$		 	 	 242
10.79 9 NVALID-ORDER-799 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}$, R	L		 	 	 242
10.80 ONVALID-ORDER- $800 Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, \ \overline{C}$	$\left(\frac{1}{Ls}\right)$		 	 	 242
10.80INVALID-ORDER-801 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, \ \overline{C}$	$\frac{R_L}{LR_Ls+1}$		 	 	 242
10.80 2 NVALID-ORDER-802 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}$, R	$L + \frac{1}{C_L s}$		 	 	 242
10.80 INVALID-ORDER-803 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}+R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, L$	$Ls + \frac{1}{C_L s}$)	 	 	 243
10.80#NVALID-ORDER-804 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, \ \overline{C}$	$\frac{L_L s}{L_L L_L s^2 + 1}$		 	 	 243
10.80 Invalid-order-805 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, L$	$Ls + R_L$ -	$+\frac{1}{C_L s}$	 	 	 243
10.80 ENVALID-ORDER-806 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	R_3, ∞	$L_5s + R_5$	$+\frac{1}{C_5s}, \ \overline{C}$	$\frac{1}{L s + \frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L^s}$	 	 	 243
10.80 T NVALID-ORDER-807 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + R$	$R_3, \infty,$	$L_5s + R_5$	$+\frac{1}{C_5s}, \ \overline{C}$	$\frac{L_L s}{L L_L s^2 + 1} +$	$\vdash R_L$	 	 	 243
10.80\ndlandrame{8}\text{NVALID-ORDER-808} $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	R_3, ∞	$L_5s + R_5$	$+\frac{1}{C_5s}, \frac{R}{R}$	$\frac{C_L \left(L_L s + \frac{1}{C_L} \right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{\frac{1}{L^s}}{L^s}\right)$.	 	 	 244
10.80 9 NVALID-ORDER-809 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_{3}s}{C_{3}L_{3}s^{2}+1}+I$	R_3, ∞	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{R_5}}$	$\frac{1}{L_5 s}$, R_L			 	 	 244
10.81 0 NVALID-ORDER-810 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1} + I$	R_3, ∞	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{R_5}}$	$\frac{1}{C_L s}$, $\frac{1}{C_L s}$			 	 	 244

10.81INVALID-ORDER-811 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$\left(\frac{R_L}{C_L R_L s + 1}\right)$)		 	 	244
10.812NVALID-ORDER-812 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$R_L + \frac{1}{C_L s}$)		 	 	244
10.81 B NVALID-ORDER-813 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$L_L s + \frac{1}{C_L s}$	$\left(\frac{1}{s}\right)$		 	 	245
10.81#NVALID-ORDER-814 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\tfrac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$\frac{L_L s}{C_L L_L s^2 + 1}$)		 	 	245
10.81 SNVALID-ORDER-815 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}$	$L_L s + R_L$	$\left(1 + \frac{1}{C_L s}\right)$		 	 	245
10.816NVALID-ORDER-816 $Z(s) = 0$	$\left(\infty, \ \infty, \right.$	$\tfrac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{R_L}}$	$\frac{1}{L_L s}$.		 	 	245
10.81 T NVALID-ORDER-817 $Z(s) = ($	(105 250		. /		 	 	245
10.81\(\) NVALID-ORDER-818 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}$	$\frac{R_L \left(L_L s + \overline{c} $	$\left(\frac{\frac{1}{C_L s}}{\frac{1}{C_L s}}\right)$.		 	 	246
10.819NVALID-ORDER-819 $Z(s) = ($								 	 	246
10.82 ONVALID-ORDER- 820 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + L_5 s$	$R_5, \frac{1}{C_L s}$).			 	 	246
10.82INVALID-ORDER-821 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + 1$	$R_5, \frac{R_L}{C_L R_L s + 1}$	$_{\overline{1}}$)		 	 	246
10.82 2 NVALID-ORDER-822 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + \frac{L_5 s}{C_5 L_5 s^2 + 1}$	$R_5, R_L + \frac{1}{C_L}$	$\left(\frac{1}{Ls}\right)$		 	 	246
10.82 S NVALID-ORDER-823 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + 1$	$R_5, L_L s + \overline{c}$	$\left(\frac{1}{C_{L}s}\right)$		 	 	247
10.824NVALID-ORDER-824 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + \frac{L_5 s}{C_5 L_5 s^2 + 1}$	$R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}$	$\overline{-1}$)		 	 	247
10.825NVALID-ORDER-825 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + \frac{L_5 s}{C_5 L_5 s^2 + 1}$	$R_5, L_L s + R_5$	$R_L + \frac{1}{C_L s}$)	 	 	247
10.826NVALID-ORDER-826 $Z(s) = 1$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$\frac{L_5s}{C_5L_5s^2+1} + \frac{L_5s}{C_5L_5s^2+1}$	$R_5, \frac{1}{C_L s + \frac{1}{R_L}}$	$\left(\frac{1}{1+\frac{1}{L_L s}}\right)$		 	 	247
10.82 T NVALID-ORDER-827 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \infty$	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + 1$	$R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}$	$\overline{+1} + R_L$		 	 	247
10.82\NVALID-ORDER-828 $Z(s) = 0$	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$\frac{L_5s}{C_5L_5s^2+1} + \frac{L_5s}{C_5L_5s^2+1}$	$R_5, \frac{R_L(L_L s)}{L_L s + R_L}$	$\left(\frac{+\frac{1}{C_L s}}{+\frac{1}{C_L s}}\right)$		 	 	248
10.82 9 NVALID-ORDER-829 $Z(s) = ($	$(\infty, \infty,$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$\left(\frac{1}{2}, R_L \right)$			 	 	248
10.83 0 NVALID-ORDER-830 $Z(s) = ($	$\left(\infty, \ \infty, \right.$	$\frac{L_3s}{C_3L_3s^2+1}$	$+R_3, \propto$	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}$	$\left(\frac{1}{C_L s}\right)$.			 	 	248

10.84&NVALID-ORDER-848 $Z(s) =$	\										 	 	 	 	 	 252
10.84 9 NVALID-ORDER-849 $Z(s) = 1$											 	 	 	 	 	 252
10.85 0 NVALID-ORDER-850 $Z(s) =$											 	 	 	 	 	 252
10.85INVALID-ORDER-851 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{1}{C_5 s}$, I	R_L +	$-\frac{1}{C_L s}$				 	 	 	 	 	 252
10.85 2 NVALID-ORDER-852 $Z(s) =$	\		- 3-					/			 	 	 	 	 	 252
10.85 2 NVALID-ORDER-853 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{1}{C_5 s}$,	$\frac{L_L}{C_L L_L}$	$\left(\frac{s}{s^2+1}\right)$				 	 	 	 	 	 253
10.854NVALID-ORDER-854 $Z(s) =$	\								\overline{s}		 	 	 	 	 	 253
10.85 Invalid-order-855 $Z(s) = 10.85$	$\left(\infty,\right)$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{1}{C_5 s}$,	$\overline{C_L s}$	$\frac{1}{\frac{1}{R_L} + \frac{1}{L}}$	$\frac{1}{L^s}$			 	 	 	 	 	 253
10.85 CNVALID-ORDER-856 $Z(s) = 1$	$\left(\infty,\right)$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{1}{C_5 s}$,	$\frac{L_L}{C_L L_L}$	$\frac{s}{s^2+1}$	$+R_L$) .		 	 	 	 	 	 253
10.85 T NVALID-ORDER-857 $Z(s) =$	\		- 0					$\left(\frac{1}{L^s}\right)$			 	 	 	 	 	 253
10.85\(\mathbb{R}\) NVALID-ORDER-858 $Z(s) = 1$											 	 	 	 	 	 254
10.85 9 NVALID-ORDER-859 $Z(s) = 1$											 	 	 	 	 	 254
10.86 0 NVALID-ORDER-860 $Z(s) =$											 	 	 	 	 	 254
10.86INVALID-ORDER-861 $Z(s) =$											 	 	 	 	 	 254
10.862NVALID-ORDER-862 $Z(s) =$	(∞, c)	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{1}$, I	$L_L s +$	$\frac{1}{C_L s}$) .		 	 	 	 	 	 254
10.86 B NVALID-ORDER-863 $Z(s) =$	$\left(\infty,\right)$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	${+1}$,	$\frac{L_L s}{C_L L_L s}$	$\left(\frac{s}{2+1}\right)^{2}$			 	 	 	 	 	 255
10.864NVALID-ORDER-864 $Z(s) =$	(∞, c)	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}},$	∞ ,	$\frac{R_5}{C_5 R_5 s}$	$\frac{1}{1}$, I	$L_L s +$	R_L -	$-\frac{1}{C_L}$	$\frac{1}{s}$	 	 	 	 	 	 255

10.86 NVALID-ORDER-865 $Z(s) = 1$	\	- 3		· L L · ,	/	 	 255
10.86©NVALID-ORDER-866 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \ \infty,$	$\frac{R_5}{C_5R_5s+1},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R$	R_L)	 	 255
10.86 T NVALID-ORDER-867 $Z(s) = 1$	\	· ·		L)	 	 255
10.86\nbelownermal NVALID-ORDER-868 $Z(s) = 10.86$	\	9		/		 	 256
10.86 9 NVALID-ORDER-869 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$, \frac{1}{C_L s} $		 	 256
10.870NVALID-ORDER-870 $Z(s) = 1$	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$\left(\frac{R_L}{C_L R_L s + 1}\right)$		 	 256
10.87INVALID-ORDER-871 $Z(s)=\left(\right. \left. \right. \right. \left. \right. \right. \left. \left. \right. \left. \right. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \right. \left. \left. \right. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \right. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \right. \right. \left. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \left. \left. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \left. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \left. \right. \right. \right. \left. \left. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \left. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \right. \right. \right. \right. \right. \right. \left. \left. \left. \left. \left. \left. \left. \left. \left. \right. \right.$	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$R_L + \frac{1}{C_L s}$		 	 256
10.872NVALID-ORDER-872 $Z(s) = 1$	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$L_L s + \frac{1}{C_L s}$		 	 256
10.87 B NVALID-ORDER-873 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right)$		 	 257
10.874NVALID-ORDER-874 $Z(s) = 1$	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$, $L_L s + R_L +$	$\frac{1}{C_L s}$ \cdots	 	 257
10.87 INVALID-ORDER-875 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$	·	 	 257
10.876NVALID-ORDER-876 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{L_L s}{C_L L_L s^2 + 1} + \dots$	(R_L)	 	 257
10.87 TNVALID-ORDER-877 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$R_5 + \frac{1}{C_5 s},$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	$\left(\frac{1}{2}\right)^{2}$	 	 257
10.87\NVALID-ORDER-878 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$L_5 s + \frac{1}{C_5 s}$	(R_L)		 	 258
10.879NVALID-ORDER-879 $Z(s) = 1$	$(\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$L_5 s + \frac{1}{C_5 s}$	$\left(\frac{1}{C_L s}\right) \cdot \cdot \cdot$		 	 258
10.88©NVALID-ORDER-880 $Z(s) = ($	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$L_5 s + \frac{1}{C_5 s}$	$\left(\frac{R_L}{C_L R_L s + 1}\right)$		 	 258
10.88INVALID-ORDER-881 $Z(s) = 1$	$\infty, \infty,$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$L_5 s + \frac{1}{C_5 s}$	$_{s},\ R_{L}+\frac{1}{C_{L}s}$		 	 258
				,			

$$\begin{array}{lll} 10.88\text{ENVALID-ORDER-882} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{18} + c_{17}^{+} \right)}{L_{12} + R_1 + c_{17}^{+}}, \infty, L_5 + \frac{1}{C_5 s}, L_2 s + \frac{1}{C_5 s}, L_2 s + \frac{1}{C_5 s} \right) & 258 \\ 10.88\text{ENVALID-ORDER-883} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_5 s}{C_5 L_5 s^{+} + 1} \right) & 259 \\ 10.88\text{ENVALID-ORDER-884} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_5 s}{C_5 L_5 s^{+} + 1} \right) & 259 \\ 10.88\text{ENVALID-ORDER-885} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_5 s}{C_5 L_5 s^{+} + 1} + R_L \right) & 259 \\ 10.88\text{ENVALID-ORDER-886} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_5 s}{C_5 L_5 s^{+} + 1} + R_L \right) & 259 \\ 10.88\text{ENVALID-ORDER-887} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_5 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}} \right) & 259 \\ 10.88\text{ENVALID-ORDER-888} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{R_5 \left(L_{28} + c_{17}^{+} \right)}{L_{12} + R_3 + c_{17}^{+}} \right) & 260 \\ 10.89\text{ENVALID-ORDER-890} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{R_5 \left(L_{28} + c_{17}^{+} \right)}{L_{12} s} \right) & 260 \\ 10.89\text{ENVALID-ORDER-891} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{L_5 s}{C_5 s^{+}} \right) & 260 \\ 10.89\text{ENVALID-ORDER-892} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{17}^{+}}, \infty, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{L_5 s}{C_5 L_5 s^{+} + 1} \right) & 261 \\ 10.89\text{ENVALID-ORDER-896} \ Z(s) = \left(\infty, \infty, & \frac{R_3 \left(L_{28} + c_{17}^{+} \right)}{L_{24} + R_3 + c_{13}^{+}}, \infty, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{L_5 s}{C_5 L_5 s^{+} + 1}, \frac{L_5 s}{L_5 s} \right) & 261 \\ 10.89\text{ENVALID-O$$

10.89 9 NVALID-ORDER-899 $Z(s) = 0$	\	3		/		 	 . 262
10.90 0 NVALID-ORDER-900 $Z(s) = 0$	\	9		,		 	 . 262
10.90INVALID-ORDER-901 $Z(s) = 1$	\	9		,		 	 . 262
10.90 2 NVALID-ORDER-902 $Z(s) = 0$	\	3		/		 	 . 262
10.90\bar{u}NVALID-ORDER-903 $Z(s) = 0$	\	~ 3~		/		 	 . 263
10.904NVALID-ORDER-904 $Z(s) = 1$	\	o o			/	 	 . 263
10.90 Invalid-Order-905 $Z(s) = 1$. 263
10.90 G NVALID-ORDER-906 $Z(s) = 1$. 263
10.90 T NVALID-ORDER-907 $Z(s) = 1$					$\left(\frac{1}{\overline{s}}\right)$. 263
10.90\nbelownVALID-ORDER-908 $Z(s) = 10.90$. 264
10.90 9 NVALID-ORDER-909 $Z(s) = 1$	\	9	0 0	/		 	 . 264
10.91 0 NVALID-ORDER-910 $Z(s) = 0$. 264
10.91 INVALID-ORDER-911 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_s$	$L + \frac{1}{C_L s}$.		 	 . 264
10.91 2 NVALID-ORDER-912 $Z(s) = 1$. 264
10.913NVALID-ORDER-913 $Z(s) = 1$. 265
10.914NVALID-ORDER-914 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_1$	$Ls + R_L + \frac{1}{C_L}$	\overline{s} \cdots .	 	 . 265
10.91 INVALID-ORDER-915 $Z(s) = 1$	$\left(\infty, \ \infty, \right.$	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, C_1$	$\frac{1}{Ls + \frac{1}{R_L} + \frac{1}{L_L s}} $. 265

$$\begin{array}{lll} & 10.91 & 10.$$

	\		030	050	$\frac{L_L s}{C_L L_L s^2 + 1}$)
	\		~ 3~	- 3-	$L_L s + R_L + \frac{1}{C_L s}$
10.93 NVALID-ORDER-935 $Z(s) =$	$(\infty,$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} $
10.936NVALID-ORDER-936 $Z(s) =$	$(\infty,$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_L $
10.93 NVALID-ORDER-937 $Z(s) =$	$(\infty,$	∞ ,	$\frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \ \infty,$	$\frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)' \dots \dots$

1 Examined
$$H(z)$$
 for TIA simple Z3 Z5 ZL: $\frac{Z_3Z_L(Z_5g_m-1)}{Z_3Z_5g_m+2Z_3Z_Lg_m+Z_3+Z_5Z_Lg_m+Z_L}$

$$H(z) = \frac{Z_3 Z_L (Z_5 g_m - 1)}{Z_3 Z_5 g_m + 2 Z_3 Z_L g_m + Z_3 + Z_5 Z_L g_m + Z_L}$$

- 2 HP
- 3 BP

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

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

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

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

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

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

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

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

Q:
$$\frac{\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{2g_m}$$
 wo:
$$\sqrt{\frac{1}{L_L(C_3+C_L)}}$$
 bandwidth:
$$\frac{2g_m}{C_3R_5g_m+C_3+C_LR_5g_m+C_L}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_5g_m-1}{2g_m}$$
 Qz: 0 Wz: None

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

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

$$\begin{aligned} &\text{Q:} \ \frac{R_L\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{R_5g_m+2R_Lg_m+1} \\ &\text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ &\text{bandwidth:} \ \frac{R_5g_m+2R_Lg_m+1}{R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ &\text{K-LP:} \ 0 \\ &\text{K-HP:} \ 0 \\ &\text{K-BP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ &\text{Qz:} \ 0 \\ &\text{Wz:} \ \text{None} \end{aligned}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{R_3\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{2R_3g_m+R_5g_m+1} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{2R_3g_m+R_5g_m+1}{R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{R_3R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_3R_L\sqrt{\frac{1}{C_3L_3}}(R_5g_m+1)}{R_5g_m+2R_Lg_m+1} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_5g_m+2R_Lg_m+1}{C_3R_L(R_5g_m+1)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

$$H(s) = \frac{L_3 s (R_5 g_m - 1)}{C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + C_L L_3 R_5 g_m s^2 + C_L L_3 s^2 + 2L_3 g_m s + R_5 g_m + 1}$$

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

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

$$H(s) = \frac{L_3 R_L s \left(R_5 g_m - 1\right)}{C_3 L_3 R_5 R_L g_m s^2 + C_3 L_3 R_L s^2 + C_L L_3 R_5 R_L g_m s^2 + C_L L_3 R_5 g_m s + L_3 R_5 g_m s + L_3 s + R_5 R_L g_m + R_L R_2 g_m s^2 + C_4 R_5 g_m s^2 + C_4 R_5 g_m s^2 + C_5 R_5$$

Q:
$$\frac{R_L\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{R_5g_m+2R_Lg_m+1}$$
 wo:
$$\sqrt{\frac{1}{L_3(C_3+C_L)}}$$
 bandwidth:
$$\frac{R_5g_m+2R_Lg_m+1}{R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}$$
 Qz: 0 Wz: None

3.10 BP-10
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

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

Q:
$$\frac{\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}}{2g_m} (C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L)}$$
wo:
$$\sqrt{\frac{L_3 + L_L}{L_3 L_L (C_3 + C_L)}}$$
bandwidth:
$$\frac{2g_m}{C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L}$$
K-LP: 0
K-HP: 0
K-BP:
$$\frac{R_5 g_m - 1}{2g_m}$$
Qz: 0
Wz: None

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

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

$$\begin{array}{l} \text{Q:} \ \frac{R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{R_5g_m+2R_Lg_m+1} \\ \text{wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_5g_m+2R_Lg_m+1}{R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_3R_3R_L\sqrt{\frac{1}{C_3L_3}}(R_5g_m+1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}\\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}}\\ \text{bandwidth:} \ \frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_3R_3R_L(R_5g_m+1)}\\ \text{K-LP:} \ 0\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

Q:
$$\frac{R_3\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{2R_3g_m+R_5g_m+1}$$
 wo:
$$\sqrt{\frac{1}{L_3(C_3+C_L)}}$$
 bandwidth:
$$\frac{2R_3g_m+R_5g_m+1}{R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$$
 Qz: 0 Wz: None

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

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

$$\begin{array}{l} \text{Q:} \ \frac{R_3R_L\sqrt{\frac{1}{L_3(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{wo:} \ \sqrt{\frac{1}{L_3(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{R_3R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

$$H(s) = \frac{L_3 L_L R_3 s \left(R_5 g_m - 1\right)}{C_3 L_3 L_L R_3 R_5 g_m s^2 + C_3 L_3 L_L R_3 s^2 + C_L L_3 L_L R_3 R_5 g_m s^2 + C_L L_3 L_L R_3 s^2 + 2 L_3 L_L R_3 g_m s + L_3 L_L R_5 g_m s + L_3 L_L s + L_3 R_3 R_5 g_m + L_3 R_3 R_5 g_m + L_L R_3 R_$$

$$\begin{array}{l} \text{Q:} \ \frac{R_3\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{2R_3g_m+R_5g_m+1} \\ \text{Wo:} \ \sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{2R_3g_m+R_5g_m+1}{R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

$$H(s) = \frac{L_3L_LR_3R_Ls\left(R_5g_m - 1\right)}{C_3L_3L_LR_3R_5R_Lg_ms^2 + C_3L_3L_LR_3R_5R_Lg_ms^2 + C_LL_3L_LR_3R_Ls^2 + L_3L_LR_3R_Ls^2 + L_3L_LR_3R_Lg_ms + L_3L_LR_3s + L_3L_2s + L_3L_2s + L_$$

Q:
$$\frac{R_3R_L\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}$$
 wo:
$$\sqrt{\frac{L_3+L_L}{L_3L_L(C_3+C_L)}}$$
 bandwidth:
$$\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{R_3R_L(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}$$
 Qz: 0 Wz: None

4 LP

5 BS

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

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

$$\begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}(2R_3g_m+R_5g_m+1)}{R_3(R_5g_m+1)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_3(R_5g_m+1)}{L_L(2R_3g_m+R_5g_m+1)} \\ \text{K-LP:} \ \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1} \\ \text{K-HP:} \ \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \end{array}$$

Wz:
$$\sqrt{\frac{1}{C_L L_L}}$$

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

$$\begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)} \\ \text{Wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_3R_L(R_5g_m + 1)}{L_L(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)} \\ \text{K-LP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ \text{K-HP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}$$

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

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

$$\begin{aligned} &\text{Q: } \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_5g_m+2R_Lg_m+1)}{R_L(R_5g_m+1)} \\ &\text{wo: } \sqrt{\frac{1}{C_3L_3}} \\ &\text{bandwidth: } \frac{R_L(R_5g_m+1)}{L_3(R_5g_m+2R_Lg_m+1)} \\ &\text{K-LP: } \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ &\text{K-HP: } \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \end{aligned}$$

K-BP: 0
Qz: None
Wz:
$$\sqrt{\frac{1}{C_3L_3}}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)}{R_3R_L(R_5g_m + 1)} \\ \text{wo:} \ \sqrt{\frac{1}{C_3L_3}} \\ \text{bandwidth:} \ \frac{R_3R_L(R_5g_m + 1)}{L_3(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)} \\ \text{K-LP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ \text{K-HP:} \ \frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_3L_3}} \end{array}$$

6 **GE**

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

$$H(s) = \frac{R_3 \left(R_5 g_m - 1 \right) \left(C_L L_L s^2 + C_L R_L s + 1 \right)}{2 C_L L_L R_3 g_m s^2 + C_L L_L R_5 g_m s^2 + C_L L_L s^2 + C_L R_3 R_5 g_m s + 2 C_L R_3 R_L g_m s + C_L R_3 s + C_L R_5 R_L g_m s + C_L R_1 s + 2 R_3 g_m + R_5 g_m + 1}{2 C_L R_3 R_5 g_m s^2 + C_L R_1 R_2 g_m s^2 + C_L R_2 R_2 g_m s + C_L R_3 R_5 g_m s + C_L R_5 R_5 g_m s + C$$

$$\mathbf{Q} \colon \frac{L_L \sqrt{\frac{1}{C_L L_L}} (2R_3 g_m + R_5 g_m + 1)}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}$$

$$\begin{array}{l} \text{wo: } \sqrt{\frac{1}{C_L L_L}} \\ \text{bandwidth: } \frac{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}{L_L (2 R_3 g_m + R_5 g_m + 1)} \\ \text{K-LP: } \frac{R_3 (R_5 g_m - 1)}{2 R_3 g_m + R_5 g_m + 1} \\ \text{K-HP: } \frac{R_3 (R_5 g_m - 1)}{2 R_3 g_m + R_5 g_m + 1} \\ \text{K-BP: } \frac{R_3 R_L (R_5 g_m - 1)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ \text{Qz: } \frac{L_L \sqrt{\frac{1}{C_L L_L}}}{R_L} \\ \text{Wz: } \sqrt{\frac{1}{C_L L_L}} \end{array}$$

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

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

$$\begin{aligned} & \text{Q:} \ \frac{C_L \sqrt{\frac{1}{C_L L_L}}}{2R_3 R_L g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)}{2R_3 g_m + R_5 g_m + 1} \\ & \text{wo:} \ \sqrt{\frac{1}{C_L L_L}} \\ & \text{bandwidth:} \ \frac{2R_3 g_m + R_5 g_m + 1}{C_L (R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)} \\ & \text{K-LP:} \ \frac{R_3 R_L (R_5 g_m - 1)}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ & \text{K-HP:} \ \frac{R_3 R_L (R_5 g_m - 1)}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ & \text{K-BP:} \ \frac{R_3 (R_5 g_m - 1)}{2R_3 g_m + R_5 g_m + 1} \\ & \text{Qz:} \ C_L R_L \sqrt{\frac{1}{C_L L_L}} \end{aligned}$$

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

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

$$\begin{aligned} &\text{Q: } \frac{L_5 g_m \sqrt{\frac{1}{C_5 L_5}} (R_3 + R_L)}{2 R_3 R_L g_m + R_3 + R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_5 L_5}} \\ &\text{bandwidth: } \frac{2 R_3 R_L g_m + R_3 + R_L}{L_5 g_m (R_3 + R_L)} \\ &\text{K-LP: } \frac{R_3 R_L}{R_3 + R_L} \\ &\text{K-HP: } \frac{R_3 R_L}{R_3 + R_L} \\ &\text{K-BP: } -\frac{R_3 R_L}{2 R_3 R_L g_m + R_3 + R_L} \\ &\text{Qz: } -L_5 g_m \sqrt{\frac{1}{C_5 L_5}} \\ &\text{Wz: } \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

6.4 GE-4
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1}, R_L\right)$$

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

$$Q: \frac{C_5\sqrt{\frac{1}{C_5L_5}}(2R_3R_Lg_m + R_3 + R_L)}{g_m(R_3 + R_L)}$$
 wo:
$$\sqrt{\frac{1}{C_5L_5}}$$
 bandwidth:
$$\frac{g_m(R_3 + R_L)}{C_5(2R_3R_Lg_m + R_3 + R_L)}$$
 K-LP:
$$-\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L}$$
 K-HP:
$$-\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L}$$
 K-BP:
$$\frac{R_3R_L}{R_3 + R_L}$$
 Qz:
$$-\frac{C_5\sqrt{\frac{1}{C_5L_5}}}{g_m}$$
 Wz:
$$\sqrt{\frac{1}{C_5L_5}}$$

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

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

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

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

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

$$\begin{aligned} &\text{Q: } \frac{C_5R_5\sqrt{\frac{1}{C_5L_5}}(2R_3R_Lg_m + R_3 + R_L)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth: } \frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{C_5R_5(2R_3R_Lg_m + R_3 + R_L)} \\ &\text{K-LP: } -\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L} \\ &\text{K-HP: } -\frac{R_3R_L}{2R_3R_Lg_m + R_3 + R_L} \\ &\text{K-BP: } \frac{R_3R_L}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ &\text{Qz: } -\frac{C_5R_5\sqrt{\frac{1}{C_5L_5}}}{R_5g_m - 1} \end{aligned}$$

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

6.7 GE-7
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1} + R_5, R_L\right)$$

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

$$\begin{aligned} & \text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)}{g_m(R_3 + R_L)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth:} \ \frac{g_m(R_3 + R_L)}{C_5(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)} \\ & \text{K-LP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ & \text{K-HP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ & \text{K-BP:} \ \frac{R_3R_L}{R_3 + R_L} \\ & \text{Qz:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_5g_m - 1)}{g_m} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

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

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

$$\begin{aligned} &\text{Q:} \ \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)}{R_5(2R_3R_Lg_m + R_3 + R_L)} \\ &\text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth:} \ \frac{R_5(2R_3R_Lg_m + R_3 + R_L)}{L_5(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)} \\ &\text{K-LP:} \ \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \end{aligned}$$

$$\begin{aligned} & \text{K-HP: } \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ & \text{K-BP: } -\frac{R_3R_L}{2R_3R_Lg_m+R_3+R_L} \\ & \text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}(-R_5g_m+1)}}{R_5} \\ & \text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

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

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

$$\begin{aligned} &\text{Q: } \frac{L_3\sqrt{\frac{1}{C_3L_3}}(R_5g_m + 2R_Lg_m + 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ &\text{wo: } \sqrt{\frac{1}{C_3L_3}} \\ &\text{bandwidth: } \frac{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}{L_3(R_5g_m + 2R_Lg_m + 1)} \\ &\text{K-LP: } \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ &\text{K-HP: } \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ &\text{K-BP: } \frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L} \\ &\text{Qz: } \frac{L_3\sqrt{\frac{1}{C_3L_3}}}{R_3} \\ &\text{Wz: } \sqrt{\frac{1}{C_3L_3}} \end{aligned}$$

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

$$H(s) = \frac{R_L \left(R_5 g_m - 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 L_3 R_3 R_5 g_m s^2 + 2 C_3 L_3 R_3 R_L g_m s^2 + C_3 L_3 R_5 R_L g_m s^2 + C_3 L_3 R_5 g_m s^2 + 2 L_3 R_5 g_m s + 2 L_3 R_L g_m s + L_3 s + R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_4 R_2 R_2 g_m s^2 + 2 R_3 R_3 g_m s^2$$

Q:
$$\frac{C_3\sqrt{\frac{1}{C_3L_3}}(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}{R_5g_m+2R_Lg_m+1}$$

wo:
$$\sqrt{\frac{1}{C_3L_3}}$$
 bandwidth: $\frac{R_5g_m + 2R_Lg_m + 1}{C_3(R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L)}$ K-LP: $\frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}$ K-HP: $\frac{R_3R_L(R_5g_m - 1)}{R_3R_5g_m + 2R_3R_Lg_m + R_3 + R_5R_Lg_m + R_L}$ K-BP: $\frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1}$ Qz: $C_3R_3\sqrt{\frac{1}{C_3L_3}}$ Wz: $\sqrt{\frac{1}{C_3L_3}}$

7 AP

8 INVALID-NUMER

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

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

Q:
$$\frac{C_5C_LR_3\sqrt{\frac{g_m}{C_5C_LR_3}}}{2C_5R_3g_m+C_5+C_LR_3g_m}$$
 wo:
$$\sqrt{\frac{g_m}{C_5C_LR_3}}$$
 bandwidth:
$$\frac{2C_5R_3g_m+C_5+C_LR_3g_m}{C_5C_LR_3}$$
 K-LP: R_3 K-HP: 0 K-BP:
$$-\frac{C_5R_3}{2C_5R_3g_m+C_5+C_LR_3g_m}$$
 Qz: 0 Wz: None

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

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

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_5C_LR_3R_L\sqrt{\frac{g_m(R_3+R_L)}{C_5C_LR_3R_L}}}{2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}\\ \text{wo:} \ \sqrt{\frac{g_m(R_3+R_L)}{C_5C_LR_3R_L}}\\ \text{bandwidth:} \ \frac{2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}{C_5C_LR_3R_L}\\ \text{K-LP:} \ \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_5R_3R_L}{2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

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

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

Q:
$$\frac{C_5C_LR_3R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_5C_LR_3R_5}}}{2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}$$
 wo:
$$\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_5C_LR_3R_5}}$$
 bandwidth:
$$\frac{2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}{C_5C_LR_3R_5}$$
 K-LP:
$$\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$$
 K-HP: 0 K-BP:
$$-\frac{C_5R_3R_5}{2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}$$
 Qz: 0 Wz: None

8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_3 R_L \left(-C_5 R_5 s + R_5 g_m - 1\right)}{C_5 C_L R_3 R_5 R_L s^2 + 2 C_5 R_3 R_5 R_L g_m s + C_5 R_3 R_5 s + C_5 R_5 R_L s + C_L R_3 R_5 R_L g_m s + C_L R_3 R_L s + R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L r_2 R_3 R_2$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_5C_LR_3R_5R_L\sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_5C_LR_3R_5R_L}}}{2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L} \\ \text{wo:} \ \sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_5C_LR_3R_5R_L}} \\ \text{bandwidth:} \ \frac{2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L}{C_5C_LR_3R_5R_L} \\ \text{K-LP:} \ \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3R_5R_L}{2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L}} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_5C_LR_3\sqrt{\frac{g_m}{C_5C_LR_3(R_5g_m+1)}}(R_5g_m+1)}{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_5C_LR_3(R_5g_m+1)}} \\ \text{bandwidth:} \ \frac{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m}{C_5C_LR_3(R_5g_m+1)} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_5R_3(R_5g_m-1)}{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

$$H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m s - C_5 s + g_m \right)}{C_5 C_L R_3 R_5 R_L g_m s^2 + C_5 C_L R_3 R_L s^2 + C_5 R_3 R_5 g_m s + 2 C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_5 R_L g_m s + C_5 R_L s + C_L R_3 R_L g_m s + R_3 g_m + R_L g_m r^2 + C_5 R_3 R_1 r^2 + C_5 R_1$$

Parameters:

$$\begin{array}{c} C_5C_LR_3R_L\sqrt{\frac{g_m(R_3+R_L)}{C_5C_LR_3R_L(R_5g_m+1)}}(R_5g_m+1)\\ \text{Q: } \frac{C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L+C_LR_3R_Lg_m}{C_5C_LR_3R_L(R_5g_m+1)}\\ \text{wo: } \sqrt{\frac{g_m(R_3+R_L)}{C_5C_LR_3R_L(R_5g_m+1)}}\\ \text{bandwidth: } \frac{C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L+C_LR_3R_Lg_m}{C_5C_LR_3R_L(R_5g_m+1)}\\ \text{K-LP: } \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP: } 0\\ \text{K-BP: } \frac{C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L+C_LR_3R_Lg_m}{C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L+C_LR_3R_Lg_m}\\ \text{Qz: } 0\\ \text{Wz: None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_3C_LR_L\sqrt{\frac{g_m}{C_3C_LR_L(R_5g_m+1)}}(R_5g_m+1)}{C_3R_5g_m+C_3+C_LR_5g_m+2C_LR_Lg_m+C_L} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_m}{C_3C_LR_L(R_5g_m+1)}} \\ \text{bandwidth:} \ \frac{C_3R_5g_m+C_3+C_LR_5g_m+2C_LR_Lg_m+C_L}{C_3C_LR_L(R_5g_m+1)} \\ \text{K-LP:} \ \frac{R_5g_m-1}{2g_m} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_LR_L(R_5g_m-1)}{C_3R_5g_m+C_3+C_LR_5g_m+2C_LR_Lg_m+C_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_L}}}{C_3R_Lg_m+2C_5R_Lg_m+C_5} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_L}} \\ \text{bandwidth:} \ \frac{C_3R_Lg_m+2C_5R_Lg_m+C_5}{C_3C_5R_L} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_L}{C_3R_Lg_m+2C_5R_Lg_m+C_5} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_5R_L\sqrt{\frac{g_m}{C_5R_L(C_3+C_L)}}(C_3+C_L)}{C_3R_Lg_m+2C_5R_Lg_m+C_5+C_LR_Lg_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_5R_L(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{C_3R_Lg_m+2C_5R_Lg_m+C_5+C_LR_Lg_m}{C_5R_L(C_3+C_L)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_L}{C_3R_Lg_m+2C_5R_Lg_m+C_5+C_LR_Lg_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

Parameters:

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

$$H(s) = \frac{-C_5R_5s + R_5g_m - 1}{C_3C_5R_5s^2 + C_3R_5g_ms + C_3s + C_5C_LR_5s^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_Ls + 2g_m}$$

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_5R_5\sqrt{\frac{g_m}{C_5R_5(C_3+C_L)}}(C_3+C_L)}{C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L}\\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_m}{C_5R_5(C_3+C_L)}}\\ \text{bandwidth:} \ \frac{C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L}{C_5R_5(C_3+C_L)}\\ \text{K-LP:} \ \frac{R_5g_m-1}{2g_m}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ -\frac{C_5R_5}{C_3R_5g_m+C_3+2C_5R_5g_m+C_LR_5g_m+C_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

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

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

Parameters:

$$\begin{array}{c} C_5R_5R_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_5R_5R_L(C_3+C_L)}}(C_3+C_L)}\\ \text{Q: } \frac{C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L}{C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L}\\ \text{wo: } \sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_5R_5R_L(C_3+C_L)}}\\ \text{bandwidth: } \frac{C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L}{C_5R_5R_L(C_3+C_L)}\\ \text{K-LP: } \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}\\ \text{K-HP: } 0\\ \text{K-BP: } -\frac{C_5R_5R_L}{C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L}\\ \text{Qz: } 0\\ \text{Wz: None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_3C_5R_L\sqrt{\frac{g_m}{C_3C_5R_L(R_5g_m+1)}}(R_5g_m+1)}{C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_3C_5R_L(R_5g_m+1)}} \\ \text{bandwidth:} \ \frac{C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5}{C_3C_5R_L(R_5g_m+1)} \\ \text{K-LP:} \ R_L \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_5R_L(R_5g_m-1)}{C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

Parameters:

$$\begin{aligned} &\text{Q:} & \frac{C_5 R_L \sqrt{\frac{g_m}{C_5 R_L (C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L)}} (C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L)}{C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 + C_L R_L g_m} \\ &\text{wo:} & \sqrt{\frac{g_m}{C_5 R_L (C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L)}} \\ &\text{bandwidth:} & \frac{C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 + C_L R_L g_m}{C_5 R_L (C_3 R_5 g_m + C_3 + C_L R_5 g_m + C_L)} \\ &\text{K-LP:} & R_L \\ &\text{K-HP:} & 0 \\ &\text{K-BP:} & \frac{C_5 R_L (R_5 g_m - 1)}{C_3 R_L g_m + C_5 R_5 g_m + 2 C_5 R_L g_m + C_5 + C_L R_L g_m} \\ &\text{Qz:} & 0 \\ &\text{Wz:} &\text{None} \end{aligned}$$

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

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

$$\begin{array}{c} C_3C_LR_3R_L\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_3C_LR_3R_L(R_5g_m+1)}}(R_5g_m+1) \\ \text{Q:} \ \, \frac{C_3R_3R_5g_m+C_3R_3+C_LR_3}{C_3R_3R_5g_m+C_LR_3R_5g_m+C_LR_3+C_LR_5R_Lg_m+C_LR_L} \\ \text{wo:} \ \, \sqrt{\frac{2R_3g_m+R_5g_m+1}{C_3C_LR_3R_L(R_5g_m+1)}} \\ \text{bandwidth:} \ \, \frac{C_3R_3R_5g_m+C_3R_3+C_LR_3R_5g_m+2C_LR_3R_Lg_m+C_LR_3+C_LR_5R_Lg_m+C_LR_L}{C_3C_LR_3R_L(R_5g_m+1)} \\ \text{K--LP:} \ \, \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1} \\ \text{K--HP:} \ \, 0 \\ \text{K--BP:} \ \, \frac{C_LR_3R_L(R_5g_m-1)}{C_3R_3R_5g_m+C_3R_3+C_LR_3R_5g_m+2C_LR_3R_Lg_m+C_LR_3+C_LR_5R_Lg_m+C_LR_L} \\ \text{Qz:} \ \, 0 \\ \text{Wz:} \ \, \text{None} \end{array}$$

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

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

Parameters:

Q:
$$\frac{C_3C_5R_3R_L\sqrt{\frac{g_m(R_3+R_L)}{C_3C_5R_3R_L}}}{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L}}$$
 wo:
$$\sqrt{\frac{g_m(R_3+R_L)}{C_3C_5R_3R_L}}$$
 bandwidth:
$$\frac{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L}{C_3C_5R_3R_L}$$
 K-LP:
$$\frac{R_3R_L}{R_3+R_L}$$
 K-HP: 0
K-BP:
$$-\frac{C_5R_3R_L}{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L}$$
 Qz: 0
Wz: None

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

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

$$\begin{array}{l} \text{Q:} \ \frac{C_5R_3\sqrt{\frac{g_m}{C_5R_3(C_3+C_L)}}(C_3+C_L)}{C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m} \\ \text{wo:} \ \sqrt{\frac{g_m}{C_5R_3(C_3+C_L)}} \\ \text{bandwidth:} \ \frac{C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m}{C_5R_3(C_3+C_L)} \\ \text{K-LP:} \ R_3 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ -\frac{C_5R_3}{C_3R_3g_m+2C_5R_3g_m+C_5+C_LR_3g_m} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

Parameters:

$$\begin{array}{c} C_5R_3R_L\sqrt{\frac{g_m(R_3+R_L)}{C_5R_3R_L(C_3+C_L)}}(C_3+C_L)}\\ \text{Q: } \frac{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}{C_5R_3R_L(G_3+C_L)}\\ \text{wo: } \sqrt{\frac{g_m(R_3+R_L)}{C_5R_3R_L(C_3+C_L)}}\\ \text{bandwidth: } \frac{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}{C_5R_3R_L(C_3+C_L)}\\ \text{K-LP: } \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP: 0}\\ \text{K-BP: } -\frac{C_5R_3R_L}{C_3R_3R_Lg_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_L+C_LR_3R_Lg_m}\\ \text{Qz: 0}\\ \text{Wz: None} \end{array}$$

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

$$H(s) = \frac{R_3 R_L \left(-C_5 R_5 s + R_5 g_m - 1 \right)}{C_3 C_5 R_3 R_5 R_L s^2 + C_3 R_3 R_5 R_L g_m s + C_3 R_3 R_5 R_L g_m s + C_5 R_3 R_5 s + C_5 R_3 R_5 s + C_5 R_5 R_L s + R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L r_2 R_3 R_3 r_3 R_2 r_3 R_3 R_2 r_3 R_3 r_3 R_2 r_3 R_3 R_2 r_3 R_3 R_2 r_3 R_3 R_2 r_3 r_3$$

Q:
$$\frac{C_3C_5R_3R_5R_L\sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_3C_5R_3R_5R_L}}}{C_3R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L}}$$
 wo:
$$\sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_3C_5R_3R_5R_L}}}$$
 bandwidth:
$$\frac{C_3R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L}{C_3C_5R_3R_5R_L}}$$
 K-LP:
$$\frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}}$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_3R_5R_L}{C_3R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L}}$$
 Qz:
$$0$$
 Wz: None

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

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

Parameters:

$$\begin{array}{c} C_5R_3R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_5R_3R_5(C_3+C_L)}}(C_3+C_L)\\ \text{Q:} \ \, \frac{C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}{C_5R_3R_5(C_3+C_L)}\\ \text{wo:} \ \, \sqrt{\frac{2R_3g_m+R_5g_m+1}{C_5R_3R_5(C_3+C_L)}}\\ \text{bandwidth:} \ \, \frac{C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}{C_5R_3R_5(C_3+C_L)}\\ \text{K-LP:} \ \, \frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}\\ \text{K-HP:} \ \, 0\\ \text{K-BP:} \ \, -\frac{C_5R_3R_5}{C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5+C_LR_3R_5g_m+C_LR_3}\\ \text{Qz:} \ \, 0\\ \text{Wz:} \ \, \text{None} \end{array}$$

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

$$\begin{array}{c} C_5R_3R_5R_L\sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_5R_3R_5R_L(C_3+C_L)}}(C_3+C_L)}\\ Q\colon \frac{C_5R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L}{C_5R_3R_5R_Lg_m+R_3+R_5R_Lg_m+R_L}}\\ \text{wo: }\sqrt{\frac{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}{C_5R_3R_5R_L(C_3+C_L)}}\\ \text{bandwidth: }\frac{C_3R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L}{C_5R_3R_5R_L(C_3+C_L)}\\ \text{K-LP: }\frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L}\\ \text{K-HP: }0\\ \text{K-BP: }-\frac{C_5R_3R_5R_L}{C_3R_3R_5R_Lg_m+C_3R_3R_L+2C_5R_3R_5R_Lg_m+C_5R_3R_5+C_5R_5R_L+C_LR_3R_5R_Lg_m+C_LR_3R_L}\\ \text{Qz: }0\\ \text{Wz: None} \end{array}$$

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

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

Parameters:

$$\begin{array}{c} C_3C_5R_3R_L\sqrt{\frac{g_m(R_3+R_L)}{C_3C_5R_3R_L(R_5g_m+1)}}(R_5g_m+1)\\ \text{Q:} \ \frac{C_3R_3R_Lg_m+C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L}{C_3C_5R_3R_L(R_5g_m+1)}\\ \text{wo:} \ \sqrt{\frac{g_m(R_3+R_L)}{C_3C_5R_3R_L(R_5g_m+1)}}\\ \text{bandwidth:} \ \frac{C_3R_3R_Lg_m+C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L}{C_3C_5R_3R_L(R_5g_m+1)}\\ \text{K-LP:} \ \frac{R_3R_L}{R_3+R_L}\\ \text{K-HP:} \ 0\\ \text{K-BP:} \ \frac{C_5R_3R_L(R_5g_m-1)}{C_3R_3R_Lg_m+C_5R_3R_5g_m+2C_5R_3R_Lg_m+C_5R_3+C_5R_5R_Lg_m+C_5R_L}\\ \text{Qz:} \ 0\\ \text{Wz:} \ \text{None} \end{array}$$

8.23 INVALID-NUMER-23 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

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

$$\begin{array}{l} \text{Q:} & \frac{C_5R_3\sqrt{\frac{g_m}{C_5R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}}(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}{C_3R_3g_m+C_5R_5g_m+C_5R_5}g_m+C_5+C_LR_3g_m} \\ \text{wo:} & \sqrt{\frac{g_m}{C_5R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)}} \\ \text{bandwidth:} & \frac{G_3R_3g_m+2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m}{C_5R_3(C_3R_5g_m+C_3+C_LR_5g_m+C_L)} \\ \text{K-LP:} & R_3 \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{C_5R_3(R_5g_m-1)}{C_3R_3g_m+2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

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

 $H(s) = \frac{R_3 R_L \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_3 R_L g_m s + C_5 C_L R_3 R_5 R_L g_m s^2 + C_5 C_L R_3 R_5 g_m s + 2 C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_5 R_L g_m s + C_5 R_1 g_m s + C_5 R_2 g_m s + C_5 R_2 g_m s + C_5 R_3 g_m s + C_5 R_3$

Parameters:

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

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

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}C_3C_LR_3\sqrt{\frac{g_m}{C_3C_LR_3(R_5g_m+1)}}(R_5g_m+1)}{2C_3R_3g_m+C_3R_5g_m+C_3+C_LR_5g_m+C_L} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_m}{C_3C_LR_3(R_5g_m+1)}} \\ \text{bandwidth:} \ \frac{2C_3R_3g_m+C_3R_5g_m+C_3+C_LR_5g_m+C_L}{C_3C_LR_3(R_5g_m+1)} \\ \text{K-LP:} \ \frac{R_5g_m-1}{2g_m} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_3R_3(R_5g_m-1)}{2C_3R_3g_m+C_3R_5g_m+C_3+C_LR_5g_m+C_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

Parameters:

 $Q\colon \frac{C_3C_LR_3R_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_3C_LR_3R_L(R_5g_m+1)}}(R_5g_m+1)}{C_3R_3R_5g_m+2C_3R_3R_Lg_m+C_3R_3+C_3R_5R_Lg_m+C_3R_L+C_LR_5R_Lg_m+C_LR_L}$ wo: $\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_3C_LR_3R_L(R_5g_m+1)}}$ bandwidth: $\frac{C_3R_3R_5g_m+2C_3R_3R_Lg_m+C_3R_3+C_3R_5R_Lg_m+C_3R_L+C_LR_5R_Lg_m+C_LR_L}{C_3C_LR_3R_L(R_5g_m+1)}$ K-LP: $\frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}$ K-HP: 0 K-BP: $\frac{C_3R_3R_5g_m+2C_3R_3R_Lg_m+C_3R_2+C_LR_5R_Lg_m+C_3R_L+C_LR_5R_Lg_m+C_LR_L}{C_3R_3R_L(R_5g_m-1)}$ Qz: 0 Wz: None

9 INVALID-WZ

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

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

$$\begin{aligned} &\text{Q:} \ \frac{C_5C_L\sqrt{\frac{g_m}{C_5C_L(2R_3R_Lg_m+R_3+R_L)}}(2R_3R_Lg_m+R_3+R_L)}{2C_5R_3g_m+C_5+C_LR_3g_m+C_LR_Lg_m} \\ &\text{wo:} \ \sqrt{\frac{g_m}{C_5C_L(2R_3R_Lg_m+R_3+R_L)}} \\ &\text{bandwidth:} \ \frac{2C_5R_3g_m+C_5+C_LR_3g_m+C_LR_Lg_m}{C_5C_L(2R_3R_Lg_m+R_3+R_L)} \\ &\text{K-LP:} \ R_3 \\ &\text{K-HP:} \ -\frac{R_3R_L}{2R_3R_Lg_m+R_3+R_L} \\ &\text{K-BP:} \ \frac{R_3(-C_5+C_LR_Lg_m)}{2C_5R_3g_m+C_5+C_LR_3g_m+C_LR_Lg_m} \end{aligned}$$

Qz:
$$\frac{C_5 C_L R_L \sqrt{\frac{g_m}{C_5 C_L (2R_3 R_L g_m + R_3 + R_L)}}}{C_5 - C_L R_L g_m}$$
Wz:
$$\sqrt{-\frac{g_m}{C_5 C_L R_L}}$$

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

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

Parameters:

$$Q \colon \frac{C_5 C_L R_5 \sqrt{\frac{2 R_3 g_m + R_5 g_m + 1}{C_5 C_L R_5 (2 R_3 R_L g_m + R_3 + R_L)}} (2 R_3 R_L g_m + R_3 + R_L)}{2 C_5 R_3 R_5 g_m + C_5 R_5 + C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L}$$

$$W0 \colon \sqrt{\frac{2 R_3 g_m + R_5 g_m + 1}{C_5 C_L R_5 (2 R_3 R_L g_m + R_3 + R_L)}}$$

$$\text{bandwidth: } \frac{2 C_5 R_3 R_5 g_m + C_5 R_5 + C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L}{C_5 C_L R_5 (2 R_3 R_L g_m + R_3 + R_L)}$$

$$\text{K-LP: } \frac{R_3 (R_5 g_m - 1)}{2 R_3 g_m + R_5 g_m + 1}$$

$$\text{K-HP: } -\frac{R_3 R_L}{2 R_3 R_L g_m + R_3 + R_L}$$

$$\text{K-BP: } \frac{R_3 (-C_5 R_5 + C_L R_5 R_L g_m - C_L R_L)}{2 C_5 R_3 R_5 g_m + C_5 R_5 + C_L R_3 R_5 g_m + 2 C_L R_3 R_L g_m + C_L R_3 + C_L R_5 R_L g_m + C_L R_L}$$

$$\text{Qz: } \frac{C_5 C_L R_5 R_L \sqrt{\frac{2 R_3 g_m + R_5 g_m + 1}{C_5 C_L R_5 (2 R_3 R_L g_m + R_3 + R_L)}}}{C_5 R_5 C_L R_5 R_L g_m + C_L R_L}$$

$$\text{Wz: } \sqrt{\frac{-R_5 g_m + 1}{C_5 C_L R_5 R_L}}$$

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

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 R_5 g_m s - C_5 s + g_m \right)}{C_5 C_L R_3 R_5 g_m s^2 + 2 C_5 C_L R_3 R_L g_m s^2 + C_5 C_L R_3 s^2 + C_5 C_L R_5 R_L g_m s^2 + C_5 C_L R_1 s^2 + 2 C_5 R_3 g_m s + C_5 R_5 g_m s + C_$$

$$Q \colon \frac{C_5C_L\sqrt{\frac{g_m}{C_5C_L(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}}(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}{2C_5R_3g_m+C_5R_5g_m+C_5+C_L}R_3g_m+C_LR_Lg_m} \\ \text{Wo: } \sqrt{\frac{g_m}{C_5C_L(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}} \\ \\ \text{bandwidth: } \frac{2C_5R_3g_m+C_5R_5g_m+C_5+C_LR_3g_m+C_LR_Lg_m}{C_5C_L(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)} \\ \\$$

$$\begin{aligned} & \text{K-LP: } R_3 \\ & \text{K-HP: } \frac{R_3 R_L (R_5 g_m - 1)}{R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L} \\ & \text{K-BP: } \frac{R_3 (C_5 R_5 g_m - C_5 + C_L R_L g_m)}{2 C_5 R_3 g_m + C_5 R_5 g_m + C_5 + C_L R_3 g_m + C_L R_L g_m} \\ & \text{Qz: } \frac{C_5 C_L R_L \sqrt{\frac{g_m}{C_5 C_L (R_3 R_5 g_m + 2 R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L)}} (R_5 g_m - 1)}{C_5 R_5 g_m - C_5 + C_L R_L g_m} \\ & \text{Wz: } \sqrt{\frac{g_m}{C_5 C_L R_L (R_5 g_m - 1)}} \end{aligned}$$

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

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

Parameters:

$$Q: \frac{\sqrt{2}C_{3}C_{L}\sqrt{\frac{g_{m}}{C_{3}C_{L}(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})}}}{2C_{3}R_{3}g_{m}+C_{3}R_{5}g_{m}+2C_{L}R_{5}g_{m}+2C_{L}R_{L}g_{m}+C_{L}}} (R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})} \\ wo: \sqrt{2}\sqrt{\frac{g_{m}}{C_{3}C_{L}(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})}} \\ bandwidth: \frac{2C_{3}R_{3}g_{m}+C_{3}R_{5}g_{m}+2C_{L}R_{5}g_{m}+2C_{L}R_{L}g_{m}+C_{L}}{C_{3}C_{L}(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})} \\ K-LP: \frac{R_{5}g_{m}-1}{2g_{m}} \\ K-HP: \frac{R_{3}R_{L}(R_{5}g_{m}-1)}{R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L}} \\ K-BP: \frac{C_{3}R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+C_{L}R_{L}}{2C_{3}R_{3}g_{m}+C_{3}R_{5}g_{m}+C_{3}R_{5}R_{L}g_{m}+C_{L}R_{L}g_{m}+C_{L}} \\ Qz: \frac{\sqrt{2}C_{3}C_{L}R_{3}R_{L}}{C_{3}C_{L}(R_{3}R_{5}g_{m}+2R_{3}R_{L}g_{m}+R_{3}+R_{5}R_{L}g_{m}+R_{L})} \\ Wz: \sqrt{\frac{1}{C_{3}C_{L}R_{3}R_{L}}} \\ \end{aligned}$$

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

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

Q:
$$\frac{C_3C_5\sqrt{\frac{g_m}{C_3C_5(2R_3R_Lg_m+R_3+R_L)}}(2R_3R_Lg_m+R_3+R_L)}{C_3R_3g_m+C_3R_Lg_m+2C_5R_Lg_m+C_5}$$

$$\begin{array}{l} \text{wo: } \sqrt{\frac{g_m}{C_3C_5(2R_3R_Lg_m+R_3+R_L)}} \\ \text{bandwidth: } \frac{C_3R_3g_m+C_3R_Lg_m+2C_5R_Lg_m+C_5}{C_3C_5(2R_3R_Lg_m+R_3+R_L)} \\ \text{K-LP: } R_L \\ \text{K-HP: } -\frac{R_3R_L}{2R_3R_Lg_m+R_3+R_L} \\ \text{K-BP: } \frac{R_L(C_3R_3g_m-C_5)}{C_3R_3g_m+C_3R_Lg_m+2C_5R_Lg_m+C_5} \\ \text{Qz: } -\frac{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5(2R_3R_Lg_m+R_3+R_L)}}}{C_3R_3g_m-C_5} \\ \text{Wz: } \sqrt{-\frac{g_m}{C_3C_5R_3}} \end{array}$$

9.6 INVALID-WZ-6 $Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

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

$$\begin{array}{l} Q\colon \frac{C_3C_5R_5\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_3C_5R_5(2R_3R_Lg_m+R_3+R_L)}}(2R_3R_Lg_m+R_3+R_L)}{C_3R_3R_5g_m+2C_3R_3R_Lg_m+C_3R_3+C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5}\\ \text{wo: } \sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_3C_5R_5(2R_3R_Lg_m+R_3+R_L)}}\\ \text{bandwidth: } \frac{C_3R_3R_5g_m+2C_3R_3R_Lg_m+C_3R_3+C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5}{C_3C_5R_5(2R_3R_Lg_m+R_3+R_L)}\\ \text{K-LP: } \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}\\ \text{K-HP: } -\frac{R_3R_L}{2R_3R_Lg_m+R_3+R_L}\\ \text{K-BP: } \frac{R_L(C_3R_3R_5g_m-C_3R_3-C_5R_5)}{C_3R_5g_m+2C_3R_3R_Lg_m+C_3R_3+C_3R_5R_Lg_m+C_3R_L+2C_5R_5R_Lg_m+C_5R_5}\\ \text{Qz: } \frac{C_3C_5R_3R_5\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_3C_5R_5(2R_3R_Lg_m+R_3+R_L)}}}{-C_3R_3R_5g_m+C_3R_3+C_5R_5}\\ \text{Wz: } \sqrt{\frac{-R_5g_m+1}{C_3C_5R_3R_5}}\\ \end{array}$$

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

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

Parameters:

$$\begin{array}{l} \mathbf{Q}: \frac{C_3C_5\sqrt{\frac{g_m}{C_3C_5(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}}(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}{C_3R_3g_m+C_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \mathbf{wo}: \frac{g_m}{\sqrt{\frac{G_3C_5(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}}}\\ \mathbf{bandwidth}: \frac{C_3R_3g_m+2R_3R_Lg_m+C_5R_5g_m+2C_5R_Lg_m+C_5}{C_3C_5(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)} \\ \mathbf{K-LP}: R_L \\ \mathbf{K-HP}: \frac{R_3R_L(R_5g_m-1)}{R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L} \\ \mathbf{K-BP}: \frac{R_L(C_3R_3g_m+C_5R_5g_m-C_5)}{C_3R_3g_m+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \mathbf{Qz}: \frac{C_3C_5R_3\sqrt{\frac{g_m}{C_3C_5(R_3R_5g_m+2R_3R_Lg_m+R_3+R_5R_Lg_m+R_L)}}(R_5g_m-1)}{C_3R_3g_m+C_5R_5g_m-C_5} \\ \mathbf{Wz}: \sqrt{\frac{g_m}{C_3C_5R_3(R_5g_m-1)}} \end{array}$$

10 INVALID-ORDER

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

$$H(s) = \frac{R_3 R_L (R_5 g_m - 1)}{R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}$$

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

$$H(s) = \frac{R_3 (R_5 g_m - 1)}{C_L R_3 R_5 g_m s + C_L R_3 s + 2R_3 g_m + R_5 g_m + 1}$$

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

$$H(s) = \frac{R_3 R_L (R_5 g_m - 1)}{C_L R_3 R_5 R_L g_m s + C_L R_3 R_L s + R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = -\frac{R_3 \left(C_5 s - g_m\right) \left(C_L L_L R_L s^2 + L_L s + R_L\right)}{2C_5 C_L L_L R_3 R_L g_m s^3 + C_5 C_L L_L R_3 s^3 + C_5 C_L L_L R_3 s^3 + 2C_5 L_L R_3 g_m s^2 + C_5 L_L s^2 + 2C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_L s + C_L L_L R_3 g_m s^2 + C_L L_L R_1 g_m s^2 + L_L g_m s + R_3 g_m s^2 + C_2 R_3 R_L g_m s + C_3 R_2 g_m s^2 + C_4 R_3 R_2 g_m s^2 + C_5 R_3 R_3 g_m s^2$$

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

$$H(s) = -\frac{R_3 R_L \left(C_5 s - g_m\right) \left(C_L L_L s^2 + 1\right)}{2 C_5 C_L L_L R_3 R_L g_m s^3 + C_5 C_L L_L R_3 s^3 + C_5 C_L L_L R_2 s^3 + C_5 C_L R_3 R_L s^2 + 2 C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_L s + C_L L_L R_3 g_m s^2 + C_L L_L R_3 g_m s^2 + C_L R_3 R_L g_m s + R_3 g_m + R_3 g_m + R_3 g_m s^2 + C_4 R_3 R_L g_m s^2 + C_5 R_3 R$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{L_L R_3 R_L s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_5 C_L L_L R_3 R_5 g_m s^3 + C_5 C_L L_L R_3 R_L s^3 + C_5 L_L R_3 R_L g_m s^2 + C_5 L_L R_3 s^2 + C_5 L_L R_5 R_L g_m s^2 + C_5 L_L R_1 s^2 + C_5 R_3 R_5 R_L g_m s + C_5 R_3 R_L s + C_L L_L R_3 R_L s + C_L$$

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

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

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

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

10.26 INVALID-ORDER-26
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

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

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

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

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

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

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

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

$$H(s) = \frac{L_L R_3 s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_5 C_L L_5 L_L R_3 g_m s^4 + C_5 C_L L_L R_3 s^3 + C_5 L_5 L_1 g_m s^3 + C_5 L_5 R_3 g_m s^2 + 2 C_5 L_L R_3 g_m s^2 + C_5 L_L s^2 + C_5 R_3 s + C_L L_L R_3 g_m s^2 + L_L g_m s + R_3 g_m s^2 + C_5 R_3 g_m s^$$

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

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

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

$$H(s) = \frac{L_L R_3 R_L s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_5 C_L L_5 L_L R_3 R_L g^3 + C_5 L_5 L_L R_3 g_m s^3 + C_5 L_5 L_L R_4 g_m s^3 + C_5 L_5 R_3 R_L g_m s^2 + 2 C_5 L_L R_3 R_L g_m s^2 + C_5 L_L R_3 s^2 + C_5 L_L R_4 s^2 + C_5 R_3 R_L s + C_L L_L R_3 r_L g_m s^2 + C_5 R_3 r_L$$

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

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

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

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + 1\right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_5 C_L L_5 L_L R_3 g_m s^4 + C_5 C_L L_5 R_3 R_L g_m s^3 + 2 C_5 C_L L_L R_3 R_L g_m s^3 + C_5 C_L L_L R_3 s^3 + C_5 C_L L_L R_L s^3 + C_5 C_L R_3 R_L s^2 + C_5 L_5 R_3 g_m s^2 + C_5 L_5 R_1 g_m s^2 - C_5 R_3 R_L s^2 + C_5 R_$$

10.35 INVALID-ORDER-35
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)$$

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

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

$$H(s) = \frac{R_3 R_L \left(-C_5 L_5 s^2 + L_5 g_m s - 1 \right)}{C_5 C_L L_5 R_3 R_L s^3 + 2 C_5 L_5 R_3 R_L g_m s^2 + C_5 L_5 R_3 s^2 + C_5 L_5 R_1 s^2 + C_L L_5 R_3 R_L g_m s^2 + C_L R_3 R_L s + L_5 R_3 g_m s + L_5 R_L g_m s + 2 R_3 R_L g_m + R_3 + R_L g_m s^2 + C_4 R_3 R_L g_m s^2 + C_5 R_3 R$$

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

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

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

$$H(s) = -\frac{R_3 \left(C_L L_L s^2 + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_5 C_L L_5 L_L R_3 g_m s^4 + C_5 C_L L_5 L_L s^4 + C_5 C_L L_5 R_3 g_m s^2 + C_5 L_5 s^2 + C_L L_5 L_L g_m s^3 + C_L L_5 R_3 g_m s^2 + 2 C_L L_L R_3 g_m s^2 + C_L L_L s^2 + C_L R_3 s + L_5 g_m s + 2 R_3 g_m s^2 + C_2 R_3 g_m s^2 + C_2 R_3 g_m s^2 + C_3 R_3 g_m s^2$$

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

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

10.40 INVALID-ORDER-40
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

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

$$H(s) = \frac{L_L R_3 R_L s \left(-C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_5 C_L L_5 L_L R_3 R_L s^4 + 2 C_5 L_5 L_L R_3 R_L g_m s^3 + C_5 L_5 L_L R_3 s^3 + C_5 L_5 L_L R_1 s^3 + C_5 L_5 R_3 R_L s^2 + C_L L_5 L_L R_3 R_L g_m s^3 + C_L L_L R_3 R_L s^2 + L_5 L_L R_3 g_m s^2 + L_5$$

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

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

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

$$H(s) = -\frac{R_3 R_L \left(C_L L_L s^2 + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_5 C_L L_5 L_L R_3 R_L g_m s^4 + C_5 C_L L_5 L_L R_3 s^4 + C_5 C_L L_5 L_L R_1 s^4 + C_5 C_L L_5 R_3 R_L s^3 + 2 C_5 L_5 R_3 R_L g_m s^2 + C_5 L_5 R_3 s^2 + C_5 L_5 R_L s^2 + C_L L_5 L_L R_3 g_m s^3 + C$$

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

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

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

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

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

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

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

10.48 INVALID-ORDER-48
$$Z(s) = \left(\infty, \infty, R_3, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

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

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + C_L R_L s + 1 \right) \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + C_5 C_L L_5 R_1 g_m s^3 + C_5 C_L L_5 R_2 g_m s^3 + C_5 C_L L_2 R_3 g_m s^3 + C_5 C_L R_3 R_5 g_m s^3 + C_5 C_L R_5 g_m s^3 + C_5 C_L$$

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

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

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

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

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

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

$$H(s) = \frac{R_3 R_L \left(C_L L_L s^2 + C_5 C_L L_L R_3 g_m s^4 + C_5 C_L L_L R_2 g_m s^4 + C_5 C_L L_L R_3 R_L g_m s^3 + C_5 C_L$$

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

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

10.54 INVALID-ORDER-54
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.55 INVALID-ORDER-55
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

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

10.56 INVALID-ORDER-56
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

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

10.57 INVALID-ORDER-57
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.58 INVALID-ORDER-58
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_5C_LL_5L_LR_3R_5g_ms^4 + C_5C_LL_5L_LR_5s^4 + 2C_5C_LL_5R_3R_5R_Lg_ms^3 + C_5C_LL_5R_3R_5s^3 + C_5C_LL_5R_3R_5s^3 + 2C_5L_5R_3R_5g_ms^2 + C_5L_5R_3s^2 + 2C_LL_5L_LR_3g_ms^3 + C_LL_5R_3R_5g_ms^3 + C_5C_LL_5R_3R_5g_ms^3 + C_5C_LL_5R_5g_ms^3 + C_5C_$$

10.59 INVALID-ORDER-59
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.60 INVALID-ORDER-60
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.61 INVALID-ORDER-61
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.62 INVALID-ORDER-62
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_{5s}}{C_5L_{5s}^2+1} + R_5, \frac{1}{C_{Ls}}\right)$$

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

10.63 INVALID-ORDER-63
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.64 INVALID-ORDER-64
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.65 INVALID-ORDER-65
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.66 INVALID-ORDER-66 $Z(s) = \left(\infty, \infty, R_3, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

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

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

$$H(s) = \frac{L_L R_3 R_5}{C_5 C_L L_5 L_L R_3 R_5 R_L g_m s^4 + C_5 C_L L_5 L_L R_3 R_L s^4 + C_5 L_5 L_L R_3 R_5 g_m s^3 + 2 C_5 L_5 L_L R_3 R_L g_m s^3 + C_5 L_5 L_L R_3 s^3 + C_5 L_5 L_L R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_3 R_5 R_L g_m s^3 + C_5 L_5 L_L R_5 R_L g_m s^3 + C_$$

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

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

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

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

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

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

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

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

10.73 INVALID-ORDER-73
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$$

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

10.74 INVALID-ORDER-74
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

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

10.75 INVALID-ORDER-75
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

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

$$H(s) = -\frac{1}{2C_5C_LL_5L_LR_3g_ms^4 + C_5C_LL_5L_LR_5g_ms^4 + C_5C_LL_5L_Ls^4 + C_5C_LL_5R_3R_5g_ms^3 + 2C_5C_LL_5R_3R_Lg_ms^3 + C_5C_LL_5R_3s^3 + C_5C_LL_5R_5R_Lg_ms^3 + C_5C_LL_5R_Ls^3 + C$$

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

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

10.78 INVALID-ORDER-78
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{C_5C_LL_5L_LR_3R_5g_ms^4 + 2C_5C_LL_5L_LR_3R_Lg_ms^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_5R_Lg_ms^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_RR_3s^4 + C_5C_LL_5L_RR_3s^$$

10.79 INVALID-ORDER-79
$$Z(s) = \left(\infty, \infty, R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_5C_LL_5L_LR_3R_5g_ms^4 + 2C_5C_LL_5L_LR_3R_Lg_ms^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_LR_5R_Lg_ms^4 + C_5C_LL_5L_LR_4s^4 + C_5C_LL_5R_3R_5R_Lg_ms^3 + C_5C_LL_5R_3R_Lg_ms^4 + C_5C_LL_5L_LR_3s^4 + C_5C_LL_5L_RR_3s^4 + C_5C_LL_$$

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

$$H(s) = \frac{R_L (R_5 g_m - 1)}{C_3 R_5 R_L g_m s + C_3 R_L s + R_5 g_m + 2 R_L g_m + 1}$$

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

$$H(s) = \frac{R_5 g_m - 1}{C_3 R_5 g_m s + C_3 s + C_L R_5 g_m s + C_L s + 2g_m}$$

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

$$H(s) = \frac{R_L (R_5 g_m - 1)}{C_3 R_5 R_L g_m s + C_3 R_L s + C_L R_5 R_L g_m s + C_L R_L s + R_5 g_m + 2R_L g_m + 1}$$

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

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

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

$$H(s) = \frac{(R_5g_m - 1)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{C_3C_LL_LR_5g_ms^3 + C_3C_LL_Ls^3 + C_3C_LR_5g_ms^2 + C_3C_LR_Ls^2 + C_3R_5g_ms + C_3s + 2C_LL_Lg_ms^2 + C_LR_5g_ms + 2C_LR_Lg_ms + C_Ls + 2g_ms^2 + C_LR_5g_ms + 2C_LR_5g_ms + 2C_LR_5g_ms$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{L_L R_L s \left(-C_5 s + g_m\right)}{C_3 C_5 L_L R_L s^3 + C_3 L_L R_L g_m s^2 + C_5 C_L L_L R_L s^3 + 2 C_5 L_L R_L g_m s^2 + C_5 L_L s^2 + C_5 R_L s + C_L L_L R_L g_m s^2 + L_L g_m s + R_L g_m s^2 + C_5 R_L s + C_4 R_L R_L g_m s^2 + C_5 R_L s + C_5 R_L s$$

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

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

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

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

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

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

$$H(s) = -\frac{\left(C_L L_L s^2 + 1\right) \left(C_5 R_5 s - R_5 g_m + 1\right)}{C_3 C_5 C_L L_L R_5 s^4 + C_3 C_5 R_5 s^2 + C_3 C_L L_L R_5 g_m s^3 + C_3 C_L L_L R_5 g_m s + C_4 S_5 R_5 g_m s + C_5 C_L L_L R_5 g_m s^3 + C_5 C_L R_5 s^2 + 2 C_5 R_5 g_m s + 2 C_L L_L g_m s^2 + C_L R_5 g_m s + C_L s + 2 g_m s^2 + C_L R_5 g_m s + C_L R_5 g$$

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

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

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

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

10.99 INVALID-ORDER-99
$$Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s}, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.100 INVALID-ORDER-100
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.101 INVALID-ORDER-101
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.102 INVALID-ORDER-102
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.103 INVALID-ORDER-103
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.104 INVALID-ORDER-104
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.105 INVALID-ORDER-105
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.106 INVALID-ORDER-106
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.107 INVALID-ORDER-107
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{\left(C_5L_5g_ms^2 - C_5s + g_m\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{C_3C_5C_LL_5L_LR_Lg_ms^5 + C_3C_5L_LL_RL_S^4 + C_3C_5L_5L_Lg_ms^4 + C_3C_5L_5R_Lg_ms^3 + C_3C_5L_Ls^3 + C_3C_5L_LL_RL_g_ms^3 + C_3L_Lg_ms^2 + C_3R_Lg_ms + C_5C_LL_5L_Lg_ms^3 + C_3C_5L_Ls^3 +$$

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

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

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

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

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

$$H(s) = \frac{-C_5L_5s^2 + L_5g_ms - 1}{C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3s + C_5C_LL_5s^3 + 2C_5L_5g_ms^2 + C_LL_5g_ms^2 + C_Ls + 2g_m}$$

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

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

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

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

10.124 INVALID-ORDER-124
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

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

10.125 INVALID-ORDER-125
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.126 INVALID-ORDER-126
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_5L_5s^2 - L_5g_ms + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_Ls^4 + C_3C_5L_5S^3 + C_3C_LL_5L_Lg_ms^4 + C_3C_LL_5R_Lg_ms^3 + C_3C_LL_Ls^3 + C_3C_LR_Ls^2 + C_3L_5g_ms^2 + C_3s + 2C_5C_LL_5L_Lg_ms^4 + 2C_5C_LL_5R_Lg_ms^3 + C_3C_LL_5S^3 + C_3C_LL_5C_LL_5S^3 + C_3C_LL_5C$$

10.127 INVALID-ORDER-127
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.128 INVALID-ORDER-128
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{\left(C_5L_5s^2 - L_5g_ms + 1\right)\left(C_LL_LR_Ls^2 + L_5L_LR_Ls^3 + C_3C_LL_5L_LR_Ls^3 + C_3L_5L_LR_Ls^3 + C_3L_5L_LR$$

10.129 INVALID-ORDER-129
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.130 INVALID-ORDER-130
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

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

10.131 INVALID-ORDER-131
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.132 INVALID-ORDER-132
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.133 INVALID-ORDER-133
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

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

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

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

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

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

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

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

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

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

10.139 INVALID-ORDER-139
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

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

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

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

$$H(s) = \frac{-C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5}{C_3C_5L_5R_5s^3 + C_3L_5R_5g_ms^2 + C_3L_5s^2 + C_3R_5s + C_5C_LL_5R_5s^3 + 2C_5L_5R_5g_ms^2 + C_LL_5R_5g_ms^2 + C_LL_5s^2 + C_LR_5s + 2L_5g_ms + 2R_5g_ms^2 + C_LL_5R_5g_ms^2 + C_LL_5g_ms^2 + C_$$

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

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

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

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

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

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5R_5R_Ls^4 + C_3C_5L_5R_5s^3 + C_3C_LL_5L_LR_5g_ms^4 + C_3C_LL_5L_Ls^4 + C_3C_LL_5R_5R_Lg_ms^3 + C_3C_LL_5R_Ls^3 + C_3C_LL_5R_5s^3 + C_3C_LL_5$$

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5L_5L_LR_5s^4 + C_3C_5L_5R_Ls^3 + C_3C_LL_5L_LR_5R_Lg_ms^4 + C_3C_LL_5L_LR_5s^4 + C_3C_LL_LR_5R_Ls^3 + C_3L_5L_LR_5g_ms^3 + C_3L_5L_Ls^3 +$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5L_5R_5R_Ls^3 + C_3C_LL_5L_LR_5R_Lg_ms^4 + C_3C_LL_5L_LR_5s^4 + C_3C_LL_LR_5R_Ls^3 + C_3L_5R_5R_Lg_ms^2 + C_3L_5R_Ls^2 + C_3R_5R_Ls^3 + C_3C_LL_5L_LR_5R_Ls^3 + C_3C_LL_5L_5R_Ls^3 + C_3C_LL_5L_5R_Ls^3 + C_3C_LL_5L_5R_Ls^3 +$$

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

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

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

$$H(s) = \frac{C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3R_5g_ms + C_3s + C_5C_LL_5R_5g_ms^3 + C_5C_LL_5s^3 + 2C_5L_5g_ms^2 + C_LL_5g_ms^2 + C_LR_5g_ms + C_Ls + 2g_ms^2 + C_LS_5g_ms^2 +$$

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

$$H(s) = \frac{R_L \left(C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1 \right)}{C_3 C_5 L_5 R_5 R_L g_m s^3 + C_3 C_5 L_5 R_L g_m s^2 + C_3 R_5 R_L g_m s + C_3 R_L s + C_5 C_L L_5 R_L g_m s^3 + C_5 C_L L_5 R_L s^3 + C_5 L_5 R_5 g_m s^2 + 2 C_5 L_5 R_L g_m s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 R_5 R_2 g_m s^$$

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

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

10.154 INVALID-ORDER-154
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.155 INVALID-ORDER-155
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

$$H(s) = \frac{(C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_LL_5L_Lg_ms^4 + C_3C_LL_5R_Lg_ms^3 + C_3C_LL_5R_Lg_ms^4 + C_3C_LL_5R_L$$

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

$$H(s) = \frac{L_L R_L s \left(C_5 L_5 R_5 g_m s^3 + C_3 C_5 L_5 L_L R_L s^4 + C_3 C_5 L_5 L_L R_L g_m s^3 + C_3 L_L R_L g_m s^2 + C_3 L_L R_L s^2 + C_5 C_L L_5 L_L R_5 R_L g_m s^4 + C_5 C_L L_5 L_L R_5 g_m s^3 + 2 C_5 L_5 L_L R_5 g_m s^4 + C_5 C_L L_5 L_L R_5 g_m s^4 + C_5 C_L L_5 L_L R_5 g_m s^3 + 2 C_5 L_5 L_L R_5 g_m s^4 + C_5 C_L L_5 L_L R_5 g_m s^5 + C_5 C_L L_5 L_5 R_5 g_m s^5 + C_5 C_L L_5 R_5 g_m s^5 + C_5 C$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5L_LL_5L_LR_Ls^5 + C_3C_5L_5L_LR_5g_ms^4 + C_3C_5L_5L_Ls^4 + C_3C_5L_5R_Lg_ms^3 + C_3C_5L_5R_Ls^3 + C_3C_LL_5L_LR_Lg_ms^4 + C_3C_LL_LR_5R_Lg_ms^3 + C_3C_LL_5L_LR_Lg_ms^4 + C_3C_LL_LR_Lg_ms^4 + C_3C_LL_LR_Lg_ms^4$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5L_LL_6L_RL_5s^5 + C_3C_5L_5R_5R_Lg_ms^3 + C_3C_5L_5R_Ls^3 + C_3C_LL_5L_LR_Lg_ms^4 + C_3C_LL_LR_5R_Lg_ms^3 + C_3C_LL_LR_Ls^3 + C_3L_5R_Lg_ms^2 + C_3R_5R_Lg_ms^3 + C_3C_LL_LR_Ls^3 + C_3C_LL_LR_Ls^3$$

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

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

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

$$H(s) = \frac{C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1}{C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5R_5s^2 + C_3R_5g_ms + C_3s + C_5C_LL_5R_5g_ms^3 + C_5C_LL_5s^3 + C$$

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

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

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

$$H(s) = -\frac{(C_L R_L s + 1) \left(-C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + C_5 L_5 s^2 + C_5 L_5 s^2 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + C_5 L_5 R_5 g_m s^2 + C$$

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

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

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_5C_LL_LR_5s^4 + C_3C_5C_LR_5R_Ls^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5R_5s^2}{C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_5C_LL_LR_5s^4 + C_3C_5C_LR_5R_Ls^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5C_LL_5R_5s^4 + C_3C_5C_LL_5R_5s^2 + C_3C_5C_LL_5R_5c$$

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

$$H(s) = \frac{L_L R_L s \left(C_5 + C_5 C_6 L_5 L_L R_5 R_L g_m s^4 + C_3 C_5 L_5 L_L R_5 R_L s^3 + C_3 L_L R_5 R_L g_m s^2 + C_3 L_L R_5 R_L g_m s^4 + C_5 C_L L_5 L_L R_5 R_L g_m s^4$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_LR_5R_Ls^4 + C_3C_5L_5L_LR_5g_ms^4 + C_3C_5L_5L_Ls^4 + C_3C_5L_5R_Lg_ms^3 + C_3C_5L_5R_Ls^3 + C_3C_5L_LR_5s^3 +$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_LR_5R_Ls^4 + C_3C_5L_5R_5R_Lg_ms^3 + C_3C_5L_5R_Ls^3 + C_3C_5R_5R_Ls^2 + C_3C_LL_LR_5R_Lg_ms^3 + C_3C_LL_LR_5R_Lg_ms^3 + C_3C_5L_LR_5R_Lg_ms^3 + C_3C_5L_LR_5R_Lg_ms^3$$

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

$$H(s) = \frac{R_3 R_L (R_5 g_m - 1)}{C_3 R_3 R_5 R_L g_m s + C_3 R_3 R_L s + R_3 R_5 g_m + 2R_3 R_L g_m + R_3 + R_5 R_L g_m + R_L}$$

10.171 INVALID-ORDER-171 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{R_3 (R_5 g_m - 1)}{C_3 R_3 R_5 g_m s + C_3 R_3 s + C_L R_3 R_5 g_m s + C_L R_3 s + 2R_3 g_m + R_5 g_m + 1}$$

10.172 INVALID-ORDER-172 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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

10.173 INVALID-ORDER-173 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

10.174 INVALID-ORDER-174 $Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.175 INVALID-ORDER-175
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.176 INVALID-ORDER-176
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.177 INVALID-ORDER-177
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.178 INVALID-ORDER-178
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{R_3 \left(C_5 s - g_m\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_5 C_L L_L R_3 s^4 + C_3 C_5 R_3 s^2 + C_3 C_L L_L R_3 g_m s^3 + C_5 C_L L_L R_3 g_m s^3 + C_5 C_L L_L g_m s^2 + C_L R_3 g_m s + G_5 C_L L_L g_m s^3 + C_5 C_L L_L g_m s^3 + C$$

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

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

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

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

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

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

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

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

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

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

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

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

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

10.186 INVALID-ORDER-186
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5s^4 + C_3C_5C_LR_3R_5R_Ls^3 + C_3C_5R_3R_5s^2 + C_3C_LL_LR_3R_5g_ms^3 + C_3C_LL_LR_3s^3 + C_3C_LR_3R_5R_Lg_ms^2 + C_3C_LR_3R_Ls^2 + C_3R_3R_5g_ms + C_3R_3s^3 + C_3C_LL_RR_3s^3 + C_3C_LR_3R_5R_Lg_ms^2 + C_3C_LR_3R_Ls^2 + C_3R_3R_5g_ms + C_3R_3s^3 + C_3C_LR_3R_5R_Lg_ms^2 + C_3C_LR_3R_5g_ms + C_3R_3R_5g_ms + C_3C_LR_3R_5g_ms^3 + C_3C_$$

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

10.189 INVALID-ORDER-189
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.190 INVALID-ORDER-190
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5R_Ls^4 + C_3C_5R_3R_5R_Ls^2 + C_3C_LL_LR_3R_5R_Lg_ms^3 + C_3C_LL_LR_3R_Ls^3 + C_3R_3R_5R_Lg_ms + C_3R_3R_Ls + 2C_5C_LL_LR_3R_5R_Lg_ms^3 + C_5C_LL_LR_3R_5s^3 + C_5C_L$$

10.191 INVALID-ORDER-191
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.192 INVALID-ORDER-192
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.193 INVALID-ORDER-193
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.194 INVALID-ORDER-194
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3}{C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_Ls^3 + C_3C_5R_3s^2 + C_3C_5R_3s^2 + C_3C_LL_LR_3g_ms^3 + C_3C_LR_3R_Lg_ms^2 + C_3R_3g_ms^4 + C_3C_5C_LR_3R_5g_ms^3 +$$

10.195 INVALID-ORDER-195
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$L_L R_3 R_L s \left(C_5 R_5 g_m s - C_5 s + g_m \right)$$

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

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

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_LR_3R_5g_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5R_3R_5R_Lg_ms^2 + C_3C_5R_3R_Ls^2 + C_3C_LL_LR_3R_Lg_ms^3 + C_3L_LR_3g_ms^2 + C_3R_3R_Ls^2 + C_3C_5R_3R_Ls^2 + C_3C_5R_Ls^2 + C_3C_5R_Ls$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5R_3R_5R_Lg_ms^2 + C_3C_5R_3R_Ls^2 + C_3C_LL_LR_3R_Lg_ms^3 + C_3R_3R_Lg_ms^4 + C_3C_5L_LR_3R_Lg_ms^3 + C_3C_5L_LR_3R_Lg_ms^3$$

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

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

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

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

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

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

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

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_3 C_5 C_L L_5 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_L s^3 + C_3 C_5 R_3 g_m s^3 + C_3 C_5 R_3 s^2 + C_3 C_L R_3 R_L g_m s^2 + C_5 C_L L_5 R_3 g_m s^3 + C_5 C_L L_5 R_1 g_m s^3 + 2 C_5 C_L R_3 R_L g_m s^2 + C_5 C_L R_3 R_L g_m s^3 +$$

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

$$H(s) = \frac{R_3 \left(C_L L_L s^2 + 1 \right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_3 C_5 C_L L_5 L_L R_3 g_m s^5 + C_3 C_5 C_L L_L R_3 g_m s^3 + C_3 C_5 R_3 g_m s^3 + C_3 C_5 L_L R_3 g_m s^3 + C_5 C_L L_5 L_L g_m s^4 + C_5 C_L L_5 R_3 g_m s^3 + 2 C_5 C_L L_L R_3 g_m s^3 + C_5 C_L L_5 R_5 g_m s^3 + C_5 C_L L_5$$

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

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

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

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

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

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

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_5L_RR_3g_ms^4 + C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5R_3R_Ls^2 + C_3C_LL_LR_3R_Lg_ms^3 + C_3L_LR_3g_ms^2 + C_3R_3R_Lg_ms^3 + C_3C_5L_LR_3g_ms^3 + C_3C_5L$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5R_3R_Ls^2 + C_3C_LL_LR_3R_Lg_ms^3 + C_3R_3R_Lg_ms^3 + C_5C_LL_5L_LR_3g_ms^4 + C_5C_LL_5L_LR_3g_ms^4 + C_5C_LL_5L_LR_3g_ms^4 + C_5C_LL_5L_Rg_ms^4 + C_5C_LL_5L_Rg_ms$$

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

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

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

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

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

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

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

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

10.212 INVALID-ORDER-212
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

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

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5L_5R_3s^3 + C_3C_LL_5L_LR_3g_ms^4 + C_3C_LL_5R_3R_Lg_ms^3 + C_3C_LL_LR_3s^3 + C_3C_LR_3R_Ls^2 + C_3L_5R_3g_ms^2 + C_3R_3s + 2C_5C_LL_5R_3g_ms^3 + C_3C_LL_5R_3g_ms^3 + C_3C$$

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5L_5L_LR_3s^4 + C_3C_5L_5R_3R_Ls^3 + C_3C_LL_5L_LR_3R_Lg_ms^4 + C_3C_LL_LR_3R_Ls^3 + C_3L_5L_LR_3g_ms^3 + C_3L_5R_3R_Lg_ms^2 + C_3L_LR_3s^2 + C_3R_3R_Ls^3 + C_3R_3R_Ls^3$$

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

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

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

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

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

10.220 INVALID-ORDER-220
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.221 INVALID-ORDER-221
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(C_L R_L s + 1 \right) \left(C_5 L_2 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_5 R_L g_m s^3 + C_3 C_5 L_2 R_3 R_L s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_3 R_2 g_m s^2 + C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_5 R_5 g_m s^2 + C_5 C_5 R_5 g_m s^2 + C_5 C_5 R_5 g_m s^2 + C_5 C_$$

10.222 INVALID-ORDER-222
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

10.223 INVALID-ORDER-223
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.224 INVALID-ORDER-224
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_RR_3s^4 + C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_Ls^3 + C_3C_5L_LR_3g_ms^3 + C_3C_5C_LR_3R_Ls^3 + C_3C_5C_LR_3R$$

10.225 INVALID-ORDER-225
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{1}{C_3C_5L_5L_LR_3R_Lg_ms^4 + C_3C_5L_LR_3R_5R_Lg_ms^3 + C_3C_5L_LR_3R_Ls^3 + C_3L_LR_3R_Lg_ms^2 + C_5C_LL_5L_LR_3R_Lg_ms^4 + C_5C_LL_LR_3R_5R_Lg_ms^3 + C_5C_LL_LR_3R_Ls^3 + C_5L_5L_LR_3g_ms^4 + C_5C_LL_LR_3R_5R_Lg_ms^3 + C_5C_LL_LR_3R_Ls^3 + C_5L_LR_3R_Lg_ms^4 + C_5C_LL_LR_3R_Lg_ms^3 + C_5C_LL_LR_3R_Ls^3 + C_5L_LR_3R_Lg_ms^4 + C_5C_LL_LR_3R_Lg_ms^3 + C_5C_LL_LR_3R_Lg_ms^4 + C_5C_LL_LR_3R_Lg_ms^3 + C_5C_LL_LR_3R_Lg_ms^3 + C_5C_LL_LR_3R_Lg_ms^4 + C$

10.226 INVALID-ORDER-226
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_LR_3g_ms^4 + C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_LR_3R_5g_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5L$$

10.227 INVALID-ORDER-227
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5R_3R_5R_Lg_ms^2 + C_3C_5R_3R_Ls^2 + C_3C_5L_LR_3R_Lg_ms^3 + C_3R_3R_Lg_ms^3 + C_3C_5R_3R_Lg_ms^3 + C_3C_5R_2R_Lg_ms^3 + C_3C_5R_2R_Lg_ms^3 + C_3C_5R_2R_Lg_ms^3 + C_3C_5R_2R_Lg$$

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

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

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

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

$$R_3R_L\left(-C_5L_5R_5s^2 + L_5R_5g_ms - L_5s\right)$$

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5L_5R_3R_5s^3 + C_3C_LL_5L_LR_3R_5g_ms^4 + C_3C_LL_5L_LR_3s^4 + C_3C_LL_LR_3R_5s^3 + C_3L_5R_3R_5g_ms^2 + C_3L_5R_3s^2 + C_3R_3R_5s^3 + C_3L_5L_LR_3R_5g_ms^4 + C_3C_LL_5L_LR_3s^4 + C_3C_LL_5L_LR_3s^3 + C_3L_5R_3s^3 + C_3L_5R_3s^2 + C_3R_3s^3 + C_3L_5R_3s^3 + C_3R_3s^3 + C_3R_3$$

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5R_3R_5R_Ls^4 + C_3C_5L_5R_3R_5s^3 + C_3C_LL_5L_LR_3R_5g_ms^4 + C_3C_LL_5L_LR_3s^4 + C_3C_LL_5R_3R_5R_Lg_ms^3 + C_3C_LL_5R_3R_Ls^3 + C_3C_LL_5R_3R_5s^4 + C_3C_LL_5R_5s^4 + C_3C_LL_5R_5R_5s^4 + C_3C_LL_5R_5s^4 + C_3$$

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

10.236 INVALID-ORDER-236
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.237 INVALID-ORDER-237
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.238 INVALID-ORDER-238
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

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

10.239 INVALID-ORDER-239
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

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

10.240 INVALID-ORDER-240
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$R_3R_L\left(C_5L_5R_5g_ms^2-C_5\right)$$

$$H(s) = \frac{R_3R_L\left(C_5L_5R_5g_ms^2 - C_5L_5R_5g_ms^2 - C_5R_5g_ms^2 - C_5R_5g_ms^$$

10.241 INVALID-ORDER-241
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_LL_5R_3R_Lg_ms^3 + C_3C_LR_3R_5R_Lg_ms^2 + C_3C_LR_3R_Ls^2 + C_3L_5R_3g_ms^2 + C_3R_3R_5R_Lg_ms^3 + C_3C_LR_3R_5R_Lg_ms^3 + C_3C_LR_3R_5R_Lg_ms^3 + C_3C_LR_3R_Lg_ms^3 + C_3C_LR_3R_Lg_ms^3$$

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

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

10.244 INVALID-ORDER-244
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_LL_5L_LR_3g_ms^4 + C_3C_LL_5R_3R_Ls^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3R_5g_ms^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s^3$$

10.245 INVALID-ORDER-245
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5L_5L_LR_3R_5R_Lg_ms^4 + C_3C_5L_5L_LR_3R_Ls^4 + C_3L_5L_LR_3R_Lg_ms^3 + C_3L_LR_3R_5R_Lg_ms^2 + C_3L_LR_3R_Ls^2 + C_5C_LL_5L_LR_3R_5R_Lg_ms^4 + C_5C_LL_5L_LR_3R_Ls^4 + C_5L_5L_LR_3R_Ls^4 + C_5L_5L_LR$$

10.246 INVALID-ORDER-246
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3R_3s+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3R_Ls^5 + C_3C_5L_5L_RR_3R_5g_ms^4 + C_3C_5L_5L_LR_3s^4 + C_3C_5L_5R_3R_5R_Lg_ms^3 + C_3C_5L_5R_3R_Ls^3 + C_3C_5L_5L_LR_3R_Lg_ms^4 + C_3C_5L_5L_LR_3s^4 + C_3C_5L_5R_3R_5R_Lg_ms^3 + C_3C_5L_5R_3R_Ls^3 + C_3C_5L_5L_LR_3R_Lg_ms^4 + C_3C_5L_5L_LR_3s^4 + C_3C_5L_5R_3R_5R_Lg_ms^3 + C_3C_5L_5R_3R_Ls^3 + C_3C_5L_5R_Ls^3 + C_3C_5L_5R_2R_Ls^3 + C_3C_5R_2R_Ls^3 + C_3C_5R_Ls^3 + C_3C_5R_2R_Ls^3 + C_3C_5R$$

10.247 INVALID-ORDER-247
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_5 L_L R_3 R_5 R_L g_m s^5 + C_3 C_5 C_L L_5 L_L R_3 R_L s^5 + C_3 C_5 L_5 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_5 R_3 R_L s^3 + C_3 C_L L_5 L_L R_3 R_L g_m s^4 + C_3 C_L L_L R_3 R_5 R_L g_m s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_3 R_L g_m s^4 + C_3 C_L L_L R_3 R_5 R_L g_m s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 C_L L_L R_3 R_L g_m s^4 + C_3 C_L R_L g_m s^4 + C_3$$

10.248 INVALID-ORDER-248
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

10.249 INVALID-ORDER-249
$$Z(s) = \left(\infty, \ \infty, \ \frac{R_3}{C_3 R_3 s + 1}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$$

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

10.250 INVALID-ORDER-250
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.251 INVALID-ORDER-251
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

10.252 INVALID-ORDER-252
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_LR_3R_5s^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_3R_5s^2 + C_3C_LL_LR_3R_5g_ms^3 + C_3C_LL_LR_3s^3 + C_3C_5L_LR_3s^3 + C_3C_5L_LR_3s^3$$

10.253 INVALID-ORDER-253
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L R_3 S_5 C_5 L_5}{C_3 C_5 L_5 L_L R_3 R_5 g_m s^4 + C_3 C_5 L_L R_3 s^4 + C_3 C_5 L_L R_3 R_5 s^3 + C_3 L_L R_3 R_5 g_m s^2 + C_3 L_L R_3 S_5 + C_5 C_L L_5 L_L R_3 R_5 g_m s^4 + C_5 C_L L_5 L_L R_3 S_5 + C_5 L_5 L_L R_5 + C_$

10.254 INVALID-ORDER-254
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.255 INVALID-ORDER-255
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.256 INVALID-ORDER-256
$$Z(s) = \left(\infty, \infty, \frac{R_3}{C_3 R_3 s + 1}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

$$H(s) = \frac{R_L (R_5 g_m - 1) (C_3 R_3 s + 1)}{C_3 R_3 R_5 g_m s + 2 C_3 R_3 R_L g_m s + C_3 R_3 s + C_3 R_5 R_L g_m s + C_3 R_L s + R_5 g_m + 2 R_L g_m + 1}$$

10.259 INVALID-ORDER-259
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

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

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

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

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

10.262 INVALID-ORDER-262
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.263 INVALID-ORDER-263
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.264 INVALID-ORDER-264
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.265 INVALID-ORDER-265
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.266 INVALID-ORDER-266
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{R_L \left(C_5 s - g_m\right) \left(C_3 R_3 s + 1\right)}{C_3 C_5 C_L R_3 R_L s^3 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_1 s^2 + C_3 C_5 R_L s^2 + C_3 C_L R_3 R_L g_m s^2 + C_3 R_3 g_m s + C_3 R_L g_m s + C_5 C_L R_L s^2 + 2 C_5 R_L g_m s + C_5 s + C_L R_L g_m s + g_m R_2 r_0 R_2 r_0$$

10.267 INVALID-ORDER-267
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.268 INVALID-ORDER-268
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

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

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

10.271 INVALID-ORDER-271
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{L_L R_L s \left(C_5 s - g_m\right) \left(C_3 R_3 s + 1\right)}{C_3 C_5 C_L L_L R_3 R_L s^4 + 2 C_3 C_5 L_L R_3 R_L g_m s^3 + C_3 C_5 L_L R_3 s^3 + C_3 C_5 L_L R_1 s^3 + C_3 C_5 L_L R_3 R_L s^2 + C_3 C_L L_L R_3 R_L g_m s^3 + C_3 L_L R_3 g_m s^2 + C$$

10.272 INVALID-ORDER-272
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.273 INVALID-ORDER-273
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.274 INVALID-ORDER-274
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

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

10.275 INVALID-ORDER-275
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{R_L \left(C_3 R_3 s + 1\right) \left(C_5 R_5 s - R_5 g_m + 1\right)}{C_3 C_5 C_L R_3 R_5 R_L s^3 + 2 C_3 C_5 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_3 R_5 s^2 + C_3 C_5 R_5 R_L s^2 + C_3 C_L R_3 R_5 R_L g_m s^2 + C_3 C_L R_3 R_5 R_L g_m s + 2 C_3 R_3 R_L g_m s + C_3 R_3 s + C_3 R_5 R_L g_m s^2 + C_3 C_4 R_3 R_5 R_L g_m s^2 + C_3 C_4 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_5 R_L g_m s^2 + C_5 C_5 R$$

10.276 INVALID-ORDER-276
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

10.277 INVALID-ORDER-277
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

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

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

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

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_LR_5s^4 + 2C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LR_5R_Ls^3 + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3C_LL_LR_3g_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3C_LL_LR_3g_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5C_LR_3R_5s^3 + 2C_3C_5C_5C_LR_3R_5s^3 + 2C_5C_5C_LR_3R_5s^3 + 2C_5C_5C_LR_3R_5s^3 + 2C_5C_5C_LR_3R_5s^3 + 2C_5C_5C_LR_3$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_LR_3R_5R_Ls^4 + 2C_3C_5L_LR_3R_5R_Lg_ms^3 + C_3C_5L_LR_3R_5s^3 + C_3C_5L_LR_5R_Ls^3 + C_3C_5R_3R_5R_Ls^2 + C_3C_LL_LR_3R_5R_Lg_ms^3 + C_3C_LL_LR_3R_5R_Ls^3 + C_3C_LLR_3R_5R$$

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

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

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

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

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

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

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

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

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

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

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

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

10.288 INVALID-ORDER-288
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_3R_3s+1)\left(C_LL_Ls^2 + C_LR_Ls +$$

10.289 INVALID-ORDER-289
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5L_LR_3R_Ls^4 + C_3C_5L_LR_3R_5g_ms^3 + 2C_3C_5L_LR_3R_Lg_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5$$

10.290 INVALID-ORDER-290
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5g_ms^4 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_5R_Lg_ms^4 + C_3C_5C_LL_LR_5s^4 + 2C_3C_5L_LR_3g_ms^3 + C_3C_5L_LR_5g_ms^3 + C_3C_5L_LR_5g_ms^$$

10.291 INVALID-ORDER-291
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_LR_3R_5g_ms^4 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_5R_Lg_ms^4 + C_3C_5C_LL_LR_2s^4 + C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_Ls^3 + C_3C_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LR_3R_Lg_ms^4 + C_3C_5$$

10.292 INVALID-ORDER-292
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

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

10.293 INVALID-ORDER-293
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.294 INVALID-ORDER-294
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_3 C_5 C_L L_5 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_L s^3 + C_3 C_5 L_5 R_3 g_m s^3 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_3 s^2 + C_3 C_5 R_L s^2 + C_3 C_L R_3 R_L g_m s^2 + C_3 R_3 g_m s + C_3 R_L g_m s^2 + C_3 R_2 g_m s^2 + C_3 R_3 g_m s^2 +$$

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

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

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

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

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

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 C_L L_5 L_L R_3 g_m s^5 + C_3 C_5 L_L L_R g_m s^4 + C_3 C_5 L_5 R_3 g_m s^3 + 2 C_3 C_5 L_L R_3 g_m s^3 + C_3 C_5 L_L s^3 + C_3 C_5 R_3 s^2 + C_3 C_4 L_L R_3 g_m s^3 + C_3 L_L g_m s^2 + C_3 R_3 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_5 C_5 L_L g_m s^3 + C_5$$

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

$$H(s) = \frac{(C_3R_3s + 1)\left(C_LL_Ls^2 + C_LR_Ls + C_3C_5C_LL_5R_2g_ms^3 + C_3C_5C_LL_5R_2g_ms^3 + C_3C_5C_LL_2s^3 + 2C_3C_5C_LL_2s^3 + 2C_3C_5C_LR_3R_Lg_ms^2 + C_3C_5C_LR_3s^2 + C_3C_5C_LR_2s^2 + C_3C_5C_LR_3s^2 + C_3C_5C_LR_3s^2$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_5L_RR_3g_ms^4 + C_3C_5L_5L_LR_2g_ms^4 + C_3C_5L_5R_3R_Lg_ms^3 + 2C_3C_5L_LR_3R_Lg_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5L_L$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_2g_ms^5 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_4s^4 + C_3C_5L_5L_Lg_ms^4 + C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_2g_ms^3 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_3s^4$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_Lg_ms^5 + C_3C_5C_LL_5R_3R_Lg_ms^4 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_Ls^4 + C_3C_5C_LR_3R_Ls^3 + C_3C_5L_LR_3s^4 + C_3C_5C_LL_LR_2s^4 + C_3C_5C_LL_LR_2$$

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

$$H(s) = -\frac{R_L \left(C_3 R_3 s + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_3 C_5 L_5 R_3 R_L g_m s^3 + C_3 C_5 L_5 R_3 s^3 + C_3 C_5 L_5 R_L s^3 + C_3 L_5 R_3 g_m s^2 + C_3 L_5 R_L g_m s^2 + 2 C_3 R_3 R_L g_m s + C_3 R_3 s + C_3 R_L s + 2 C_5 L_5 R_L g_m s^2 + C_5 L_5 s^2 + L_5 g_m s + 2 R_L g_m + 2 C_5 R_3 R_1 g_m s^2 + C_5 R_2 g_m s^2 +$$

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

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

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

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

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

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

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

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

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_Ls^5 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_Ls^4 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3C_LL_5L_Lg_ms^4 + C_3C_LL_5R_3s^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3C_5L_5L_5g_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3C_5L_5s^3 + C_3C_5L_5s^3 + C_3C_5C_LL_5s^3 + C_3C_5$$

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

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_Ls^5 + 2C_3C_5L_5L_LR_3g_ms^4 + C_3C_5L_5L_Ls^4 + 2C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_Ls^3 + C_3C_5R_Ls^3 + C_3C_5$$

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_Ls^3 + C_3C_5L_5L_LR_3g_ms^4 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_Ls^3 + C_3C_5L_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_RR_3s^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s^3 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_RR_3s^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5R_3s$$

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

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

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

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

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

$$H(s) = \frac{R_L \left(C_3 R_3 s + 1 \right) \left(C_5 L_5 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_5 R_L g_m s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 L_5 R_1 g_m s^3 + C_3 C_5 R_3 R_2 g_m s^2 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_3 s^2 + C_3 C_5 R_5 R_L g_m s^3 + C_3 C_5 R_3 R_L g_m s^3 + C_3 C_5 R_2 R_L g_m s^3 + C_3 C_5 R_3 R_L g_m s^3 + C_3 C_5 R_2 R_L g_m s^3 + C_3 C_5 R_3 R_L g_m s^3 + C_3 C_5 R_2 R_L g_m s^3 + C_3 C_5 R_L g_m s^3 + C_3 C_5 R_L g_m s^3 + C_3 C_5 R_L$$

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

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

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

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

$$H(s) = \frac{L_L s \left(C_3 R_3 s + 1\right) \left(C_5 L_4 R_3 R_5 g_m s^5 + C_3 C_5 C_L L_L R_3 R_5 g_m s^4 + C_3 C_5 L_L L_R g_m s^4 + C_3 C_5 L_L R_3 g_m s^3 + 2 C_3 C_5 L_L R_3 g_m s^3 + C_3 C_5 L_L R_5 g_m s^3 + C_3 C_5 L_L S^3 + C_5$$

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

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

10.319 INVALID-ORDER-319
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_LR_3g_ms^4 + C_3C_5L_5L_LR_2g_ms^4 + C_3C_5L_5R_3R_Lg_ms^3 + C_3C_5L_LR_3R_5g_ms^3 + 2C_3C_5L_LR_3g_ms^4 + C_3C_5L_LR_3g_ms^4 + C_3C_5$$

10.320 INVALID-ORDER-320
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_5 L_L R_3 g_m s^5 + C_3 C_5 C_L L_5 L_L R_1 g_m s^5 + C_3 C_5 C_L L_L R_3 R_5 g_m s^4 + 2 C_3 C_5 C_L L_L R_3 R_L g_m s^4 + C_3 C_5 C_L L_L R_3 s^4 + C_3 C_5 C_L L_L R_5 R_L g_m s^4 + C_3 C_5 C_L R_5 R_L g_m s^4 + C_$$

10.321 INVALID-ORDER-321
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_2g_ms^5 + C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_LR_3R_5g_ms^4 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_3s^2 + C_3C_5$$

10.322 INVALID-ORDER-322
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

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

10.323 INVALID-ORDER-323
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$$

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

10.324 INVALID-ORDER-324
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.325 INVALID-ORDER-325
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_5R_Ls^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_LL_5R_3R_5g_ms^3 + 2C_3C_LL_5R_3R_5g_ms^3 + 2C_3C_LL_5R_5g_ms^3 + 2C_$$

10.326 INVALID-ORDER-326
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

10.327 INVALID-ORDER-327
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.328 INVALID-ORDER-328
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_5s^5 + 2C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_5R_Ls^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_5s^3 + 2C_3C_LL_5R_3R_5g_ms^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_5s^4 + C_3C_5C_LL_5R_5s^2 + C_3C_5C_LL_5R_5s^$$

10.329 INVALID-ORDER-329
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + 2C_3C_5L_5L_LR_3R_5R_Lg_ms^4 + C_3C_5L_5L_LR_3R_5s^4 + C_3C_5L_5L_LR_5R_Ls^4 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_LL_5L_LR_3R_5R_Lg_ms^4 + C_3C_LL_5L_LR_3R_5R_Ls^4 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_LL_5L_LR_3R_5R_Lg_ms^4 + C_3C_5L_5L_LR_3R_5R_Ls^4 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_LL_5L_LR_3R_5R_Lg_ms^4 + C_3C_5L_5L_LR_3R_5R_Ls^4 + C_3C_5L_5R_3R_5R_Ls^3 + C_3C_LL_5L_LR_3R_5R_Lg_ms^4 + C_3C_5L_5L_LR_3R_5R_Ls^4 + C_3C_5L_5L_Rs^4 + C_3C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^$$

10.330 INVALID-ORDER-330
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.331 INVALID-ORDER-331
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.332 INVALID-ORDER-332
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

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

10.333 INVALID-ORDER-333
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

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

10.334 INVALID-ORDER-334
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

10.335 INVALID-ORDER-335
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_3g_ms^$$

10.336 INVALID-ORDER-336
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

10.337 INVALID-ORDER-337
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.338 INVALID-ORDER-338
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_$$

10.339 INVALID-ORDER-339
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.340 INVALID-ORDER-340
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_5s^5 + 2C_3C_5C_LL_5L_LR_3g_ms^4 + C_3C_5L_LR_5g_ms^4 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Rg_ms^5 + C_3C_5C_$$

10.341 INVALID-ORDER-341
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.342 INVALID-ORDER-342
$$Z(s) = \left(\infty, \ \infty, \ R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right)$$

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

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

10.344 INVALID-ORDER-344
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.345 INVALID-ORDER-345
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + 2C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LR_3R_5s^4 + C_3C_5C_LR$$

10.346 INVALID-ORDER-346
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_3R_5g_ms^4 + C_3C_5C_LL_5R_3s^4 + 2C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_LR_5s^4 + C_3C_5C_LL$$

10.347 INVALID-ORDER-347
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5L_5L_LR_3g_ms^4 + C_3C_5L_5L_LR_5g_ms^4 + C_3C_5L_5L_Ls^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_5L_4R_3g_ms^4 + C_3C_5L_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^2 + C_3C_5L_5R_3g_ms^$$

10.348 INVALID-ORDER-348
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL$$

10.349 INVALID-ORDER-349
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.350 INVALID-ORDER-350
$$Z(s) = \left(\infty, \infty, R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_Rs^5 + C_3C_5C_LL_5C_LL_5L_Rs^5 + C_3C_5C_LL_5L_Rs^5 + C_3C_5C_LL_5C_LL_5L_Rs^5 + C_3C_5C_LL_5L_Rs^5 + C_3C_5C_LL_5C_LL_5C_LL_5C_LL_$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_5L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_Rs^5 + C_3C_5C_LL_5L_$$

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{L_L R_L s \left(R_5 g_m - 1\right) \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 L_L R_5 g_m s^4 + C_3 C_L L_3 L_L R_5 g_m s^3 + 2 C_3 L_3 L_L R_L g_m s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_5 R_L g_m s^2 + C_3 L_1 R_5 R_L g_m s^2 + C_3 L_L R_$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = -\frac{L_L s \left(C_5 s - g_m\right) \left(C_3 L_3 s^2 + 1\right)}{C_3 C_5 C_L L_3 L_L s^5 + 2 C_3 C_5 L_3 L_L g_m s^4 + C_3 C_5 L_L s^3 + C_3 C_L L_3 L_L g_m s^4 + C_3 L_3 g_m s^2 + C_3 L_L g_m s^2 + C_5 C_L L_L s^3 + 2 C_5 L_L g_m s^2 + C_5 s + C_L L_L g_m s^2 + g_m c^2 + C_5 c_L L_L s^3 + 2 C_5 c_L L_L s^3 + 2 c_5 c_L L_L g_m s^2 + c_5 c$$

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

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

10.368 INVALID-ORDER-368
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.369 INVALID-ORDER-369
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{(C_5s - g_m)(C_3L_3s^2 + 1)(C_LL_LR_Ls^2 + C_3C_5C_LL_3L_Ls^3 + C_3C_5C_LL_3L_Ls^4 + 2C_3C_5L_3L_Lg_ms^4 + 2C_3C_5L_3R_Lg_ms^3 + C_3C_5L_3s^3 + C_3C_5L_Ls^3 + C_3C_5R_Ls^2 + C_3C_LL_3L_Lg_ms^4 + C_3C_LL_3L_Lg_ms^4 + C_3C_LL_3L_Lg_ms^4 + C_3C_Lg_ms^4 + C_3C_Lg_ms^4$$

10.370 INVALID-ORDER-370
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.371 INVALID-ORDER-371
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

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

10.372 INVALID-ORDER-372
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_5R_5s - R_5g_m + 1\right)}{C_3C_5C_LL_3R_5s^4 + 2C_3C_5L_3R_5g_ms^3 + C_3C_5R_5s^2 + C_3C_LL_3R_5g_ms^3 + C_3C_LL_3s^3 + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_5C_LR_5s^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_Ls + 2g_ms^2 + C_3R_5g_ms^2 + C_3R_5g_m$$

10.373 INVALID-ORDER-373
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.374 INVALID-ORDER-374
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

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

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

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)\left(C_5R_5s - R_5g_{12}R_5g_{13} + C_3C_5C_LL_3L_2R_5g_{13} + C_3C_5C_LL_3L_2R_5g_{13} + C_3C_5C_LL_3R_5g_{13} + C_3C_5C_LL_3R_5g_{13} + C_3C_LL_3R_5g_{13} + C_3C_LL_3R_5g_{13$$

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

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

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_LR_5s^4 + C_3C_5C_LR_5R_Ls^3 + 2C_3C_5L_3R_5g_ms^3 + C_3C_5R_5s^2 + 2C_3C_LL_3L_Lg_ms^4 + C_3C_LL_3R_5s^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_$$

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

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Ls^5 + 2C_3C_5L_3L_LR_5R_Lg_ms^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_LR_5R_Ls^3 + C_3C_LL_3L_LR_5R_Lg_ms^4 + C_3C_LL_3L_LR_5s^4 + C_3L_3L_LR_5s^4 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3L_LR_5R_Ls^3 + C_3C_5L_3L_Rs^3 + C_3C_5L_$$

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_LR_5R_Ls^4 + 2C_3C_5L_3L_LR_5g_ms^4 + 2C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L_LR_5s^3 + C_3C_5R_5R_Ls^2 + C_3C_5C_LL_3L_LR_5g_ms^4 + 2C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L_4R_5s^3 + C_3C_5R_5R_Ls^2 + C_3C_5R_Ls^2 + C_3C_$$

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

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

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

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

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_3C_5C_LL_3R_5g_ms^3 + C_3C_5C_LL_3s^3 + 2C_3C_5L_3g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3C_LL_3g_ms^2 + C_3g_m + C_5C_LR_5g_ms + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$$

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

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

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

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

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

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

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

$$H(s) = \frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 C_L L_3 L_L R_5 g_m s^5 + C_3 C_5 L_L L_3 L_L s^5 + 2 C_3 C_5 L_3 L_L g_m s^4 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_L R_5 g_m s^3 + C_3 C_5 L_L s^3 + C_3 C_5 L_L s^4 + C_3 L_3 g_m s^2 + C_3 L_L g_m s^2 + C_3 L_L g_m s^4 + C_3 L_3 g_m s^2 + C_3 L_L g_m s^4 + C_3 L_2 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_3 C_5 L_L g_m s^4 + C_3 L_2 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_3 C_5 L_L g_m s^4 + C_3 L_2 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_3 C_5 L_L g_m s^4 + C_3 L_2 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_3 C_5 L_L g_m s^4 + C_3 L_2 g_m s^3 + C_3 C_5 L_L g_m s^3 + C_3 C_5 L_2 g_m s^3 + C_3 C_5 L_3 L_2 g_m s^3 + C_3 C_5 L_3 L_3 g_m s^3 + C_3 C_5$$

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

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

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3L_LR_5g_ms^4 + 2C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_4R_5R_Lg_ms^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_LR_5R_Lg_ms^4 + C_3C_5C_LL_LR_Ls^4 + 2C_3C_5L_3L_Lg_ms^4 + C_3C_5L_3R_5g_ms^3 + 2C_3C_5L_3R_Lg_ms^3 + 2C_3C_5L_3L_LR_5g_ms^3 + 2C_3C_5L_3L_Rg_ms^3 + 2C_5C_5L_3L_Rg_ms^3 + 2C_5C_5L_AL_Rg_ms^$$

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

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3R_Ls^4$$

10.391 INVALID-ORDER-391
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

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

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

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5g_ms^2 - C_5s + g_m\right)}{s\left(C_3C_5C_LL_3L_5g_ms^4 + C_3C_5L_Ls^3 + 2C_3C_5L_3g_ms^2 + C_3C_5L_5g_ms^2 + C_3C_5s + C_3C_LL_3g_ms^2 + C_5C_LL_5g_ms^2 + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$$

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5L_3L_5R_Lg_ms^4 + 2C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_Ls^3 + C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3L_Lg_ms^4 + C_3C_5L_2Lg_ms^4 + C_3C_5L_2Lg_ms^4 + C_3C_5L_2Lg_ms^4 + C_3C_5L_2Lg_ms^4 + C_3C_5L_2Lg_ms^4 + C_3C_5L$$

10.399 INVALID-ORDER-399
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_5L_LR_Lg_ms^5 + C_3C_5C_LL_LR_Ls^4 + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3L_Lg_ms^4 + 2C_3C_5L_3L_Lg_ms^3 + 2C_3C_5L_3L_Lg_ms^4 + 2C_3C_5L_Lg_ms^4 + 2C_3C_5L_3L_Lg_ms^4 + 2C_3C_5L_Lg_ms^4 + 2C_3C_5L_Lg_ms^4 + 2C_3C_5L_Lg_ms^2 + 2C_5L_Lg_ms^2 + 2C_5L_Lg_ms^2 + 2C_5L_Lg_ms^2 + 2C_$$

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

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

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

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

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5s^2 - L_5g_ms + 1\right)}{C_3C_5C_LL_3L_5s^5 + 2C_3C_5L_3L_5g_ms^4 + C_3C_LL_3L_5g_ms^4 + C_3C_LL_3s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^2 + C_3L_5g_ms^2 + C_LL_5g_ms^2 + C_L$$

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

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

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

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

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_Ls^2 + 1\right)\left(C_5L_5s^2 - L_5g_{12}L_5g_{13}S_5 + C_3C_5C_LL_3L_5s^5 + C_3C_5L_5L_5s^5 + C_3C_5L_5L_5s^3 + C_3C_LL_3L_5g_{ms}^4 + C_3C_LL_5g_{ms}^4 + C_3$$

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

$$H(s) = -\frac{L_L s \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{C_3 C_5 C_L L_3 L_5 L_L s^6 + 2 C_3 C_5 L_3 L_5 L_L g_m s^5 + C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_5 L_L s^4 + C_3 C_L L_3 L_5 L_L g_m s^5 + C_3 C_L L_3 L_L s^4 + C_3 L_3 L_5 g_m s^3 + 2 C_3 L_3 L_L g_m s^3 + C_3 L_3 L_2 g_m s^3 + C_3 L_5 L_L g_m s^3 + C_3 L_5 L_L$$

10.407 INVALID-ORDER-407
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

10.408 INVALID-ORDER-408
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.409 INVALID-ORDER-409
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.410 INVALID-ORDER-410
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_5L_LR_Ls^5 + 2C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_5R_Ls^3 + C_3C_LL_3L_5L_Lg_ms^5 - C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5L_Lg_ms^5 - C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_Ls^6 + C$$

10.411 INVALID-ORDER-411
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 L_5 R_L g_m s^3 + C_3 C_5 R_5 R_L g_m s^3 + C_3 C_5 R_L g_m s^2 + C_3 C_5 R_L g_m s^2 + C_3 R_L g_m s^2 + C_5 R_5 g_m s^2$$

10.412 INVALID-ORDER-412
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_3C_5C_LL_3L_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^3 + C_3C_5L_1g_ms^2 + C_3C_5L_5g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3C_LL_3g_ms^2 + C_5C_LL_5g_ms^2 + C_5C_LL$$

10.413 INVALID-ORDER-413
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.414 INVALID-ORDER-414
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LR_Ls + 1\right)\left(C_5L_5g_ms^2 + C_5g_ms^2 + C_5g_m$$

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

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_LL_s^2 + 1\right)\left(C_5L_5g_ms^2 + C_3C_5C_LL_3L_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^3 + C_3C_5C_LL_3S^3 + C_3C_5C_LL_5L_2g_ms^4 + C_3C_5C_LL_LS^3 + 2C_3C_5L_3g_ms^2 + C_3C_5L_2g_ms^4 + C_3C_5C_LL_2S^3 + 2C_3C_5L_3g_ms^2 + C_3C_5C_LL_3S^3 + C_3$$

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

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

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

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

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

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_5L_LR_Lg_ms^5 + C_3C_5C_LL_LR_5R_Lg_ms^4 + C_3C_5C_LL_LR_Ls^4 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Lg_ms^5 + C_3C_5C_L$$

10.420 INVALID-ORDER-420
$$Z(s) = \left(\infty, \ \infty, \ L_3s + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_Ls^5 +$$

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

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5\right)}{2 C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_5 R_5 R_L s^3 + C_3 L_3 L_5 R_5 g_m s^3 + 2 C_3 L_3 L_5 R_L g_m s^3 + C_3 L_3 L_5 R_5 R_L g_m s^2 + C_3 L_3 R_5 R_L g_m s^2 + C_3 L_5 R_5 R_L g_m$$

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

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5R_5s^2 - L_5R_5g_ms + L_5s + R_5\right)}{C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5L_3L_5R_5g_ms^4 + C_3C_LL_3L_5R_5g_ms^4 + C_3C_LL_3L_5s^4 + C_3C_LL_3R_5s^3 + 2C_3L_3L_5g_ms^3 + 2C_3L_3R_5g_ms^2 + C_3L_5R_5g_ms^2 + C_3L_5R_$$

10.423 INVALID-ORDER-423
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.424 INVALID-ORDER-424
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_5R_5R_Ls^4 + 2C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5R_5s^3 + C_3C_LL_3L_5R_5g_ms^4 + 2C_3C_LL_3L_5R_5g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5R_5g_ms^4 + C_3C_5L_5R_5g_ms^2 + C_3C_5L_5R_5g_m$$

10.425 INVALID-ORDER-425
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_5L_RS^5 + 2C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5R_5s^3 + 2C_3C_LL_3L_5L_Lg_ms^5 + C_3C_LL_3L_5R_5g_ms^4 + C_3C_LL_3L_5R_5g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5R_5g_ms^4 + C_3C_5L_5R_5g_ms^2 + C_3C_5L_5$$

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_5L_LR_5s^5 + C_3C_5C_LL_5R_5R_Ls^4 + 2C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5R_5s^3 + 2C_3C_LL_5R_5s^5 + C_3C_5C_LL_5R_5s^5 + C_3C_5C_$$

10.428 INVALID-ORDER-428
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + 2C_3C_5L_3L_5L_LR_5R_Lg_ms^5 + C_3C_5L_3L_5L_LR_5s^5 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_5L_LR_5R_Ls^4 + C_3C_LL_3L_5L_LR_5R_Lg_ms^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_5L_3L_5L_LR_5s^5 + C_3C_5L_3L_5L_Rs^5 + C_3C_5L_3L_$$

10.429 INVALID-ORDER-429
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.430 INVALID-ORDER-430
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.431 INVALID-ORDER-431
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1 \right)}{C_3 C_5 L_3 L_5 R_5 g_m s^4 + 2 C_3 C_5 L_3 L_5 R_L g_m s^4 + C_3 C_5 L_5 R_5 R_L g_m s^3 + C_3 C_5 L_5 R_L s^3 + C_3 L_3 L_5 g_m s^3 + C_3 L_3 R_5 g_m s^2 + 2 C_3 L_3 R_L g_m s^2 + C_3 L_5 R_L g_m s^2 + C_3 L_5 R_L g_m s^3 +$$

10.432 INVALID-ORDER-432
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + 1\right)\left(C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1\right)}{C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5L_4L_5s^5 + 2C_3C_5L_3L_5g_ms^4 + C_3C_5L_5s^3 + C_3C_LL_3L_5g_ms^4 + C_3C_LL_3R_5g_ms^3 + C_3C_LL_3R_5g_ms^3 + C_3C_LL_3s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^3 + C_3C_LL_3s^3 + 2C_3L_3g_ms^3 + C_3C_3L_3s^3 + 2C_3L_3s^3 + 2C_3L_3s^$$

10.433 INVALID-ORDER-433
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_5R_Lg_ms^3 + C_3C_5L_5R_Ls^3 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_5R_Lg_ms^4 + C_3C_5L_5$$

10.434 INVALID-ORDER-434
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + 2C_3C_5L_3L_5g_ms^4 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5L_5c^3 + C_3C_5C_5L_5c^3 + C_3C_5C_5L_5c^3 + C_3C_5C_5L_5c^3 + C_3C_5C_5C_5C_5C_5C_5C_5C_5C_5C_5C_5C_5C_$$

10.435 INVALID-ORDER-435
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5s^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + 2C_3C_5L_3L_5g_ms^4 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5L_5L_5g_ms^5 + C_3C_5C_LL_5L_5g_ms^5 + C_3C_5C_LL_5L_5g_ms^5 + C_3C_5C_LL_5L_5g_ms^5 + C_3C_5C_LL_5L_5g_ms^5 + C_3C_5C_LL_5L_5g_ms^5 + C_3C_5C_LL_5g_ms^5 + C_3C_5C_$$

10.436 INVALID-ORDER-436
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.437 INVALID-ORDER-437
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_5R_Lg_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C_$$

10.438 INVALID-ORDER-438
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5L_LR_5g_ms^5 + 2C_3C_5L_3L_5L_LR_Lg_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5L_LR_5g_ms^5 + 2C_3C_5L_3L_5L_LR_5g_ms^5 + 2C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4$$

10.439 INVALID-ORDER-439
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_Ls^5 + 2C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5L_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_Ls^5 + 2C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5L_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_5L_LR_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_Ls^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C_3C_5C_LL_5C_Ls$$

10.440 INVALID-ORDER-440
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^6 + C_3C_5C_LL_3L_5R_L$$

10.441 INVALID-ORDER-441
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + 1\right) \left(-C_5 L_5 R_5 g_m s^2 + C_5 L_5 R_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_5 g_m s^3 + C_3 C_5 L_3 R_5 R_5 g_m s^3 + C_3 C_5 L_5 R_5 R_L g_m s^3 + C_3 C_5 L_5 R_L s^3 + C_3 C_5 L_5 R_L s^3 + C_3 C_5 R_5 R_L s^3 + C_5 R_5$$

10.442 INVALID-ORDER-442
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_3L_3s^2 + 1\right)\left(-C_5L_5R_5g_ms^2 + C_5L_5s^2 + C_5L_5s^3 + C_5L$$

10.443 INVALID-ORDER-443
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_3R_5g_ms^4 + 2C_3C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 + 2C_5C_5L_3R_5g_ms^2 +$$

10.444 INVALID-ORDER-444
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_5R_5R_Lg_ms^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_5C_LL_5R_Ls^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_5R_5s^4 + C_3C_5C_LL$$

10.445 INVALID-ORDER-445
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5L_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C$$

10.446 INVALID-ORDER-446
$$Z(s) = \left(\infty, \infty, L_3 s + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5s^5 + 2C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^5 + 2C_5C_LL_3R_5R_Lg_ms^5 + 2C$$

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

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

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

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C$$

10.451 INVALID-ORDER-451
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.452 INVALID-ORDER-452
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.453 INVALID-ORDER-453
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.454 INVALID-ORDER-454
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

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

10.455 INVALID-ORDER-455
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

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

10.456 INVALID-ORDER-456
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}}, \infty, \frac{1}{C_5 s}, R_L\right)$$

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

10.457 INVALID-ORDER-457
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s\left(-C_5s + g_m\right)}{C_3C_5L_3s^3 + C_3L_3g_ms^2 + C_5C_LL_3s^3 + 2C_5L_3g_ms^2 + C_5s + C_LL_3g_ms^2 + g_m}$$

10.458 INVALID-ORDER-458
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.459 INVALID-ORDER-459
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.460 INVALID-ORDER-460
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.461 INVALID-ORDER-461
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(-C_5s + g_m\right)}{C_3C_5L_3L_Ls^3 + C_3L_3L_Lg_ms^2 + C_5C_LL_3L_Ls^3 + 2C_5L_3L_Lg_ms^2 + C_5L_3s + C_5L_Ls + C_LL_3L_Lg_ms^2 + L_3g_m + L_Lg_m}$$

10.462 INVALID-ORDER-462
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.463 INVALID-ORDER-463
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.464 INVALID-ORDER-464
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

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

10.465 INVALID-ORDER-465
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

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

10.466 INVALID-ORDER-466
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)$$

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

10.467 INVALID-ORDER-467
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3s\left(-C_5R_5s + R_5g_m - 1\right)}{C_3C_5L_3R_5s^3 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + C_5C_LL_3R_5s^3 + 2C_5L_3R_5g_ms^2 + C_5R_5s + C_LL_3R_5g_ms^2 + C_LL_3s^2 + 2L_3g_ms + R_5g_m + 1}$$

10.468 INVALID-ORDER-468
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

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

10.469 INVALID-ORDER-469
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$$

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

10.470 INVALID-ORDER-470
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{L_3s\left(C_LL_Ls^2 + 1\right)\left(C_5R_5s - R_5g_m + 1\right)}{C_3C_5C_LL_3L_LR_5s^5 + C_3C_5L_3R_5s^3 + C_3C_LL_3L_LR_5g_ms^4 + C_3C_LL_3L_Ls^4 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + 2C_5C_LL_3L_LR_5g_ms^4 + C_5C_LL_3R_5s^3 + 2C_5L_3R_5g_ms^4 + C_5C_LL_3R_5g_ms^4 + C_5C_LL_3R_5g_ms^5 + C_5C_LL_3R_5g_ms^5 + C_5C_LL_3R_5g_ms^5 + C_5C_LL_3R_5g_ms^5 + C_5C_LL_3R_5g_ms^5 + C_5C_$$

10.471 INVALID-ORDER-471
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(-C_5R_5s + R_5g_m - 1\right)}{C_3C_5L_3L_LR_5s^3 + C_3L_3L_LR_5g_ms^2 + C_3L_3L_LS^2 + C_5C_LL_3L_LR_5s^3 + 2C_5L_3L_LR_5g_ms^2 + C_5L_3R_5s + C_5L_LR_5s + C_5$$

10.472 INVALID-ORDER-472
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.473 INVALID-ORDER-473
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3L_LR_Ls\left(-C_5R_5s + R_5g_m - 1\right)}{C_3C_5L_3L_LR_5R_Ls^3 + C_3L_3L_LR_5R_Lg_ms^2 + C_5L_3L_LR_5R_Ls^3 + 2C_5L_3L_LR_5R_Lg_ms^2 + C_5L_3L_LR_5s^2 + C_5L_3R_5R_Ls + C_5L_LR_5R_Ls + C_LL_3L_LR_5R_Lg_ms^2 + C_5L_3L_LR_5R_Lg_ms^2 + C_5L_3L_LR_5R_Ls + C_5L_LR_5R_Ls + C_5L_LR_5R_$$

10.474 INVALID-ORDER-474
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.475 INVALID-ORDER-475
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5L_3R_5R_Ls^3 + C_3C_LL_3L_LR_5R_Lg_ms^4 + C_3C_LL_3L_LR_5s^4 + C_3L_3R_5R_Lg_ms^2 + C_3L_3R_Ls^2 + 2C_5C_LL_3L_LR_5R_Lg_ms^4 + C_5C_LL_3L_LR_5s^4 + C_$$

10.476 INVALID-ORDER-476
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$$

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

10.477 INVALID-ORDER-477
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s}^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + C_5 C_L L_3 R_5 g_m s^3 + C_5 C_L L_3 s^3 + 2 C_5 L_3 g_m s^2 + C_5 R_5 g_m s + C_5 s + C_L L_3 g_m s^2 + g_m r^2}$$

10.478 INVALID-ORDER-478
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_L s^3 + C_5 C_L L_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_5 g_m s^2 + 2 C_5 L_3 R_L g_m s^2 + C_5 R_5 R_L g_m s + C_5 R_L s + C_L L_3 R_L g_m s^2 + C_5 R_5 R_L g_m s + C_5 R_L s + C_L R_3 R_L g_m s^2 + C_5 R_5 R_L g_$$

10.479 INVALID-ORDER-479
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.480 INVALID-ORDER-480
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.481 INVALID-ORDER-481
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(C_5R_5g_ms - C_5s + g_m\right)}{C_3C_5L_3L_LR_5g_ms^3 + C_3C_5L_3L_Ls^3 + C_3L_3L_Lg_ms^2 + C_5C_LL_3L_LR_5g_ms^3 + C_5C_LL_3L_Lg_ms^3 + C_5L_3R_5g_ms + C_5L_3s + C_5L_1R_5g_ms + C_5L_1R_5g_ms^3 + C_5L_1R_5g_ms^3$$

10.482 INVALID-ORDER-482
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_3s}{C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3C_LL_3L_Lg_ms^4 + C_3C_LL_3R_Lg_ms^3 + C_3L_3g_ms^2 + C_3C_5C_LL_3L_Lg_ms^4 + C_3C_5C_LL_3R_Lg_ms^4 + C_3C_5C_LL_3R_Lg_ms^2 + C_3C_5C_LL_3R_Lg$$

10.483 INVALID-ORDER-483
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 L_L R_5 g_m s^3 + C_3 C_5 L_3 L_L R_L s^3 + C_5 C_L L_3 L_L R_5 g_m s^3 + C_5 C_L L_3 L_L R_5 g_m s^3 + C_5 L_3 L_L R_5 g_m s^2 + 2 C_5 L_3 L_L R_1 g_m s^2 + C_5 L_3 L_L R_5 g_m s^2 + C_5 L_2 L_2 L_2 R_5 g_m s^2 + C_5 L_3 L_2 R_5 g_m$$

10.484 INVALID-ORDER-484
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_L R_5 R_L g_m s^5 + C_3 C_5 C_L L_3 L_L R_L s^5 + C_3 C_5 L_3 L_L R_5 g_m s^4 + C_3 C_5 L_3 L_L s^4 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_L s^3 + C_3 C_L L_3 L_L R_L g_m s^4 + C_3 L_3 L_L R_5 g_m s^4 + C_3 L_3 L_$$

10.485 INVALID-ORDER-485
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_Ls^3 + C_3C_LL_3L_LR_Lg_ms^4 + C_3L_3R_Lg_ms^2 + C_5C_LL_3L_LR_5g_ms^4 + C_3C_5L_3L_LR_5g_ms^4 + C_3C_5L_3L_RR_5g_ms^4 + C_3C_5L_3L_RR_5g_ms^2 + C_3C_5L_3L_RR_5g_ms^2$$

10.486 INVALID-ORDER-486
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

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

10.487 INVALID-ORDER-487
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3s\left(C_5L_5g_ms^2 - C_5s + g_m\right)}{C_3C_5L_3L_5g_ms^4 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + C_5C_LL_3L_5g_ms^4 + C_5C_LL_3s^3 + 2C_5L_3g_ms^2 + C_5L_5g_ms^2 + C_5s + C_LL_3g_ms^2 + g_m}$$

10.488 INVALID-ORDER-488
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_L g_m s^4 + C_3 C_5 L_3 R_L s^3 + C_5 L_4 L_5 R_L g_m s^4 + C_5 C_L L_3 L_5 R_L g_m s^4 + C_5 L_4 R_L s^3 + C_5 L_3 R_L g_m s^3 + 2 C_5 L_3 R_L g_m s^2 + C_5 L_5 R_L g_m s^2 + C_5 R_L s + C_L L_3 R_L g_m s^2 + C_5 R_L s + C_L R_2 R_L g_m s^2 + C_5 R_L s + C_L R_2 R_L g_m s^2 + C_5 R_L s + C_L R_2 R_L g_m s^2 + C_5 R_L s + C_L R_2 R_L g_m s^2 + C_5 R_$$

10.489 INVALID-ORDER-489
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

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

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
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(C_5L_5g_ms^2 - C_5s + g_m\right)}{C_3C_5L_3L_5L_Lg_ms^4 + C_3C_5L_3L_Ls^3 + C_3L_3L_Lg_ms^2 + C_5C_LL_3L_5L_Lg_ms^4 + C_5C_LL_3L_Ls^3 + C_5L_3L_Lg_ms^2 + C_5L_Lg_ms^2 +$$

10.492 INVALID-ORDER-492
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.493 INVALID-ORDER-493
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_3 L_L R_L s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_L R_L g_m s^4 + C_3 C_5 L_3 L_L R_L g_m s^2 + C_5 C_L L_3 L_5 L_L R_L g_m s^4 + C_5 C_L L_3 L_L R_L s^3 + C_5 L_3 L_5 L_L g_m s^3 + C_5 L_3 L_5 R_L g_m s^2 + 2 C_5 L_3 L_L R_L g_m s^2 + C_5 L_3 L_5 R_L g_m s^2 + C_5 L_3 L_5 R_L g_m s^2 + C_5 L_3 R_L g_m s^2 + C_5 R_3 R_L g_m s^2 + C_5 R_3 R_L g_m s^2 + C_5 R_2 R_L g_m s^2 + C_5 R_3 R_L g_m s^2 + C_5 R_2 R_L g_m s^2 + C_5 R_L g_m s^2 + C_$$

10.494 INVALID-ORDER-494
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_Ls^3 + C_3C_LL_3L_LR_Lg_ms^4 + C_3L_3L_Lg_ms^3 + C_3L_3R_Lg_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3L_LR_Lg_ms^4 + C_3L_3L_LR_Lg_ms^4 + C_3L_LR_Lg_ms^4 + C$$

10.495 INVALID-ORDER-495
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3R_Ls^3 + C_3C_LL_3L_LR_Lg_ms^4 + C_3L_3R_Lg_ms^4 + C_5C_LL_3L_5L_Lg_ms^5 + C_5C_LL_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_5L_5R_Lg_ms^4 + C_3C_5L_5R_Lg_ms^4 + C_3C_5L_5R$$

10.496 INVALID-ORDER-496
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$$

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

10.497 INVALID-ORDER-497
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{1}{C_{Ls}}\right)$$

$$H(s) = \frac{L_3s\left(-C_5L_5s^2 + L_5g_ms - 1\right)}{C_3C_5L_3L_5s^4 + C_3L_3L_5g_ms^3 + C_3L_3s^2 + C_5C_LL_3L_5s^4 + 2C_5L_3L_5g_ms^3 + C_5L_5s^2 + C_LL_3L_5g_ms^3 + C_LL_3s^2 + 2L_3g_ms + L_5g_ms + 1}$$

10.498 INVALID-ORDER-498
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

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

10.499 INVALID-ORDER-499
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$$

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

10.500 INVALID-ORDER-500
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}L_{5}s^{2}-L_{5}g_{m}s+1\right)}{C_{3}C_{5}C_{L}L_{3}L_{5}L_{L}s^{6}+C_{3}C_{5}L_{3}L_{5}L_{L}g_{m}s^{5}+C_{3}C_{L}L_{3}L_{5}S^{4}+C_{3}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{3}L_{5}S^{4}+C_{5}C_{L}L_{5}L_{5}S^{4}+C_$$

10.501 INVALID-ORDER-501
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

10.502 INVALID-ORDER-502
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5L_3L_5s^4 + C_3C_LL_3L_5L_Lg_ms^5 + C_3C_LL_3L_5R_Lg_ms^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3R_Ls^3 + C_3L_3L_5g_ms^3 + C_3L_3s^2 + 2C_5C_LL_3L_5R_Lg_ms^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3R_Ls^3 + C_3L_3L_5g_ms^3 + C_3L_3L_5R_Lg_ms^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3R_Ls^3 + C_3L_3L_5R_Ls^3 + C_3L_3L_5R_Ls^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3L_5R_$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Ls^4 + C_3C_LL_3L_5L_LR_Lg_ms^5 + C_3C_LL_3L_LR_Ls^4 + C_3L_3L_5L_Lg_ms^4 + C_3L_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^2 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5R_Lg_ms^3 + C_3L_5$$

10.505 INVALID-ORDER-505
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.506 INVALID-ORDER-506
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_L g_m s^4 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 L_3 R_L g_m s^2 + C_5 L_3 L_5 g_m s^3 + C_5 L_3 R_5 g_m s^2 + 2 C_5 L_3 R_L g_m s^2 + C_5 L_5 R_L g_m s^2 + C_5 R_5 R_L g_m s + C_5 R_5 R_L g_m s^2 +$$

10.507 INVALID-ORDER-507
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

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

10.508 INVALID-ORDER-508
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

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

10.509 INVALID-ORDER-509
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

10.510 INVALID-ORDER-510
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{L_{3}s\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}R_{5}C_{L}L_{3}L_{5}L_{L}g_{m}s^{6}+C_{3}C_{5}C_{L}L_{3}L_{L}R_{5}g_{m}s^{5}+C_{3}C_{5}L_{4}L_{5}s^{5}+C_{3}C_{5}L_{3}L_{5}g_{m}s^{4}+C_{3}C_{5}L_{3}R_{5}g_{m}s^{3}+C_{3}C_{5}L_{3}s^{3}+C_{3}C_{L}L_{3}L_{L}g_{m}s^{4}+C_{3}L_{3}g_{m}s^{2}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{3}L_{5}g_{m}s^{4}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^{5}+C_{5}C_{L}L_{5}L_{5}g_{m}s^$$

10.511 INVALID-ORDER-511
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{C_3C_5L_3L_Lg_ms^4 + C_3C_5L_3L_LR_5g_ms^3 + C_3C_5L_3L_Lg_ms^2 + C_5C_LL_3L_Lg_ms^4 + C_5C_LL_3L_LR_5g_ms^3 + C_5C_LL_3L_Ls^3 + C_5L_3L_Lg_ms^2 + C_5C_LL_3L_Lg_ms^2 + C_5C_LL_3L_Lg_ms^2 + C_5C_LL_3L_Lg_ms^2 + C_5C_LL_3L_Lg_ms^3 + C_5C_LL_3L_Lg_ms^2 + C_5C_LL_3L$$

10.512 INVALID-ORDER-512
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5L_3L_5g_ms^4 + C_3C_5L_3R_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^2 + C_3C_5C_LL_3R_5g$$

10.513 INVALID-ORDER-513
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.514 INVALID-ORDER-514
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.515 INVALID-ORDER-515
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3R_Lg_ms^4 + C_3C_5L_3R_Lg_ms^2 + C_3C_5L$$

10.516 INVALID-ORDER-516
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(-C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{C_3 C_5 L_3 L_5 R_5 R_L s^4 + C_3 L_3 L_5 R_5 R_L g_m s^3 + C_3 L_3 L_5 R_5 R_L s^2 + 2 C_5 L_3 L_5 R_5 R_L g_m s^3 + C_5 L_3 L_5 R_5 R_L s^2 + L_3 L_5 R_5 g_m s^2 + 2 L_3 L_5 R_L g_m s^2 + L_3 L_5 R_5 g_m s^2 + 2 L_3 L_5 R_5 g_m s^2 + 2 L_3 L_5 R_5 g_m s^2 + 2 L_5 R_5 g_m$$

10.517 INVALID-ORDER-517
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$$

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

10.518 INVALID-ORDER-518
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{L_3 R_L s \left(-C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s + L_5 R_5 R_L s^4 + C_5 L_3 L_5 R_5 R_L s^4 + C_5 L_3 L_5 R_5 R_L s^3 + C_5 L_5 R_5$$

10.519 INVALID-ORDER-519
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5L_3L_5R_5s^4 + C_3C_LL_3L_5R_5R_Lg_ms^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3R_5R_Ls^3 + C_3L_3L_5R_5g_ms^3 + C_3L_3L_5s^3 + C_3$$

10.520 INVALID-ORDER-520
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

10.521 INVALID-ORDER-521
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(-C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5g_ms - L_5g_ms - L_5s - R_5g_ms - L_5g_ms - R_5g_ms - L_5s - R_5g_ms - L_5g_ms - L_5g_m$$

10.522 INVALID-ORDER-522
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5R_5R_Ls^5 + C_3C_5L_3L_5R_5s^4 + C_3C_LL_3L_5L_LR_5g_ms^5 + C_3C_LL_3L_5L_Ls^5 + C_3C_LL_3L_5R_5R_Lg_ms^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3L_5R_5s^4 + C_3C_LL_3L_5L_2R_5g_ms^5 + C_3C_LL_3L_5L_2R_5g_ms^5 + C_3C_LL_3L_5R_5R_Lg_ms^4 + C_3C_LL_3L_5R_Lg_ms^4 + C_3C_LL_3L_5R_5R_Lg_ms^4 + C_3C_LL_3L_5R_5R_Lg_ms^4 + C_3C_LL_3L_5R_Lg_ms^4 + C_3C_LL_3$$

10.523 INVALID-ORDER-523
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$$

10.524 INVALID-ORDER-524
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.525 INVALID-ORDER-525
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_LL_3L_5L_LR_5R_Lg_ms^5 + C_3C_LL_3L_5L_LR_5s^5 + C_3C_LL_3L_5R_Ls^4 + C_3L_3L_5R_5R_Lg_ms^3 + C_3L_3L_5R_Ls^4 + C_3L_5R_Ls^4 + C_3L_5R_L$$

10.526 INVALID-ORDER-526
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_L g_m s^3 + C_3 L_3 R_5 R_L g_m s^2 + C_3 L_3 R_L s^2 + C_5 L_3 L_5 R_5 g_m s^3 + 2 C_5 L_3 L_5 R_L g_m s^3 + C_5 L_3 L_5 R_5 g_m s^2 + C_5 L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 R_L g_m s^3 + C_5 L_5$$

10.527 INVALID-ORDER-527
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$$

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

10.528 INVALID-ORDER-528
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$$

$$L_3R_Ls\left(C_5L_5R_5g_ms^2-\right)$$

$$H(s) = \frac{L_3R_Ls\left(C_5L_5R_5g_ms^2 - C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3L_3L_5R_Lg_ms^3 + C_3L_3R_5R_Lg_ms^2 + C_3L_3R_Ls^2 + C_5C_LL_3L_5R_5g_ms^4 + C_5C_LL_3L_5R_Lg_ms^4 + C_5L_3L_5R_Lg_ms^3 + 2C_5L_3L_5R_Lg_ms^4 + C_5L_3L_5R_Lg_ms^4 + C_5L_3L_5R_Lg_ms^3 + 2C_5L_3L_5R_Lg_ms^4 + C_5L_3L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5L_5R_Lg_ms^4 + C_5L_5R_Lg_ms^4 + C_5L_$$

10.529 INVALID-ORDER-529
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_LL_3L_5R_Lg_ms^4 + C_3C_LL_3R_5R_Lg_ms^3 + C_3C_LL_3R_Ls^3 + C_3L_3L_5g_ms^3 + C_3L_5L_5g_ms^3 + C_3L_5L_5g_ms^3$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{L_{Ls}}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_3L_Ls\left(C_5L_5R_5g_ms^2 - C_5L_5L_5L_1s_4 + C_3C_5L_3L_5L_Ls^4 + C_3L_3L_5L_Lg_ms^3 + C_3L_3L_LR_5g_ms^2 + C_5L_3L_5L_LR_5g_ms^4 + C_5C_LL_3L_5L_Ls^4 + 2C_5L_3L_5L_Lg_ms^3 + C_5L_3L_5R_5g_ms^2 - C_5L_3L_5L_Ls^4 + C_5C_LL_3L_5L_Ls^4 + C_5C_LL_3L_5L_2s^4 + C_5C_LL_3L_5L_2s^4 + C_5C_LL_3L_5L_2$$

10.532 INVALID-ORDER-532
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3L_5L_2g_ms^5 + C_3C_5L_3L_5R_5g_ms^6 + C_3C_5L_3L_5L_3L_5R_5g_ms^6 + C_3C_5L_3L_5L_5R_5g_ms^6 + C_3C_5L_3L_5R_5g_ms^6 + C_3C_5L_5L_5R_5g_ms^6 + C_3C_5L_5R_5g_ms^6 + C_3C_5L_5L_5R_5g_ms^6 + C_3C_5L_5L_5R_5g_ms^6 + C_3C_5L_5L_5R_5g_ms^6 + C_3C_5L$$

10.533 INVALID-ORDER-533
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.534 INVALID-ORDER-534
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{L_{Ls}}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5L_LR_Lg_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C$$

10.535 INVALID-ORDER-535
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_LL_3L_5L_LR_Lg_ms^5 + C_3C_LL_3L_LR_5R_Lg_ms^4 + C_3C_LL_3L_LR_Ls^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3L_Ls$$

10.536 INVALID-ORDER-536
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, R_L\right)$$

$$H(s) = \frac{L_3 R_L s \left(C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{C_3 C_5 L_3 L_5 R_5 R_L g_m s^4 + C_3 C_5 L_3 L_5 R_L s^4 + C_3 C_5 L_3 R_5 R_L s^3 + C_3 L_3 R_5 R_L g_m s^2 + C_5 L_3 L_5 R_5 g_m s^3 + 2 C_5 L_3 L_5 R_L g_m s^3 + C_5 L_3 L_5 s^3 + 2 C_5 L_3 R_5 R_L g_m s^2 + C_5 L_5 R_5 g_m s^3 + C_5 L_5 R_$$

10.537 INVALID-ORDER-537
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$$

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

10.538 INVALID-ORDER-538
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_3s}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls+1}\right)$$

10.539 INVALID-ORDER-539
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3R_5s^3 + C_3C_LL_3R_5R_Lg_ms^3 + C_3C_LL_3R_Ls^3 + C_3L_3R_5R_Lg_ms^3 + C_3C_LL_3R_5R_Lg_ms^3 + C_3C_L$$

10.540 INVALID-ORDER-540
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5C_LL_3L_5R_5g_ms^6 + C_3C_5C_LL_5R_5g_ms^6 + C_3C_5C_LL_5g_ms^6$$

10.543 INVALID-ORDER-543
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5L_3L_5L_LR_5R_Lg_ms^4 + C_3C_5L_3L_5L_LR_Ls^4 + C_3C_5L_3L_LR_5R_Ls^3 + C_3L_3L_LR_5R_Lg_ms^2 + C_3L_3L_LR_Ls^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^4 + C_5C_LL_3L_5L_LR_Ls^4 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_3L_3L_LR_Ls^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^4 + C_5C_LL_3L_5L_LR_Ls^4 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_3L_3L_LR_Ls^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^4 + C_5C_LL_3L_5L_LR_Ls^4 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_5C_LL_3L_5L_LR_5R_Lg_ms^2 + C_5C_LL_3L_5L_Rg_ms^2 + C_5C_LL_3L_5L_Tg_ms^2 + C_5C_LL_3L_5L_Tg_ms^2 + C_5C_LL_3L_5L_Tg_ms^2 + C_5C_LL_5L_5L_Tg_ms^2 + C_5C_LL_5L_Tg_ms^2 + C$$

10.544 INVALID-ORDER-544
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1}, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_Ls^5 + C_3C_5L_5L_5R_Ls^5 + C_3C_5L_5L_5R_Ls^5 + C_3C_5L_5L_5R_Ls^5 + C_3C_5L_5L_5R_Ls^5 + C_3C_5L_5L_5R_Ls^5 + C_3C_5L_5R_Ls^5 + C_3C_5L_5R_Ls^5 + C_3C_5$$

10.545 INVALID-ORDER-545
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_{3s}}{C_3L_3s^2+1}, \ \infty, \ \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls+\frac{1}{C_Ls}\right)}{L_Ls+R_L+\frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_RL_s^6 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3R_5R_Ls^3 + C_3C_LL_3L_LR_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3R_5R_Ls^3 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^3 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^3 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^3 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_3L_5R_Ls^3 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_5L_5R_Ls^4 + C_3C_5L_5R_Ls^4 + C_3C_5L_5R$$

10.546 INVALID-ORDER-546
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_5g_m - 1\right)\left(C_3L_3s^2 + C_3R_3s + 1\right)}{C_3C_LL_3R_5g_ms^3 + C_3C_LL_3s^3 + C_3C_LR_3R_5g_ms^2 + C_3C_LR_3s^2 + 2C_3L_3g_ms^2 + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + C_LR_5g_ms + C_Ls + 2g_m}$$

10.547 INVALID-ORDER-547
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(R_5 g_m - 1 \right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right)}{C_3 C_L L_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_5 R_L g_m s^2 + C_3 C_L R_3 R_5 R_L g_m s^2 + C_3 L_3 R_5 g_m s^2 + 2 C_3 L_3 R_L g_m s^2 + C_3 L_3 R_5 g_m s + 2 C_3 R_3 R_L g_m s + C_3 R_3 R_5 R_L g_m s + C_3 R_3 R_5 R_L g_m s^2 + C_3 R_3 R_5 g_m s^2 + 2 C_3 R_3 R_5 g_m s^2 + C_3 R_3 R_5 g_m s + 2 C_3 R_3 R_5 g_m s + 2 C_3 R_3 R_5 g_m s + 2 C_3 R_5 R_5 g_m s^2 + 2 C_5 R_$$

10.548 INVALID-ORDER-548
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.549 INVALID-ORDER-549
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.550 INVALID-ORDER-550
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(R_5 g_m - 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{C_3 C_L L_3 L_L R_5 g_m s^4 + C_3 C_L L_L R_3 R_5 g_m s^3 + C_3 C_L L_L R_3 s^3 + 2 C_3 L_3 L_L g_m s^3 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_L R_5 g_m s^2 + C_3$$

10.551 INVALID-ORDER-551
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(R_5 g_m - 1) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_L L_L s^2 + C_3 C_L L_3 L_L g_m s^3 + C_3 C_L L_2 R_5 g_m s^3 + C_3 C_L L_L R_3 g_m s^3 + C_3 C_L L_L R_5 g_m s^3 + C_3 C_L L_L s^3 + C_2 C_L L_L s^3 + C_2 C_L L_L s^3 + C_2 C_L L_L s^3$$

10.552 INVALID-ORDER-552
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_S}{C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_L s^4 + C_3 C_L L_L R_3 R_5 R_L g_m s^3 + C_3 C_L L_L R_3 R_L s^3 + C_3 L_3 L_L R_5 g_m s^3 + 2 C_3 L_3 L_L R_L g_m s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_L s^3 + C_3 R_L s^3 + C_3$$

10.553 INVALID-ORDER-553
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_L g_m s^4 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_L R_3 R_5 g_m s^3 + 2 C_3 C_L L_L R_3 R_L g_m s^3 + C_3 C_L L_L R_3 s^3 + C_3 C_L L_L R_5 R_L g_m s^3 + C_3 C_L R_5 R_L g_m$$

10.554 INVALID-ORDER-554
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_L g_m s^4 + C_3 C_L L_3 L_L s^4 + C_3 C_L L_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_L s^3 + C_3 C_L L_L R_3 R_5 g_m s^3 + 2 C_3 C_L L_L R_3 R_L g_m s^3 + C_3 C_L L_L R_3 R_5 g_m s^3 + C_3 C_L L_L R_5 g_m s^3 + C_3 C_L L_L$$

10.555 INVALID-ORDER-555
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_5 s - g_m\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{2 C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 L_3 s^3 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_3 s^2 + C_3 C_5 R_L s^2 + C_3 L_3 g_m s^2 + C_3 R_3 g_m s + C_3 R_L g_m s + 2 C_5 R_L g_m s + C_5 s + g_m R_2 g_m s^2 + C_3 R_3 g_m s^2 + C_3 R_3 g_m s + C_3 R_2 g_m s + C_5 R_3 g_m s +$$

10.556 INVALID-ORDER-556
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.557 INVALID-ORDER-557
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.558 INVALID-ORDER-558
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.559 INVALID-ORDER-559
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.560 INVALID-ORDER-560
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{L_L s \left(C_5 s - g_m\right) \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{C_3 C_5 C_L L_2 L_2 s^5 + C_3 C_5 C_L L_L R_3 s^4 + 2 C_3 C_5 L_3 s^3 + 2 C_3 C_5 L_L R_3 g_m s^3 + C_3 C_5 L_L s^3 + C_3 C_5 L_2 s^3 + C_3 C_5 L_L L_2 L_2 g_m s^4 + C_3 C_L L_L R_3 g_m s^3 + C_3 L_3 g_m s^3 + C_3 C_5 L_2 s^3 + C_3 C$$

10.561 INVALID-ORDER-561
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.562 INVALID-ORDER-562
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_LR_3R_Ls^4 + 2C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_Ls^3 + 2C_3C_5L_LR_3R_Lg_ms^3 + C_3C_5L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_2R_3s^3 + C_3C_5L_3L_3L_3s^3 + C_3C_5L_3L_3s^3 + C_3C_5L_3L_3s^3 + C_3C_5L_3L_3s^3$$

10.563 INVALID-ORDER-563
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_Ls^4 + 2C_3C_5L_3L_Lg_ms^4 + 2C_3C_5L_3R_Lg_ms^3 + C_3C_5L_3s^3 + 2C_3C_5C_LL_Rs^3 + C_3C_5C_LL_Rs^3 + C_3C_5C_LL_Rs^3$$

10.564 INVALID-ORDER-564
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_Ls^4 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_LR_Ls^4 + C_3C_5C_LR_3R_Ls^3 + 2C_3C_5L_3R_Lg_ms^3 + C_3C_5C_LL_Rs^4 + C_3C_5C_LL_R$$

10.565 INVALID-ORDER-565
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_5 R_5 s - R_5 g_m + 1\right)}{2 C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_5 s^3 + 2 C_3 C_5 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_3 R_5 s^2 + C_3 C_5 R_3 R_5 g_m s^2 + 2 C_3 L_3 R_L g_m s^2 + C_3 L_3 s^2 + C_3 R_3 R_5 g_m s + 2 C_3 R_3 R_L g_m s + 2 C_3 R_3 R_5 g_m s^2 + 2 C_3 R_5 R_5 g_m s^2 + 2 C_5 R_5 g$$

10.566 INVALID-ORDER-566
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

10.567 INVALID-ORDER-567
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.568 INVALID-ORDER-568
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + C_3C_LR_3R_5s^3 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5C_LR_3R_5g_ms^3 + 2C_3C_5R_3R_5g_ms^3 + 2C_3C_5R_5R_5g_ms^3 + 2C_3C_5R_5g_ms^3 + 2C_3C_$$

10.569 INVALID-ORDER-569
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_LR_5s^4 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5R_3R_5g_ms^3 + 2C_3C_5R_5R_5g_ms^3 + 2C_5R_5R_5g_ms^3 + 2C_5R_5R_5g_ms^3 + 2C_5R_5R_5g_ms^3 + 2C_5R_5R_5g_ms$$

10.570 INVALID-ORDER-570
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5L_3L_LR_5g_ms^4 + C_3C_5L_3R_5s^3 + 2C_3C_5L_LR_3R_5g_ms^3 + C_3C_5L_LR_5s^3 + C_3C_5R_3R_5s^2 + C_3C_LL_3L_LR_5g_ms^4 + C_3C_LL_3L_Rs_5g_ms^4 + C_3C_5L_3R_5s^3 + 2C_3C_5L_LR_3R_5g_ms^3 + C_3C_5L_LR_5s^3 + C_3C_5R_3R_5s^2 + C_3C_5L_LR_5g_ms^4 + C_3C_5L_L$$

10.571 INVALID-ORDER-571
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_LR_3R_5g_ms^4 + C_3C_5C_LL_LR_5s^4 + 2C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_5s^3 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_3R_5c^4 + 2C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_$$

10.572 INVALID-ORDER-572
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_LR_3R_5R_Ls^4 + 2C_3C_5L_3L_LR_5R_Lg_ms^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3R_5R_Ls^3 + 2C_3C_5L_LR_3R_5R_Lg_ms^3 + C_3C_5L_LR_3R_5s^3 + C_3C_5L_LR_3R_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3L_LR_5s^4 + C_3C_5L_3L_LR_3s^3 + 2C_3C_5L_LR_3R_5R_Ls^3 + C_3C_5L_LR_3R_5s^3 + C_3C_5L_LR_3s^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_L$$

10.573 INVALID-ORDER-573
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_5s^4 + C_3C_5C_LL_LR_5R_Ls^4 + 2C_3C_5L_3L_LR_5g_ms^4 + 2C_3C_5L_3R_5R_Lg_ms^3 + 2C_3C_5C_LL_RR_5R_Lg_ms^4 + 2C_3C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R_Lg_ms^2 + 2C_5C_LL_RR_5R$$

10.574 INVALID-ORDER-574
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_5R_Ls^4 + 2C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_5s^4 + C_3C_5C_LL_LR_5R_Ls^4 + C_3C_5C_LL_RR_5R_Ls^4 + C$$

10.575 INVALID-ORDER-575
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 R_5 g_m s - C_5 s + g_m \right)}{C_3 C_5 L_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 R_3 R_5 g_m s^2 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_3 s^2 + C_3 C_5 R_5 R_L g_m s^2 + C_3 C_5 R_L s^2 + C_3 L_3 g_m s^2 + C_3 R_3 g_m s + C_3 R_L g_m s^2 + C_3 R_5 g_m$$

10.576 INVALID-ORDER-576
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_3C_5C_LL_3R_5g_ms^3 + C_3C_5C_LL_3s^3 + C_3C_5C_LR_3R_5g_ms^2 + C_3C_5L_2g_ms^2 + 2C_3C_5L_3g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3C_LL_3g_ms^2 + C_3C_LR_3g_ms + C_3C_5C_LL_3g_ms^2 + C_3C_LL_3g_ms^2 + C_3C_LL_3g_$$

10.577 INVALID-ORDER-577
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L}{C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LR_3R_5R_Lg_ms^3 + C_3C_5C_LR_3R_Ls^3 + C_3C_5L_3R_5g_ms^3 + 2C_3C_5L_3R_Lg_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3R_5g_ms^2 + 2C_3C_5R_3R_5g_ms^3 + 2C_3C_5L_3R_Lg_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3R_5g_ms^3 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5L_3R_5g_ms^3 + C_3C_5L_3R_5g_ms^3 + 2C_3C_5L_3R_5g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_$$

10.578 INVALID-ORDER-578
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 C_5 C_L L_3 R_5 g_m s^3 + 2 C_3 C_5 C_L L_3 R_L g_m s^3 + C_3 C_5 C_L L_3 s^3 + C_3 C_5 C_L R_3 R_5 g_m s^2 + 2 C_3 C_5 C_L R_3 R_L g_m s^2 + C_3 C_5 C_L R_3 R_5 g_m s^2 + C_3 C_5 C_L R_5 R_L g_m s^2 + C_5 C_L R_5 R_L g_m s^$$

10.579 INVALID-ORDER-579
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s^2 + C_3 C_5 C_L L_3 L_2 g_m s^4 + C_3 C_5 C_L L_3 R_5 g_m s^3 + C_3 C_5 C_L L_L R_3 g_m s^3 + C_3 C_5 C_L L_L R_5 g_m s^3 + C_3 C_5 C_L L_L s^3 + C$$

10.580 INVALID-ORDER-580
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s}{C_3 C_5 C_L L_3 L_L R_5 g_m s^5 + C_3 C_5 C_L L_3 L_L s^5 + C_3 C_5 C_L L_L R_3 R_5 g_m s^4 + C_3 C_5 C_L L_L R_3 s^4 + 2 C_3 C_5 L_3 L_L g_m s^4 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_L R_3 g_m s^3 + C_3 C_5$$

10.581 INVALID-ORDER-581
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.582 INVALID-ORDER-582
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_3L_LR_5g_ms^4 + 2C_3C_5L_3L_LR_2g_ms^4 + C_3C_5L_3L_LR_3R_5R_Lg_ms^4 + C_3C_5L_3L_Rg_ms^4 + C_3C_5L_Rg_ms^4 + C_3C_5L_Rg_ms^4 + C_3C_5$$

10.583 INVALID-ORDER-583
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_L R_5 g_m s^5 + 2 C_3 C_5 C_L L_3 L_L R_L g_m s^5 + C_3 C_5 C_L L_3 L_L s^5 + C_3 C_5 C_L L_L R_3 R_5 g_m s^4 + 2 C_3 C_5 C_L L_L R_3 R_L g_m s^4 + C_3 C_5 C_L L_L R_3 s^4 + C_3 C_5 C_L L_L R_3 R_L g_m s^4 + C_3$$

10.584 INVALID-ORDER-584
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_L R_5 g_m s^5 + 2 C_3 C_5 C_L L_3 L_L R_L g_m s^5 + C_3 C_5 C_L L_3 L_L s^5 + C_3 C_5 C_L L_3 R_5 R_L g_m s^4 + C_3 C_5 C_L L_3 R_L s^4 + C_3 C_5 C_L L_L R_3 R_5 g_m s^4 + 2 C_3 C_5 C_L L_L R_3 R_L g_m s^4 + C_3 C_5 C_L L_3 R_L g_m s^4 + C_3 C_$$

10.585 INVALID-ORDER-585
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_3 C_5 L_3 L_5 g_m s^4 + 2 C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 L_5 R_L g_m s^3 + 2 C_3 C_5 R_3 R_L g_m s^2 + C_3 C_5 R_3 s^2 + C_3 C_5 R_L s^2 + C_3 L_3 g_m s^2 + C_3 R_3 g_m s + C_3 R_L g_m s^2 + C_3 R_3 g_$$

10.586 INVALID-ORDER-586
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

10.587 INVALID-ORDER-587
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(\frac{1}{C_3 C_5 C_L L_3 L_5 R_L g_m s^5 + C_3 C_5 C_L L_3 R_L s^4 + C_3 C_5 C_L L_5 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_L s^3 + C_3 C_5 L_3 L_5 g_m s^4 + 2 C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 L_5 R_5 g_m s^3 + C_5 C_5 L_5 R_5 g_m s^3 + C_5$$

10.588 INVALID-ORDER-588
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) (C_3 L_3 s^2 + C_3 R_3 s + C_3 C_5 C_L L_3 L_5 g_m s^3 + C_3 C_5 C_L L_3 R_L g_m s^3 + C_3 C_5 C_L L_5 R_3 g_m s^3 + C_3 C_5 C_L L_5 R_L g_m s^3 + 2 C_3 C_5 C_L R_3 R_L g_m s^2 + C_3 C_5 C_L R_3 s^2 + C_3 C_5 C_L R_$$

10.589 INVALID-ORDER-589
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_3 L_3 s^2 + C_3 R_3 s - C_4 L_3 L_5 g_m s^4 + 2 C_3 C_5 C_L L_3 L_2 g_m s^4 + C_3 C_5 C_L L_3 L_2 g_m s^4 + C_3 C_5 C_L L_5 L_2 g_m s^4 + C_3 C_5 C_L L_5 L_2 g_m s^4 + C_3 C_5 C_L L_5 R_3 g_m s^3 + 2 C_3 C_5 C_L L_4 R_3 g_m s^3 + C_3 C_5 C_L L_4 S^3 + C_3 C_5 C_L L_5 R_3 g_m s^3 + C_3 C_5 C_L L_5 R_5 g_m s^3 + C_5 C_5 C_5 R_5 g_m s^3 + C_5$$

10.590 INVALID-ORDER-590
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s}{C_3 C_5 C_L L_3 L_5 L_L g_m s^6 + C_3 C_5 C_L L_3 L_L s^5 + C_3 C_5 C_L L_5 L_L R_3 g_m s^5 + C_3 C_5 C_L L_L R_3 s^4 + C_3 C_5 L_3 L_5 g_m s^4 + 2 C_3 C_5 L_3 L_L g_m s^4 + C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_5 L_L g_m s^4 + C_5 C_5 L_L g_m s^4 + C_5 C_$$

10.591 INVALID-ORDER-591
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.592 INVALID-ORDER-592
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_5L_Rg_ms^5 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_LR_Lg_ms^4 + C_3C_5L_LR_Lg_ms^4 + C_3C_5L_LR_Lg_ms^4$$

10.593 INVALID-ORDER-593
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_2g_ms^5 + 2C_3C_5C_LL_LR_3R_Lg_ms^4 + C_3C_5C_LL_LR_3s^4 + C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_RR_3g_ms^5 + C_3C_5C_LL_5L_5C_LL_5L_5C_LL_5L_5C_LL_5C_$$

10.594 INVALID-ORDER-594
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_2g_ms^5 + C_3C_5C_LL_3L_LS^5 + C_3C_5$$

10.595 INVALID-ORDER-595
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_3 C_5 L_3 L_5 R_L g_m s^4 + C_3 C_5 L_5 R_3 R_L g_m s^3 + C_3 C_5 L_5 R_3 s^3 + C_3 C_5 L_5 R_L s^3 + C_3 L_3 L_5 g_m s^3 + 2 C_3 L_3 R_L g_m s^2 + C_3 L_5 R_3 g_m s^2 + C_3 L_5 R_L g_m s^2 + C_3 L_5 R_2 g_m s^3 + C_3 L_5 R$$

10.596 INVALID-ORDER-596
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

10.597 INVALID-ORDER-597
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.598 INVALID-ORDER-598
$$Z(s) = \left(\infty, \ \infty, \ L_3 s + R_3 + \frac{1}{C_3 s}, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$$

10.599 INVALID-ORDER-599
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_5L_Rg_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_3s^4 + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3C_5L_3L_5s^3 + C_3C_5L_5L_5s^3 + C_3C_5L_5L_5s^5 + C_3C_5C_LL_5L_5s^5 + C_3C_5C_LL_5L_5c^5 + C_3C_5C_LL_5L_5c^5 + C_3C_5C_LL_5c^5 +$$

10.600 INVALID-ORDER-600
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.601 INVALID-ORDER-601
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_Ls^5 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_3g_ms^5 + C_3C_5C_LL_5L_Ls^5 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_5R_3g_ms^5 + C_3C_5C_LL$$

10.602 INVALID-ORDER-602
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.603 INVALID-ORDER-603
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_Ls^5 + 2C_3C_5L_3L_5L_Lg_ms^5 + 2C_3C_5L_3L_5L_Lg_ms^6 + 2C_3C_5L_3L_5L_Lg_ms^6 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + 2C_3C_5L_3L_5L_Lg_ms^5 + 2C_3C_5L_3L_5L_Lg_ms^6 + 2C_3C_5C_LL_5L_LR_3s^6 + 2C_3C_5C_LL_5L_RR_3s^6 + 2C_3C_5C_LL_5C_LL_5L_RR_3s^6 + 2C_3C_5C_LL_5L_RR_3s^6 + 2C_3C_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C$$

10.604 INVALID-ORDER-604
$$Z(s) = \left(\infty, \infty, L_3s + R_3 + \frac{1}{C_3s}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_Ls^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_2s^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5C_LL_5L_Rs^6 + C_3C_5C_LL_5L_Rs^6 +$$

10.605 INVALID-ORDER-605
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 R_3 s + 1 \right) \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m r^2 + C_5 R_5 g_m s - C_5 r^2 + G_5 R_5 r^2 + C_5 R_5 r^2$$

10.606 INVALID-ORDER-606
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_5L_5g_ms^2 + C_5R_5g_ms - C_5s - C_5s - C_5s^2\right)}{s\left(C_3C_5C_LL_3L_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^3 + C_3C_5C_LL_3s^3 + C_3C_5C_LL_3s$$

10.607 INVALID-ORDER-607
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 R_L g_m s^5 + C_3 C_5 C_L L_3 R_5 R_L g_m s^4 + C_3 C_5 C_L L_3 R_L s^4 + C_3 C_5 C_L L_5 R_3 R_L g_m s^4 + C_3 C_5 C_L R_3 R_5 R_L g_m s^3 + C_3 C_5 C_L R_3 R_L s^3 + C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_3 R_5 g_m s^4 + C_3 C_5 C_L R_3 R_5 R_L g_m s^4 + C_3 C_5 C_L R_5 R_5 R_L g_m s^4 + C_3 C_5 C_L R_5 R_5 R_L g_m s^4 + C_3 C_5 C_L R_5 R_L g_m s^4 +$$

10.608 INVALID-ORDER-608
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.609 INVALID-ORDER-609
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.610 INVALID-ORDER-610
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.611 INVALID-ORDER-611
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.612 INVALID-ORDER-612
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_2s^5 + C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_LR_3R_5R_Lg_ms^4 + C_3C_5C_LL_LR_3R_Ls^4 + C_3C_5L_LL_Rs^4 + C_3C_5C_LL_LR_3R_Lg_ms^5 + C_3C_5C_LL$$

10.613 INVALID-ORDER-613
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.614 INVALID-ORDER-614
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3L_LR_Lg_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3R_L$$

10.615 INVALID-ORDER-615
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5L_3L_5R_5R_Lg_ms^4 + C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_5R_3R_5R_Lg_ms^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5L_5R_5R_Ls^3 + C_3L_3L_5R_5g_ms^3 + 2C_3L_3L_5R_Lg_ms^3 + C_3L_3L_5s^3 + 2C_3L_3L_5R_5g_ms^3 + 2C_3L_5R_5g_ms^3 +$$

10.616 INVALID-ORDER-616
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5s^5 + C_3C_5C_LL_5R_3R_5s^4 + 2C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_5s^3 + C_3C_LL_3L_5R_5g_ms^4 + C_3C_LL_3L_5s^4 + C_3C_LL_3R_5s^3 + C$$

10.617 INVALID-ORDER-617
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.618 INVALID-ORDER-618
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_5s^4 + C_3C_5C_LL_5R_5R_Ls^4 + 2C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5C_LL_5R_3R_5g_ms^4 + C_3C_5C_LL_5R_5g_ms^4 + C_3C_5C_LL_5R_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_5C_LL_5g_ms^2 + C_3C_$$

10.619 INVALID-ORDER-619
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_5L_RR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5R_3R_5s^4 + 2C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5C_LL_5L_5R_5g_ms^6 + C_3C_5C_LL_5L_5R_5g_ms^5 + C_3C_5C_LL_5L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5R_3R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_$$

10.620 INVALID-ORDER-620
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_5L_LR_3R_5s^5 + 2C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_5L_LR_3R_5g_ms^4 + C_3C_5L_5L_LR_5s^4 + C_3C_5L_5R_3R_5s^3 + C_3C_LL_3L_5L_Rs^2 + C_3C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C_5C_5L_5L_Rs^2 + C$$

10.621 INVALID-ORDER-621
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Rs_5g_ms^6 + 2C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_5s^5 + 2C_3C_5C_LL_5L_Rs_8r_5g_ms^5 + C_3C_5C_LL_5L_Rs_8r_5s^5 + 2C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_5g_ms^5 + C_3C_5C_LL_5L_Rs_8r_5s^5 + 2C_3C_5C_LL_5R_3R_5g_ms^5 + C_3C_5C_LL_5R_3R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5g_ms^5 + C_3C$$

10.622 INVALID-ORDER-622
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.623 INVALID-ORDER-623
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + 2C_3C_5C_LL_5L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + 2C_3C_5L_3L_5L_LR_5g_ms^5 + 2C_3C_5C_LL_5L_LR_3R_5s^6 + 2C_3C_5C_LL_5L_RR_3R_5s^6 + 2C_5C_LL_5L_RR_3R_5s^6 + 2C_5C_LL_5L_RR_3R_5s^6 + 2C_5C_LL_5L_RR_3R_5s^6 + 2C_5C_LL_5L_RR_3R_5s^6 + 2C_5C_LL_5L_RR_3R_$$

10.624 INVALID-ORDER-624
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5R_5R_Ls^5 + 2C_3C_5C_LL_5L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3R_5s^5 + C_3C_5C_LL_5L_LR_5R_Ls^5 + C_3C_5C_LL_5L$$

10.625 INVALID-ORDER-625
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 s^2 + C_3 C_5 L_3 L_5 R_5 g_m s^4 + 2 C_3 C_5 L_3 L_5 R_L g_m s^4 + C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_5 R_3 R_5 g_m s^3 + 2 C_3 C_5 L_5 R_3 R_L g_m s^3 + C_3 C_5 L_5 R_5 R_L g_m s^3 + C_5 L_5 R_L g_m s^3 + C_5 L_5 R_L g_m s^3 + C_5 L_5 R_L g_m s^3 + C_5$$

10.626 INVALID-ORDER-626
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

10.627 INVALID-ORDER-627
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3L_5R_Lg_ms^2 + C_3C_5L_5L_5R_Lg_ms^2 + C_3$$

10.628 INVALID-ORDER-628
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LL_$$

10.629 INVALID-ORDER-629
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5R_3R_5g_ms^4 + C_3C_5C_LL_5L_3R_5g_ms^5 + C_3C_5C_LL_5L_4R_5g_ms^5 + C_3C_5C_LL_5L_4R_5g_ms^5 + C_3C_5C_LL_5L_4R_5g_ms^5 + C_3C_5C_LL_5L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5R_$$

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
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_5L_Ls^5 + C_3C_5C_LL_5L_5C_LL_5L_5C_LL_5L_5C_LL_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5 + C_3C_5C_LL_5C_Ls^5$$

10.632 INVALID-ORDER-632
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.633 INVALID-ORDER-633
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_5L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_LR_3s^6 + C_3C_5C_LL_5L_2s^6 + C_3C_5C_LL_5L_2s^6 + C_3C_5C_LL_5L_3c_5C_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_LL_5c_$$

10.634 INVALID-ORDER-634
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.635 INVALID-ORDER-635
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

10.636 INVALID-ORDER-636
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5s^5 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_5R_3R_5g_ms^4 + C_3C_5C_LL_5R_3s^4 + C_3C_5C_LR_3R_5s^3 + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5C_LL_5R_3R_5g_ms^4 + 2C_3C_5C_LL_5R_5g_ms^4 + 2C_5C_LL_5R_5g_ms^2 + 2C_5C_L$$

10.637 INVALID-ORDER-637
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LR_3R_5R_Ls^3 + C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_5R_Lg_ms^4 + C_3C_5C_LL_5R_3R_Ls^4 + C_3C_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_LL_5R_5C_$$

10.638 INVALID-ORDER-638
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5g_ms^4 + 2C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5$$

10.639 INVALID-ORDER-639
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_5L_LR_5g_ms^5 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_m$$

10.640 INVALID-ORDER-640
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5L_3L_5L_Lg_ms^5 + C_3C_5C_LL_5L_LR_3s^5 + C_3C_5C_LL_5L_5C_LR_3s^5 + C_3C_5C_LL_5L_5C_LR_3s^5 + C_3C_5C_LL_5C_LR_3s^5 + C_3C_5C_LR_3s^5 + C_3C_5C_$$

10.641 INVALID-ORDER-641
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3L_LR_5g_ms^5 + 2C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5s^4 + 2C_3C_5C_LL_3L_5s^5 + 2C_3C_5C_LL_3L_5c^5 + 2C_3C_5C_LL_3L_5c^5 + 2C_3C_5C_LL_3L_5c^5 + 2C_3C_5C_LL_3L_5c^5 + 2C_3C_5C_LL_3L_5c^5 + 2C_3C_5C_LL_3c^5 + 2C_3C_5C_LL_3c^5 + 2C_3C_5C_LL_3c^5 + 2C_5C_LL_3c^5 + 2C_5C_L$$

10.642 INVALID-ORDER-642
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.643 INVALID-ORDER-643
$$Z(s) = \left(\infty, \infty, L_3 s + R_3 + \frac{1}{C_3 s}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_Rg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_5L_Rg_ms^5 + 2C_3C_5C_LL_5L_Rg_ms^5 + 2C_3C_5C_LL_5C_LL_5L_Rg_ms^5 + 2C_5C_LL_5L_Rg_ms^5 + 2C_5C_LL_5L_Rg_ms^5 + 2C_5C_LL_5L_Rg_ms^5$$

10.644 INVALID-ORDER-644
$$Z(s) = \left(\infty, \ \infty, \ L_3s + R_3 + \frac{1}{C_3s}, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^5 + 2C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^6 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_Ls^6 + C_3C_5C_LL$$

10.645 INVALID-ORDER-645
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(R_5 g_m - 1\right) \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_5 g_m s^2 + C_3 L_3 R_3 R_5 g_m s^2 + C_L L_3 R_5 g_m s^2 + C_L L_3$$

10.646 INVALID-ORDER-646
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(R_5 g_m - 1\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 L_3 R_3 R_5 g_m s^2 + C_L L_3 L_L R_3 g_m s^3 + C_L L_3 L_L R_5 g_m s^3 + C_L L_3 L_L s^3 + C_L L_3 R_3 R_5 g_m s^2 + C_L L_3 R_3 s^2 + C_L L_2 R_3 R_5 g_m s^3 + C_L L_3 R_5 g_m s^3 + C_L R_5 g_m s^3$$

10.647 INVALID-ORDER-647
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 R_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_5 g_m s^2 + C_3 L_3 R_3 s^2 + 2 C_L L_3 L_L R_3 g_m s^3 + C_L L_3 L_L R_5 g_m s^3 + C_L L_3 L_L$$

10.648 INVALID-ORDER-648
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 R_5 g_m s^3 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 R_3 R_5 R_L g_m s^2 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 R_5 g_m s^3 + 2 C_L$$

10.649 INVALID-ORDER-649
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{L_3 R_3 R_L s}{C_3 C_L L_3 L_L R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 R_3 R_5 R_L g_m s^2 + C_3 L_3 R_3 R_L s^2 + C_L L_3 L_L R_3 R_5 g_m s^3 + 2 C_L L_3 L_L R_3 R_L g_m s^3 + C_L L_3 L_L R_3 R_5 R_L g_m s^3 + C_L L_3 L_L R_3 R_L g_m s^3 + C_L R_$

10.650 INVALID-ORDER-650
$$Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_L g_m s^2 + 2 C_5 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_3 s^2 + C_5 L_3 R_L s^2 + C_5 R_3 R_L s + L_3 R_3 g_m s + L_3 R_L g_m s + R_3 R_L g_m}$$

10.651 INVALID-ORDER-651
$$Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(-C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 s^3 + C_3 L_3 R_3 g_m s^2 + C_5 C_4 L_3 R_3 s^3 + 2 C_5 L_3 R_3 g_m s^2 + C_5 L_3 s^2 + C_5 R_3 s + C_4 L_3 R_3 g_m s^2 + L_3 g_m s + R_3 g_m}$$

10.652 INVALID-ORDER-652
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_L g_m s^2 + C_5 C_L L_3 R_3 R_L s^3 + 2 C_5 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_3 s^2 + C_5 L_3 R_L s^2 + C_5 L_3 R_L s + C_L L_3 R_3 R_L g_m s^2 + L_3 R_3 g_m s + L_3 R_L g_m s + R_3 R_L g_m s^2 + C_5 R_3 R_L s + C_5 R_5 R$$

10.653 INVALID-ORDER-653
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

10.654 INVALID-ORDER-654
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{L_3 R_3 s \left(C_5 s - g_m\right) \left(C_L L_L s^2 + 1\right)}{C_3 C_5 C_L L_3 L_L R_3 s^5 + C_3 C_5 L_3 R_3 s^3 + C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 L_3 L_L R_3 g_m s^4 + C_5 C_L L_3 L_L R_3 g_m s^4 + C_5 C_L L_3 L_L R_3 s^3 + C_5 C_L L_L R_3 s^3 + 2 C_5 L_3 R_3 g_m s^2 + C_5 L_4 R_3 g_m s^4 + C_5 C_L L_3 L_L R_3 g_m s^3 + C_5 C_L L_3 R_3 g_m s^3 + C_5 C_L L$$

10.655 INVALID-ORDER-655
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_LR_3s\left(-C_5s + g_m\right)}{C_3C_5L_3L_LR_3s^3 + C_3L_3L_LR_3g_ms^2 + C_5C_LL_3L_LR_3s^3 + 2C_5L_3L_LR_3g_ms^2 + C_5L_3L_Ls^2 + C_5L_3R_3s + C_5L_LR_3s + C_LL_3L_LR_3g_ms^2 + L_3L_Lg_ms + L_3R_3g_m + L_LR_3g_ms^2 + C_5L_3L_LR_3g_ms^2 + C_5L_3L_LR_3g_m$$

10.656 INVALID-ORDER-656
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3C_LL_3R_3R_Lg_ms^3 + C_3L_3R_3g_ms^2 + 2C_5C_LL_3L_LR_3g_ms^4 + C_5C_LL_3L_Ls^4 + 2C_5C_LL_3L_Ls^4 + 2C_5C_LL_3L_L$$

10.657 INVALID-ORDER-657
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.658 INVALID-ORDER-658
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_LL_3L_LR_3R_Lg_ms^4 + C_3L_3L_LR_3g_ms^3 + C_3L_3R_3R_Lg_ms^2 + 2C_5C_LL_3L_LR_3R_Lg_ms^4 + C_5C_LL_3L_LR_3s^4 + C_5C_LL_3L_LR_3s^$$

10.659 INVALID-ORDER-659
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{L_3R_3R_4S_5 - L_3L_2R_3R_2S_5 + C_3C_5L_3R_3R_4S_3 + C_3C_4L_3L_2R_3R_4S_4 + C_3L_3R_3R_4S_3 + C_5C_4L_3L_4R_3R_4S_4 + C_5C_4L_3L_4R_4S_4 + C_5C_4L_3L_4R_5R_5 + C_5C_4L_3L_5R_5 + C_5C_4L_5R_5 + C_5C_4L_5R_5 + C_5C_4L_5R_5 + C_5C_5R_5 + C_5C_5$$

10.660 INVALID-ORDER-660
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 R_5 s + R_5 g_m - 1\right)}{C_3 C_5 L_3 R_3 R_5 R_L s^3 + C_3 L_3 R_3 R_5 R_L g_m s^2 + C_5 L_3 R_3 R_5 R_L g_m s^2 + C_5 L_3 R_3 R_5 R_L s^2 + C_5 L_3 R_5 R_L s^2 + C_5 R_3 R_5 R_L s + L_3 R_3 R_5 g_m s + 2 L_3 R_3 R_L g_m s + L_3 R_3 R_5 R_L s + L_3 R_3 R_5$$

10.661 INVALID-ORDER-661
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

10.662 INVALID-ORDER-662
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 R_5 s + R_5 g_m - 1\right)}{C_3 C_5 L_3 R_3 R_5 R_L s^3 + C_3 L_3 R_3 R_5 R_L g_m s^2 + C_5 L_4 R_3 R_5 R_L s^3 + 2 C_5 L_3 R_3 R_5 R_L g_m s^2 + C_5 L_3 R_3 R_5 R_L s^2 + C_5 R_3 R_5 R_L s + C_L L_3 R_3 R_5 R_L g_m s^2 + C_5 L_4 R_3 R_5 R_L g_m s^2 + C_5 R_5 R_L g_m s^2 + C_5 R_5 R_L g_m s^2 + C_5 R_5$$

10.663 INVALID-ORDER-663
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3R_3R_5s^3 + C_3C_LL_3R_3R_5R_Lg_ms^3 + C_3C_LL_3R_3R_Ls^3 + C_3L_3R_3R_5g_ms^2 + C_3L_3R_3R_5s^2 + 2C_5C_LL_3R_3R_5R_Lg_ms^3 + C_5C_LL_3R_3R_5s^3 + C_5C_LL_3R_5s^3 + C_5C_$$

10.664 INVALID-ORDER-664
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5L_3R_3R_5s^3 + C_3C_LL_3L_LR_3R_5g_ms^4 + C_3C_LL_3L_LR_3s^4 + C_3L_3R_3R_5g_ms^2 + C_3L_3R_3s^2 + 2C_5C_LL_3L_LR_3R_5g_ms^4 + C_5C_LL_3L_LR_3s^4 + C_$$

10.665 INVALID-ORDER-665
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_LR_3s\left(-C_5R_5s + R_5g_m - 1\right)}{C_3C_5L_3L_LR_3R_5s^3 + C_3L_3L_LR_3s^2 + C_5L_LL_3L_LR_3s^3 + 2C_5L_3L_LR_3R_5g_ms^2 + C_5L_3L_LR_5s^2 + C_5L_3R_3R_5s + C_5L_LR_3R_5s + C_LL_3L_LR_3R_5g_ms^2 - 2C_5L_3L_LR_3R_5s^2 + C_5L_3L_LR_3R_5s^2 + C_5L_3L_3L_LR_3R_5s^2 + C_5L_3L_3L_2R_5s^2 + C_5L_3L_3L_3R_5s^2 + C_5L_3L_3L_3R_5s^2 + C_5L_3L_3L_3R_5s^2 + C_5L_3L_3L_3R_5s^2 + C_5L_$$

10.666 INVALID-ORDER-666
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3R_3R_5s^3 + C_3C_LL_3L_LR_3R_5g_ms^4 + C_3C_LL_3L_LR_3s^4 + C_3C_LL_3R_3R_5R_Lg_ms^3 + C_3C_LL_3R_3R_5s^3 + C_3C_LL_3R_3R_5s^3 + C_3C_LL_3L_LR_3s^4 + C_3C_LL_3R_3R_5s^3 + C_3C_LL_3R_3$$

10.667 INVALID-ORDER-667
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L}{C_3C_5L_3L_LR_3R_5R_Ls^3 + C_3L_3L_LR_3R_5R_Lg_ms^2 + C_3L_3L_LR_3R_Ls^2 + C_5C_LL_3L_LR_3R_5R_Ls^3 + 2C_5L_3L_LR_3R_5R_Lg_ms^2 + C_5L_3L_LR_3R_5s^2 + C_5L_3L_2R_5s^2 + C_5L_3L_2R_5s^2 + C_5L_3L_2R_5s^2 + C_5L_3L_3L_2R_5s^2 + C_5L_3L_3L_3R_5s^2 +$$

10.668 INVALID-ORDER-668
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.669 INVALID-ORDER-669
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Ls^5 + C_3C_5L_3R_3R_5R_Ls^3 + C_3C_LL_3L_LR_3R_5R_Lg_ms^4 + C_3C_LL_3L_LR_3R_Ls^4 + C_3L_3R_3R_5R_Lg_ms^2 + C_3L_3R_3R_Ls^2 + 2C_5C_LL_3L_LR_3R_5R_Lg_ms^4 + C_3C_LL_3L_LR_3R_5R_Lg_ms^4 + C_3C_LL_3L_LR_3R_5R_$$

10.670 INVALID-ORDER-670
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_5 R_L g_m s^2 + C_5 L_3 R_5 R_L g_m s^2 + C_5 L_3 R_5 R_L g_m s^2 + C_5 R_3 R_5 R_L g_m s^2 + C_5 R_5 R_L g_m s^2 + C_5 R_5$$

10.671 INVALID-ORDER-671
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

10.672 INVALID-ORDER-672
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_5 R_L g_m s^2 + C_5 L_3 R_3 R_L g_m s^2$$

10.673 INVALID-ORDER-673
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

10.674 INVALID-ORDER-674
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3L_3R_3g_ms^2 + 2C_5C_LL_3L_LR_3g_ms^4 + C_5C_LL_3L_LR_5g_ms^4 + C_5C_LL_3L_LR_5g_ms^5 + C_5C_LL_3L_LR_5g_ms^5 + C_5C_LL_3L_LR_5g_ms^5 + C_5C_LL_3L_LR_5g_ms^5 + C_5C_LL_5L_5L_5g_ms^5 + C_5C_LL_5L_5L_5g_ms^5 + C_5C_LL_5L_5g_ms^5 + C_5C_LL_5g_ms^5 + C_5C_LL_5g_m$$

10.675 INVALID-ORDER-675
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_LR_3s\left(C_5R_5g_ms - C_5s + g_m\right)}{C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_LR_3g_ms^2 + C_5C_LL_3L_LR_3R_5g_ms^3 + C_5C_LL_3L_LR_3s^3 + 2C_5L_3L_LR_3g_ms^2 + C_5L_3L_LR_5g_ms^2 + C_5L_3L_LR_3g_ms^2 + C_5L_3L_LR_3$$

10.676 INVALID-ORDER-676
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3C_LL_3R_3R_5g_ms^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R$$

10.677 INVALID-ORDER-677
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_3}{C_3C_5L_3L_LR_3R_5R_Lg_ms^3 + C_3C_5L_3L_LR_3R_Ls^3 + C_3L_3L_LR_3R_Lg_ms^2 + C_5C_LL_3L_LR_3R_5R_Lg_ms^3 + C_5C_LL_3L_LR_3R_Ls^3 + C_5L_3L_LR_3R_5g_ms^2 + 2C_5L_3L_LR_3R_Lg_ms^2 + C_5L_3L_LR_3R_Lg_ms^3 + C_5C_LL_3L_LR_3R_Lg_ms^3 + C_5C_LL_3L_LR_3R_Lg_ms^2 + C_5C_LL_3L_LR_3R$$

10.678 INVALID-ORDER-678
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_L R_3 R_5 R_L g_m s^5 + C_3 C_5 C_L L_3 L_L R_3 R_L s^5 + C_3 C_5 L_3 L_L R_3 R_5 g_m s^4 + C_3 C_5 L_3 L_L R_3 s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_3 C_5 L_3 L_L R_3 R_L g_m s^4 + C_3 C_5 L_3 L_L R_3 R_5 g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_3 C_5 L_3 L_L R_3 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 R_5 R_L g_m s^4 + C_3 C_5 R_L g_m s^4 + C_3 C_5 R_L g_m s^4 + C_3 C_5 R_L$$

10.679 INVALID-ORDER-679
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.680 INVALID-ORDER-680
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

10.681 INVALID-ORDER-681
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_3 s^3 + C_5 L_1 L_2 R_3 g_m s^4 + C_5 C_L L_3 L_5 R_3 g_m s^4 + C_5 C_L L_3 R_3 s^3 + C_5 L_3 L_5 g_m s^3 + 2 C_5 L_3 R_3 g_m s^2 + C_5 L_3 R_3 g_m s^2 + C_5 R_3 g_$$

10.682 INVALID-ORDER-682
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_3 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_L s^3 + C_5 L_4 L_5 R_3 R_L g_m s^4 + C_5 C_L L_3 R_3 R_L s^3 + C_5 L_3 L_5 R_3 g_m s^3 + C_5 L_5 R_3 g_m s^3 + C_5 L_5 R_5 g_m s^3$$

10.683 INVALID-ORDER-683
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3R_3s^3 + C_3C_LL_3R_3R_Lg_ms^3 + C_3L_3R_3g_ms^2 + C_5C_LL_3L_5R_3g_ms^4 + C_5C_LL_3L_5R_3g_ms^4 + C_5C_LL_3L_5R_3g_ms^4 + C_5C_LL_3R_3R_Lg_ms^3 + C_5C_LL_3R_3R_Lg_ms^3 + C_5C_LL_3R_3R_Lg_ms^4 + C_5C_LL_3R_3R_Lg_ms^4$$

10.684 INVALID-ORDER-684
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3L_3R_3g_ms^4 + C_3L$$

10.685 INVALID-ORDER-685
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3 L_L R_3 s \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_L R_3 g_m s^4 + C_3 C_5 L_3 L_L R_3 g_m s^2 + C_5 C_L L_3 L_L R_3 g_m s^4 + C_5 C_L L_3 L_L R_3 s^3 + C_5 L_3 L_5 L_L g_m s^3 + C_5 L_3 L_5 R_3 g_m s^2 + 2 C_5 L_3 L_L R_3 g_m s^2 + C_5 L_3 L_L R_3 g_m s^4 + C_5 C_L L_3 L_L R_3 g_m$$

10.686 INVALID-ORDER-686
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3C_5L_3L_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_3L_3R_3s^3 + C_3C_5L_3L_3R_3g_ms^4 + C_3C_5L_3R_3g_ms^4 + C_3C_5L_3L_3R_3g_ms^4 + C_3C_5L_3R_3g_ms^4 + C_3C_5L_3R_3g_ms^2 + C_3C_5L_3R_3g_ms^2 + C_3C_5L_3R_3g_ms^2 + C_3C_5L_3R_3g_ms^2 + C_3C_5L_3R_3g$$

10.687 INVALID-ORDER-687
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.688 INVALID-ORDER-688
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_5R_3g_ms^5 + C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_LL_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_3L_LR_3s^4 + C_3C_5L_3L_3L_2s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3L_3s^4 + C_3C_5L_3L_3s^4 + C_3C_5L_3L_3s^4 + C_3C_5L_3L_3s^4 + C_3C_5L_3L_3s^4$$

10.689 INVALID-ORDER-689
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3R_3R_Ls^3 + C_3C_LL_3L_LR_3R_Lg_ms^4 + C_3L_3R_3R_Lg_ms^4 + C_3L_3R_3R_Lg_ms^2 + C_3R_3R_Lg_ms^2 + C_3R_3R_Lg_ms^2 + C_3R_3R_Lg_ms^2 + C_3R_3R_Lg_ms^2 + C_3R_3R_Lg_ms^2 + C$$

10.690 INVALID-ORDER-690
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(-C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_3 C_5 L_3 L_5 R_3 R_L s^4 + C_3 L_3 L_5 R_3 R_L g_m s^3 + C_5 L_3 L_5 R_3 R_L g_m s^3 + C_5 L_3 L_5 R_3 s^3 + C_5 L_3 L_5 R_3 s^3 + C_5 L_3 L_5 R_3 R_L s^2 + L_3 L_5 R_3 g_m s^2 + L_3 L_5 R_1 g_m s^2 + 2 L_3 R_3 R_1 g_m s^3 + C_5 L_3 L_5 R_3 g_m s^3 + C_5 L_5 R_5 g_m s^3 + C$$

10.691 INVALID-ORDER-691
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

10.692 INVALID-ORDER-692
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.693 INVALID-ORDER-693
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3s^4 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3R_3R_Ls^3 + C_3L_3L_5R_3g_ms^3 + C_3L_3R_3s^2 + 2C_5C_LL_3L_5R_3R_Lg_ms^4 + C_5C_LL_3L_5R_3s^4 + C_$$

10.694 INVALID-ORDER-694
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

10.695 INVALID-ORDER-695
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_LR_3s\left(-C_5L_5s^2 + L_5g_ms - 1\right)}{C_3C_5L_3L_5L_LR_3s^4 + C_3L_3L_5L_LR_3s^3 + C_5L_3L_5L_LR_3s^4 + 2C_5L_3L_5L_LR_3g_ms^3 + C_5L_3L_5L_Ls^3 + C_5L_3L_5R_3s^2 + C_5L_5L_LR_3s^2 + C_5L_5L_LR_3g_ms^3}$$

10.696 INVALID-ORDER-696
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3s^4 + C_3C_LL_3L_5L_R3g_ms^5 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3L_LR_3s^4 + C_3C_LL_3R_3R_Ls^3 + C_3L_3L_5R_3g_ms^4 + C_3C_LL_3L_5R_3s^4 + C_3C_LL_3L_5R_$$

10.697 INVALID-ORDER-697
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.698 INVALID-ORDER-698
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.699 INVALID-ORDER-699
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5L_3L_5R_3R_Ls^4 + C_3C_LL_3L_5L_RR_3R_Lg_ms^5 + C_3C_LL_3L_5R_3R_Ls^4 + C_3L_3L_5R_3R_Lg_ms^3 + C_3L_3R_3R_Ls^2 + 2C_5C_LL_3L_5L_RR_3R_Lg_ms^5 + C_3C_LL_3L_5R_3R_Ls^4 + C_3C_LL_3L_5R_Ls^4 + C_3C_LL_3L_$$

10.700 INVALID-ORDER-700
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_3 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 L_3 R_3 R_L g_m s^2 + C_5 L_3 L_5 R_3 g_m s^3 + C_5 L_3 L_5 R_1 g_m s^3 + C_5 L_3 R_3 R_5 g_m s^2 + 2 C_5 L_3 R_3 R_L g_m s^2 + C_5 L_3 R_3 R_5 g_m s^3 + C_5 L_3 R_5 g_m s^3 + C_5 L_5 R_5 g_m s^3 + C_5 L_$$

10.701 INVALID-ORDER-701
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_3 R_5 g_m s^3 + C_3 L_5 R_3 g_m s^2 + C_5 C_L L_3 L_5 R_3 g_m s^4 + C_5 C_L L_3 R_3 s^3 + C_5 L_4 L_5 R_3 g_m s^3 + C_5 L_4 L_5 R_3 g_m s^3 + C_5 L_4 R_3 R_5 g_m s^3 + C_5 L_4 R_3 R_5 g_m s^3 + C_5 L_5 R_5 g_m s^3$$

10.702 INVALID-ORDER-702
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{L_3 R_4}{C_3 C_5 L_3 L_5 R_3 R_L g_m s^4 + C_3 C_5 L_3 R_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_L g_m s^2 + C_5 C_L L_3 L_5 R_3 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_L s^3 + C_5 L_3 L_5 R_3 g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^3 + C_5 C_L L_3 R_3 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^4 + C_5 C_L L_3 R_3 R_5 R_L g_m s^4 + C_5 C_L L_3 R_5 R_5 R_L g_m s^4 + C_5 C_L L_3 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_5 R_5 R_L g_m s^4 + C_5 C_L L_5 R_$$

10.703 INVALID-ORDER-703
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_LL_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R$$

10.704 INVALID-ORDER-704
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3L_LR_3g_ms^4 + C_3L_3R_3g_ms^4 + C_3C_5L_3R_3g_ms^4 + C_3C_5L_3R_3g$$

10.705 INVALID-ORDER-705
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_3L_LF}{C_3C_5L_3L_5L_LR_3g_ms^4 + C_3C_5L_3L_LR_3F_0ms^3 + C_3C_5L_3L_LR_3s^3 + C_3L_3L_LR_3g_ms^2 + C_5C_LL_3L_LR_3g_ms^4 + C_5C_LL_3L_LR_3F_0ms^3 + C_5C_LL_3L_LR_3s^3 + C_5L_3L_5L_Lg_ms^3}$$

10.706 INVALID-ORDER-706
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_4R_3s^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5R_Lg_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^6 + C_3C_5C_LL_3R_3R_Lg_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^6 + C_3C_5C_LL_3L_5R_3R$$

10.707 INVALID-ORDER-707
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5L_3L_5L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3R_5R_Lg_ms^3 + C_3C_5L_3L_LR_3R_Ls^3 + C_3L_3L_LR_3R_Lg_ms^2 + C_5C_LL_3L_LR_3R_Lg_ms^4 + C_5C_LL_3L_LR_3R_5R_Lg_ms^3 + C_5C_LL_3L_LR_3R_Lg_ms^3 + C_5C$$

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
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_Ls^3 + C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^4 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^4 + C_3C_5L_3R_3R_Lg_ms^2 + C_3C_5L_3R_3R_Lg_ms^2 + C_3C_5L_3R_3R_Lg_ms^2 + C_3C_5L_3R_3R_Lg_ms^2 + C_3C_5L_3R$$

10.710 INVALID-ORDER-710
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

10.711 INVALID-ORDER-711
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(-C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5 R_5 r_5 + L_5 R_5 g_m s - L_5 s - R_5 R_$$

10.712 INVALID-ORDER-712
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.713 INVALID-ORDER-713
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_LL_3L_5R_3R_5R_Lg_ms^4 + C_3C_LL_3L_5R_3R_Ls^4 + C_3C_LL_3R_3R_5R_Ls^3 + C_3L_3L_5R_3R_5g_ms^3 + C_3L_3L_5R_3s^3 + C_3$$

10.714 INVALID-ORDER-714
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_LL_3L_5L_LR_3R_5g_ms^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_LR_3R_5s^4 + C_3L_3L_5R_3R_5g_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3R_3R_5s^4 + C_3C_LL_3L_5L_4R_3s^5 + C_3C_LL_3L_5L_4R_3s^5 + C_3C_LL_3L_5R_3s^5 + C_3C_L$$

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
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_LL_3L_5L_LR_3R_5g_ms^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5R_3R_5R_Lg_ms^4 + C_3C_LL_3L_5R_3R_5g_ms^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5R_3R_5R_Lg_ms^4 + C_3C_LL_3L_5R_3R_5g_ms^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5R_3R_5R_Lg_ms^4 + C_3C_LL_3L_5R_3R_5g_ms^5 + C_3C_LL_3L_5L_LR_3s^5 + C_3C_LL_3L_5R_3R_5g_ms^5 + C_3C_LL_3L_5R_3g_ms^5 + C_3C_LL_3L_5R_3$$

10.717 INVALID-ORDER-717
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.718 INVALID-ORDER-718
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.719 INVALID-ORDER-719
$$Z(s) = \left(\infty, \ \infty, \ \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.720 INVALID-ORDER-720
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

$$H(s) = \frac{L_3 R_3 R_L s}{C_3 C_5 L_3 L_5 R_3 R_5 R_L g_m s^4 + C_3 C_5 L_3 L_5 R_3 R_L s^4 + C_3 L_3 L_5 R_3 R_L g_m s^3 + C_3 L_3 R_3 R_5 R_L g_m s^2 + C_3 L_3 R_3 R_L s^2 + C_5 L_3 L_5 R_3 R_5 g_m s^3 + 2 C_5 L_3 L_5 R_3 R_L g_m s^3 + C_5 L_5 L_5 L_5 R_3 R_L g_m s^3 + C_5 L_5 L_5 L_5 R_5 R_L g_m s^3 + C_5 L_5 R_5 R_L g_m$$

10.721 INVALID-ORDER-721
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_5 L_5 R_5 g_m s^2 - C_5 L_5 L_5 L_5 L_5 R_5 g_m s^2 - C_5 L_5 L_5 L_5 R_5 g_m s^2 - C_5 L_5 L_5 R_5 g_m s^2 + C_5 L_5 L_5 L_5 L_5 R_5 g_m s^2 + C_5 L_5 L_5$$

10.722 INVALID-ORDER-722
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

10.723 INVALID-ORDER-723
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3R_3R_5R_Lg_ms^4 + C_3C_LL_3R_3R_Lg_ms^4 + C_3C_LL_3R$$

10.724 INVALID-ORDER-724
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5L_2R_3g_ms^6 + C_3C_5C_LL_3L_5L_3L_5R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_3R_3R_5g_ms^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^6 + C_3C_5C_LL_3L_5R_5g_ms^6 + C_3C_5C_LL_3L_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G$$

10.727 INVALID-ORDER-727
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.728 INVALID-ORDER-728
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.729 INVALID-ORDER-729
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3R_Ls^6 + C_3C_5L_3L_5R_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_Ls^4 + C_3C_LL_3L_5L_LR_3R_Lg_ms^5 + C_3C_LL_3L_LR_3R_5R_Lg_ms^4 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3L_5L_LR_3R_Lg_ms^5 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3L_5R_3R_Lg_ms^6 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3L_5R_3R_Lg_ms^6 + C_3C_LL_3L_5R_Lg_ms^6 + C_3C_LL$$

10.730 INVALID-ORDER-730
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

10.731 INVALID-ORDER-731
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{L_3 R_3 s \left(C_5 L_5 R_{55} g_{15} + C_5 L_5 L_5 R_{55} g_{15} + C_5 L_5 L_5 R_{55} g_{15} + C_5 L_5 L_5 R_{55} g_{15} g_{15} + C_5 L_5 L_5 R_{55} g_{15} g_{15}$$

10.732 INVALID-ORDER-732
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_Ls^4 + C_3C_5L_3R_3R_5R_Ls^3 + C_3L_3R_3R_5R_Lg_ms^2 + C_3L_3R_3R_Ls^2 + C_5C_LL_3L_5R_3R_5R_Lg_ms^4 + C_5C_LL_3L_5R_3R_Ls^4 + C_5C_LL_3R_3R_5R_Lg_ms^2 + C_3L_3R_3R_5R_Lg_ms^2 + C_3L_3R$$

10.733 INVALID-ORDER-733
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3R_3R_5s^3 + C_3C_LL_3R_3R_5R_Lg_ms^3 + C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3R_3R_5s^3 + C_3C_5L_3R_5R_5s^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5s^3 +$$

10.734 INVALID-ORDER-734
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$$

10.735 INVALID-ORDER-735
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.738 INVALID-ORDER-738
$$Z(s) = \left(\infty, \infty, \frac{1}{C_3 s + \frac{1}{R_3} + \frac{1}{L_3 s}}, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{1}{C_Ls}\right)$$

10.741 INVALID-ORDER-741
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L \left(R_5 g_m - 1 \right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right)}{C_3 C_L L_3 R_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_5 g_m s^2 + 2 C_3 L_3 R_3 R_L g_m s^2 + C_3 L_3 R_5 R_L g_m s^2 + C_4 L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 R_L$$

10.742 INVALID-ORDER-742
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.743 INVALID-ORDER-743
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(R_5 g_m - 1\right) \left(C_L L_L s^2 + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 C_L L_3 L_L S^4 + C_3 C_L L_3 R_5 g_m s^3 + C_3 C_L L_3 R_3 g_m s^3 + C_3 L_4 R_3 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 R_5 g_m s^3 + C_L L_3 L_L g_m s^3 + C_L L_3 R_5 g_m s^3 + C_L L_3 R_$$

10.744 INVALID-ORDER-744
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_L s \left(R_5 g_m - 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 C_L L_3 L_L R_3 g_m s^3 + C_3 L_3 L_L R_5 g_m s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 R_5 g_m s^2 + C_3 L_3 R_3 s^2 + C_L L_3 L_L R_5 g_m s^3 + C_L L_L R_3 R_5 g_m s^3 + C_L L_2 R_3 R_5 g_m s^3 + C_L L_3 R_3 R_5 g_m s^3 + C_L R_5 g_m s^3 +$$

10.745 INVALID-ORDER-745
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_LL_3L_LR_3g_ms^4 + C_3C_LL_3L_LR_5g_ms^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3R_3R_5g_ms^3 + 2C_3C_LL_3R_3R_Lg_ms^3 + C_3C_LL_3R_3s^3 + C_3C_LL_3R_5R_Lg_ms^3 + C_3C_LL_3R_3s^3 + C_$$

10.746 INVALID-ORDER-746
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_LL_3L_LR_3R_5R_Lg_ms^4 + C_3C_LL_3L_LR_3R_Ls^4 + C_3L_3L_LR_3R_5g_ms^3 + 2C_3L_3L_LR_3R_Lg_ms^3 + C_3L_3L_LR_3s^3 + C_3L_3L_LR_5R_Lg_ms^3 + C_3L_3L_LR_3s^3 + C_3L_3L_2LR_3s^3 + C_3L_3L_3L_2LR_3s^3 + C_3L_3L_3L_3L_3L_3s^3 + C_3L_3L_3L_3L_3s^3 + C_3L_3L_3L_3s^3 + C$$

10.747 INVALID-ORDER-747
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L R_5 R_L g_m$$

10.748 INVALID-ORDER-748
$$Z(s) = \left(\infty, \infty, \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_4 R_5 R_L g_m s^4 + C_3 C_L L_3 R_5 R_L g_m s^4 + C_3 C_L R_$$

10.749 INVALID-ORDER-749
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_5 s - g_m\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_3 s^3 + C_3 C_5 L_3 R_L g_m s^2 + C_3 L_3 R_L g_m s^2 + 2 C_5 L_3 R_L g_m s^2 + 2 C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_L s + L_3 g_m s + R_3 g_m + R_3 g_m + R_3 g_m s +$$

10.750 INVALID-ORDER-750
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.751 INVALID-ORDER-751
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}} + R_3, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = -\frac{R_L \left(C_5 s - g_m\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{C_3 C_5 C_L L_3 R_3 R_L s^4 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_3 s^3 + C_3 C_5 L_3 R_1 s^3 + C_3 C_5 L_3 R_1 s^3 + C_3 C_5 L_3 R_2 s^3 + C_3 C_5 L_3 R_3 R_L s^3 + C_5 C_L L_3 R_2 s^3 + C_5 C_L L_3 R_3 s^3 +$$

10.752 INVALID-ORDER-752
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

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

10.753 INVALID-ORDER-753
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

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

10.754 INVALID-ORDER-754
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = -\frac{L_L s \left(C_5 s - g_m\right) \left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{C_3 C_5 C_L L_3 L_L R_3 g_m s^4 + C_3 C_5 L_3 L_L s^4 + C_3 C_5 L_3 L_L s^3 + C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 L_3 L_L g_m s^3 + C_3 L_3 L_L g_m s^3 + C_5 L_L L_L L_L L_L R_3 s^3 + C_5 L$$

10.755 INVALID-ORDER-755
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_{3s^2+1}} + R_3, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_Ls^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_LL_3L_Lg_ms^4 + C_3C_LL_3R_3s^4 + C_3C_5C_LL_3R_2s^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5L_3L_3L_2g_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_$$

10.756 INVALID-ORDER-756
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.757 INVALID-ORDER-757
$$Z(s) = \left(\infty, \ \infty, \ \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_Ls^5 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3L_LR_3s^3 + C_3C_5L_3L_2R_3s^3 + C_3C_5L_3L_3L_2R_3s^3 + C_3C_5L_3L_3L_2R_3s^3 + C_3C_5L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3L_3R_3s^3 + C_3C_5L_3L_3L_3R_3s^3 + C_3C_5L_3L_3$$

10.758 INVALID-ORDER-758
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3R_3R_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3R_3R_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_3s^3 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c_LL_3c$$

10.759 INVALID-ORDER-759
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_5 R_5 s - R_5 g_m + 1\right) \left(C_3 L_3 R_3 s^2 + L_3 s_3 R_5 R_4 g_m s^3 + C_3 C_5 L_3 R_3 R_5 s^3 + C_3 C_5 L_3 R_5 R_L s^3 + C_3 L_3 R_5 R_L g_m s^2 + C_3 L_$$

10.760 INVALID-ORDER-760
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)$$

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

10.761 INVALID-ORDER-761
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3R_3R_5R_Ls^4 + 2C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_5s^3 + C_3C_5L_3R_5R_Ls^3 + C_3C_LL_3R_3R_5R_Lg_ms^3 + C_3C_LL_3R_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_LL_3R_5R_Ls^3 + C_3C_$$

10.762 INVALID-ORDER-762
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_5R_Ls^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3R_5g_ms^3 + 2C_3C_LL_3R_3R_5g_ms^3 + 2C_3C_LL_3R_5g_ms^3 + 2C_3C_LL_3R_5g_m$$

10.763 INVALID-ORDER-763
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + 2C_3C_LL_3L_LR_3g_ms^4 + C_3C_LL_3L_LR_5g_ms^4 + C_3C_LL_3L_2L_2L_2L_3L_2L_3L_3L_3L_3$$

10.764 INVALID-ORDER-764
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.765 INVALID-ORDER-765
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_{3s^2+1}} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_5R_Ls^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + 2C_3C_LL_3R_5R_5s^4 + C_3C_5C_LL_3R_5R_5s^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^$$

10.766 INVALID-ORDER-766
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.767 INVALID-ORDER-767
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_5R_Ls^5 + 2C_3C_5L_3L_LR_3R_5g_ms^4 + C_3C_5L_3L_LR_5s^4 + 2C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_5s^3 + C_3C_5L_3L_LR_3R_5s^4 + C_3C_5L_2R_3R_5s^4 + C_3C_5L_2R_3R_5s^4 + C_3$$

10.768 INVALID-ORDER-768
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.769 INVALID-ORDER-769
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_5 R_5 g_m s - C_5 s + g_m \right)}{C_3 C_5 L_3 R_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_L g_m s^3 + C_3 C_5 L_3 R_2 g_m s^3 + C_3 C_5 L_3 R_3 g_m s^2 + C_5 L_3 R_5 g_m s^2 + C_5 L_5 g_m s^2 + C_5 L_5 g_m$$

10.770 INVALID-ORDER-770
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_5R_5g_ms - C_5s + g_m\right)}{C_3C_5C_LL_3R_3g_ms^4 + C_3C_5C_LL_3R_3s^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_3g_ms^3 + C_5C_LL_3R_5g_ms^3 +$$

10.771 INVALID-ORDER-771
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_L$$

10.772 INVALID-ORDER-772
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3C_$$

10.773 INVALID-ORDER-773
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_3s^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3C_5L_3R_5g_ms^3 + C_$$

10.774 INVALID-ORDER-774
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_5g_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_LL_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_5g_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_3g_ms^4$$

10.775 INVALID-ORDER-775
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3 L_3 s^2 + 1} + R_3, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^4 + C_3C_5C_LL_3R_5g_ms^5 +$$

10.776 INVALID-ORDER-776
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_LR_3R_5g_ms^4 + 2C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5$$

10.777 INVALID-ORDER-777
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_5g_ms^4 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_$$

10.778 INVALID-ORDER-778
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_{3}L_{3}s^{2}+1} + R_{3}, \infty, R_{5} + \frac{1}{C_{5}s}, \frac{R_{L}\left(L_{L}s + \frac{1}{C_{L}s}\right)}{L_{L}s + R_{L} + \frac{1}{C_{L}s}}\right)$$

10.779 INVALID-ORDER-779
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 \right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_5 g_m s^4 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_2 s^3 + C_3 C_5 L_3 R_L s^3 + C_3 L_3 R_2 g_m s^2 + C_5 L_3 L_5 g_m s^3 + 2 C_5 L_3 R_L g_m s^2 + C_5 L_3 R_2 g_m s^3 + 2 C_5 L_3 R_L g_m s^2 + C_5 L_3 R_2 g_m s^3 + 2 C_5 L_3 R_3 g_m s^3 + 2 C_5 L_3$$

10.780 INVALID-ORDER-780
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

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

10.781 INVALID-ORDER-781
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_3s^3$$

10.782 INVALID-ORDER-782
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 R_3 g_m s^5 + C_3 C_5 C_L L_3 L_5 R_L g_m s^5 + 2 C_3 C_5 C_L L_3 R_3 R_L g_m s^4 + C_3 C_5 C_L L_3 R_3 s^4 + C_3 C_5 C_L L_3 R_L s^4 + C_3 C_5 L_3 L_5 g_m s^4 + 2 C_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 L_3 R_3 g_m s^4 + C_3 C_5 L_4 R_3 R_L g_m s^4 + C_3 C_5 L_4 R_5 R_L g_m s^4 + C_3 C_5 L_4 R_5 R_L g_m s^4 + C_3 C_5 L_5 R_L g_m s^4 + C_5 C_5 L_5 R_L g_m s^5 + C_5 C_$$

10.783 INVALID-ORDER-783
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3s^4 + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5L_3L_5s^3 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_3s^5 + C_3C_5C_LL_3s^5 + C_3C_5C_LL_3s^$$

10.784 INVALID-ORDER-784
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.785 INVALID-ORDER-785
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_3s^2 + C_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_$$

10.786 INVALID-ORDER-786
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_Lg_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2R_3s^5 + C_3C_5C_LL_3L_3L_3R_3s^5 + C_3C_5C_LL_3L_3C_5C_LL_3L_3C_5C_LL_3$$

10.789 INVALID-ORDER-789
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$$

$$H(s) = -\frac{R_L \left(C_5 L_5 s^2 - L_5 g_m s + 1\right) \left(C_3 L_3 R_3 s^2 + L_5 g_m s + 1\right) \left(C_3 L_3 R_3 s^2 + L_5 R_3 R_L g_m s^4 + C_3 C_5 L_3 L_5 R_3 s^4 + C_3 C_5 L_3 L_5 R_L s^4 + C_3 L_3 L_5 R_3 g_m s^3 + C_3 L_3 L_5 R_L g_m s^3 + 2 C_3 L_3 R_3 R_L g_m s^2 + C_3 L_3 R_3 s^2 + C_3 L_$$

10.790 INVALID-ORDER-790
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{\left(C_5L_5s^2 - L_5g_ms + 1\right)\left(C_3L_3R_3s^2 + L_3s + L_3s^2 + L_3s^3 + L_3L_5R_3s^3 + L_3L_5R_3s^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_$$

10.791 INVALID-ORDER-791
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Ls^5 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3R_3R_Ls^3 + C_3L_3L_5R_3g_ms^3 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5R_3g_ms^3 + C_3L_3L_5R_3g_ms^$$

10.792 INVALID-ORDER-792
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Ls^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_LL_3L_5R_3g_ms^4 + C_3C_LL$$

10.793 INVALID-ORDER-793
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3s^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_LL_3L_5L_Lg_ms^5 + C_3C_LL_3L_5R_3g_ms^4 + 2C_3C_LL_3L_5R_3g_ms^4 + C_3C_5L_3L_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_5L_5R_3g_ms^4 + C_3C_5L_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^4 + C_3C_5L_5R_3g_ms^2 + C_3C_5L_5R_3g_ms^2 + C_3C_5L_5R_3g_ms^2 + C_3C_5L_5R_3g_ms^2 + C_3C_5L_5$$

10.794 INVALID-ORDER-794
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.795 INVALID-ORDER-795
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.796 INVALID-ORDER-796
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.797 INVALID-ORDER-797
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.798 INVALID-ORDER-798
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.799 INVALID-ORDER-799
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_3 L_3 R_3 s^2 + L_3 s + R_3 R_4 + R_3 C_5 L_3 L_5 R_4 g_m s^4 + C_3 C_5 L_3 R_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_3 R_4 g_m s^3 + C_3 C_5 L_3 R_5 R_5 g_m s^3 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_5 R_5 g_m s^3 + C_5 C_5$$

10.800 INVALID-ORDER-800
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + L_$$

10.801 INVALID-ORDER-801
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3R_3R_5g_ms^3 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^4 + C_3C_5L_3R_3R_Lg_ms^2 + C_3$$

10.802 INVALID-ORDER-802
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_Lg_ms^4 + C_3C_5C_LL_3R_Lg_ms^2 + C_3C_5C_LL_3R_Lg_m$$

10.803 INVALID-ORDER-803
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3L_Rs^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_3s^4 +$$

10.804 INVALID-ORDER-804
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.805 INVALID-ORDER-805
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_2g_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3L_3L_3R_3g_ms^5 + C_3C_5C_LL_3L_4R_5g_ms^5 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5G_ms^5 + C_3C_5C_LL_5G_ms^$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3$$

10.808 INVALID-ORDER-808
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_3L_3c_5C_LL_3L_3c_5C_LL_3$$

10.809 INVALID-ORDER-809
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5L_3L_5R_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3L_3L_5R_3R_5g_ms^3 + 2C_3L_3L_5R_3R_Lg_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3L_5R_3s$$

10.810 INVALID-ORDER-810
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5s^4 + C_3C_LL_3L_5R_3R_5g_ms^4 + C_3C_LL_3L_5R_3s^4 + C_3C_LL_3R_3R_5s^3 + 2C_3L_3L_5R_3g_ms^3 + C_3L_3L_5R_5g_ms^3 + C_3L_3L_5R_3g_ms^3 + C_3L_3L_5R_3g_ms$$

10.811 INVALID-ORDER-811
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$$

10.812 INVALID-ORDER-812
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_5s^5 + C_3C_5C_LL_3L_5R_5R_Ls^5 + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_LL_3L_5R_3R_5g_ms^4 + 2C_3C_LL_3L_5R_5g_ms^4 + 2C_3C_LL_3L_5R_5g_ms^2 + 2C_3C_5C_LL_3L_5R_5g_ms^2 + 2C_3C_LL_3L_5R_5g_ms^2 + 2C_3C_5C_LL_3L_5g_ms^2 + 2C_3C_5C_LL_3L_5g_ms^2 + 2C_3C_5C_LL_3L_5g_ms^2 + 2C_3C_5C_LL_3L_5g_ms^2 + 2C_3C_5C_LL_3L_5g_ms^2 + 2C_3C_5C$$

10.813 INVALID-ORDER-813
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5s^4 + 2C_3C_LL_3L_5L_LR_3g_ms^5 + C_3C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5C_LR_3g_ms^6 + C_3C_5C_LR_3g_ms^6 + C_3C_5C_LL_3L_5C_LR_3g_ms^6 + C_3C_5C_LL_3C_5C_LR_3g_ms^6 + C_3C_5C_LR_3g_ms^6 + C_3$$

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
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.816 INVALID-ORDER-816
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.817 INVALID-ORDER-817
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.818 INVALID-ORDER-818
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + 2C_3C_5L_3L_5R_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5C_LR_3R_5s^6 + C_3C_5C_LL_3L_5C_LR_3C_5C_LR$$

10.819 INVALID-ORDER-819
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, R_L\right)$$

$$H(s) = \frac{1}{C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^2 + C_3C_5L_5L_5$$

10.820 INVALID-ORDER-820
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$$

10.821 INVALID-ORDER-821
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5$$

10.822 INVALID-ORDER-822
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5$$

10.823 INVALID-ORDER-823
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_3g_ms^6 + C_3C_5C_LL_3L_5R_$$

10.824 INVALID-ORDER-824
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.825 INVALID-ORDER-825
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3C_5C_LL_3C_5C_$$

10.826 INVALID-ORDER-826
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.827 INVALID-ORDER-827
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 L_L R_3 R_5 g_m s^6 + 2 C_3 C_5 C_L L_3 L_5 L_L R_3 R_L g_m s^6 + C_3 C_5 C_L L_3 L_5 L_L R_3 s^6 + C_3 C_5 C_L L_3 L_5 L_L R_5 R_L g_m s^6 + C_3 C_5 C_L L_5 L_5 R_5 R_L g_m s^6 + C_5 C_L L_5 R_5 R_L g_m s^6 + C_5 C_L L_5 R_L g_m s^6 + C_5 C_L L_5 R_5 R_L g_m s^6 + C_5 C_L L_5 R_L g_m s^6 +$$

10.828 INVALID-ORDER-828
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5L_Rs^6$$

10.829 INVALID-ORDER-829
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L\right)$$

10.830 INVALID-ORDER-830
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L$$

10.831 INVALID-ORDER-831
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3R_Lg_ms^2 + C_3C_5L_5L_5R_3R_Lg_ms^2 + C_3C_5L_5L_5R_3R_Lg_ms^2 + C_3C_5L_5L_5R_2R_Lg_ms^2 + C_3C_5L_5L_5R_2R_Lg_ms^2 + C_3C_$$

10.832 INVALID-ORDER-832
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$$

10.833 INVALID-ORDER-833
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + 2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5$$

10.834 INVALID-ORDER-834
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3R_5s^5 + 2C_3C_5L_3L_5L_LR_3g_ms^5 + C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4}{C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_2s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3c_5C_LL_3$$

10.835 INVALID-ORDER-835
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L$$

10.836 INVALID-ORDER-836
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.837 INVALID-ORDER-837
$$Z(s) = \left(\infty, \infty, \frac{L_3s}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.838 INVALID-ORDER-838
$$Z(s) = \left(\infty, \infty, \frac{L_{3s}}{C_3L_3s^2+1} + R_3, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_Rg_ms^6 + C_3C_5C_$$

10.839 INVALID-ORDER-839
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(R_5 g_m - 1 \right) \left(C_3 L_3 s^2 + 1 \right)}{C_3 C_L L_3 R_3 R_5 g_m s^3 + C_3 C_L L_3 R_3 s^3 + 2 C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + C_3 R_3 R_5 g_m s + C_4 R_3 R_5 g_m s + C_L R_3 s + 2 R_3 g_m + R_5 g_m + 1}$$

10.840 INVALID-ORDER-840
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_3 R_L \left(R_5 g_m - 1\right) \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 R_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_L s^3 + C_3 L_3 R_3 R_5 g_m s^2 + 2 C_3 L_3 R_3 R_L g_m s^2 + C_3 L_3 R_3 s^2 + C_3 L_3 R_5 R_L g_m s^2 + C_3 R_3 R_5 R_L g_m s^2 + C_3 R_5 R_L g_m s^2 + C_3 R_5 R_L g_m s^2 + C_3 R_5 R_L g_m s^2$$

10.841 INVALID-ORDER-841
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{R_3 \left(R_5 g_m - 1\right) \left(C_3 L_3 s^2 + 1\right) \left(C_L R_L s + 1\right)}{C_3 C_L L_3 R_3 R_5 g_m s^3 + 2 C_3 C_L L_3 R_3 R_L g_m s^3 + C_3 C_L L_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_L g_m s^2 + C_3 C_L R_3 R_L g_m s^2 + C_3 C_L R_3 R_L g_m s^2 + C_3 C_L R_3 R_L g_m s^3 +$$

10.842 INVALID-ORDER-842
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_3 \left(R_5 g_m - 1 \right) \left(C_3 L_3 s^2 + 1 \right) \left(C_L L_L s^2 + 1 \right)}{2 C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 C_L L_3 L_L S^4 + C_3 C_L L_3 R_3 R_5 g_m s^3 + C_3 C_L L_L R_3 R_5 g_m s^3 + C_3 C_L L_L R_3 S^3 + 2 C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 R_5 g_m s^3 + C_3 C_L L_L R_3 R_5 g_m s^3 + C_3 C_L L_L R_5 g_m s^$$

10.843 INVALID-ORDER-843
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = \frac{L_L R_3 s \left(R_5 g_m - 1\right) \left(C_3 L_3 s^2 + 1\right)}{C_3 C_L L_3 L_L R_3 g_m s^4 + C_3 C_L L_3 L_L R_3 g_m s^3 + C_3 L_3 L_L R_5 g_m s^3 + C_3 L_3 L_L s^3 + C_3 L_3 R_3 R_5 g_m s^2 + C_3 L_3 R_3 R_5 g_m s^2 + C_3 L_L R_3$$

10.844 INVALID-ORDER-844
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_LL_3L_LR_3g_ms^4 + C_3C_LL_3L_LR_5g_ms^4 + C_3C_LL_3L_Ls^4 + C_3C_LL_3R_3R_5g_ms^3 + 2C_3C_LL_3R_3R_Lg_ms^3 + C_3C_LL_3R_3s^3 + C_3C_LL_3R_5R_Lg_ms^3 + C_3C_LL_3R_3s^3 + C_$$

10.845 INVALID-ORDER-845
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{L_L R_3 R_L s}{C_3 C_L L_3 L_L R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 R_L s^4 + C_3 L_3 L_L R_3 R_5 g_m s^3 + 2 C_3 L_3 L_L R_3 R_L g_m s^3 + C_3 L_3 L_L R_3 s^3 + C_3 L_3 L_L R_5 R_L g_m s^3 + C_3 L_2 R_$$

10.846 INVALID-ORDER-846
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 R_5 R_L g_m s^3 + C_3 C_L L_L R_3 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 R_L g_m s^4 + C_3 C_L R_3 R_L g_m s^$$

10.847 INVALID-ORDER-847
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3 C_L L_3 L_L R_3 R_5 g_m s^4 + 2 C_3 C_L L_3 L_L R_3 R_L g_m s^4 + C_3 C_L L_3 L_L R_3 s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 L_L R_5 R_L g_m s^4 + C_3 C_L L_3 R_3 R_5 R_L g_m s^3 + C_3 C_L L_3 R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 R_3 R_5 R_L g_m s^4 + C_3 C_L L_3 R_5 R_L g_m s^4 + C_3 C_L R_5 R_L g_m s^4$$

10.848 INVALID-ORDER-848
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{1}{C_5 s}, R_L \right)$$

$$R_3 R_L \left(C_5 s - g_m \right) \left(C_3 L_3 s^2 + 1 \right)$$

$$R_3 R_L \left(C_5 s - g_m \right) \left(C_3 L_3 s^2 + 1 \right)$$
10.849 INVALID-ORDER-849 $Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s} \right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{1}{C_5 s}, \frac{1}{C_5 s} \right)$

$$R_3 \left(C_5 s - g_m \right) \left(C_3 L_3 s^2 + 2 C_5 R_3 R_L g_m s + 2 C_5 R_3 R_L g_m s + C_5 R_3 s + C_5 R_L s + R_3 g_m + R_L g_m s + R_L g_m$$

10.851 INVALID-ORDER-851
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

10.852 INVALID-ORDER-852
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{R_3 \left(C_5 s - g_m\right) \left(C_3 L_3 s^2 + 1\right) \left(C_L L_L L_L R_3 s^2 + C_3 C_5 C_L L_3 L_L S^5 + C_3 C_5 C_L L_3 R_3 s^4 + C_3 C_5 C_L L_L R_3 s^4 + 2 C_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 C_5 R_3 s^2 + C_3 C_L L_3 L_L g_m s^4 + C_3 C_L L_3 R_3 g_m s^3 + C_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 R_3 s^2 + C_3 C_L L_3 L_L g_m s^4 + C_3 C_L L_3 R_3 g_m s^3 + C_3 C_5 R_3 s^2 + C_3 C_$$

10.853 INVALID-ORDER-853
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.854 INVALID-ORDER-854
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_Rs^4 + C_3C$$

10.855 INVALID-ORDER-855
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.856 INVALID-ORDER-856
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_LR_3R_Ls^4 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^4 + C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_Ls^4 + 2C_3C_5L_3L_Ls^4 + 2C_3C_5$$

10.857 INVALID-ORDER-857
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{1}{C_5 s}, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_Ls^5 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5C_LL_LR_3R_Ls^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5C_LL_3R_3R_Ls$$

10.858 INVALID-ORDER-858
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, R_L\right)$$

$$H(s) = -\frac{R_3R_L\left(C_3L_3s^2 + 1\right)\left(C_5R_5s - R_5g_m + 1\right)}{2C_3C_5L_3R_3R_5R_Lg^3 + C_3C_5L_3R_3R_5g_Ls^3 + C_3C_5R_3R_5R_Ls^2 + C_3L_3R_3R_5g_ms^2 + 2C_3L_3R_3R_Lg_ms^2 + C_3L_3R_3g_s^2 + C_$$

10.859 INVALID-ORDER-859
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 s - R_5 g_m + 1\right)}{C_3 C_5 C_L L_3 R_3 R_5 s^4 + 2 C_3 C_5 L_3 R_3 R_5 g_m s^3 + C_3 C_5 L_3 R_5 s^2 + C_3 C_L L_3 R_3 R_5 g_m s^3 + 2 C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_5 g_m s$$

10.860 INVALID-ORDER-860
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.861 INVALID-ORDER-861
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LR_3R_5R_Ls^3 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5R_3R_5s^2 + C_3C_LL_3R_3R_5g_ms^3 + C_3C_5L_3R_5R_5s^3 + C_3C_5L_3R_5s^3 + C_3C$$

10.862 INVALID-ORDER-862
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_LR_3R_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5R_3R_5s^2 + 2C_3C_LL_3L_LR_3g_ms^4}{2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5R_3R_5s^2 + 2C_3C_5L_3L_RR_3g_ms^4}$$

10.863 INVALID-ORDER-863
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.864 INVALID-ORDER-864
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_5s^5 + 2C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5s^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5s^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^4 + C_3C_5C_LL_3R_5c^2 + C_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C$$

10.865 INVALID-ORDER-865
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.866 INVALID-ORDER-866
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

10.867 INVALID-ORDER-867
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_5s^5 + C_3C_5C_LL_3L_LR_5R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_LR_3R_5R_Ls^4 + 2C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5C_LL_3R_3R_5R_5C_LL_3R_3R_5R_5R_5C_LL_3R_3R_5R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL_3R_5C_LL$$

10.868 INVALID-ORDER-868
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 R_5 g_m s - C_5 s + g_m\right)}{C_3 C_5 L_3 R_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 R_3 R_5 R_L g_m s^2 + C_3 C_5 R_3 R_L s^2 + C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_L g_m s^2 + C_3 L_3 R_2 g_m s^3 + C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 R_5 R_L g_m s^3 + C_5 R_L g_m s^3 + C_5 R_L g_m s^3 +$$

10.869 INVALID-ORDER-869
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

10.870 INVALID-ORDER-870
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5L_Ll_3R_3R_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3R_3R_5R_Lg_ms^3 + C_3C_5L_3R_5R_Lg_ms^3 + C_3C_5L_3$$

10.871 INVALID-ORDER-871
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LR_3R_5R_Lg_ms^4 + C_3C_5C_LR_3R_Ls^3 + 2C_3C_5L_3R_3s^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_$$

10.872 INVALID-ORDER-872
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_2R_3R_5g_ms^4 + C_3C_5C_LL_2R_3s^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3$$

10.873 INVALID-ORDER-873
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + 2C_3C_5L_3L_LR_3g_ms^4 + C_3C_5L_3L_LR_5g_ms^4 + C_3C_5L_3L_Ls^4 + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_3s^3$$

10.874 INVALID-ORDER-874
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_$$

10.875 INVALID-ORDER-875
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_LR_3R_5g_ms^4 + 2C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3s^4 + C_3C_5L_3L_LR_5R_Lg_ms^4 + C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5$$

10.876 INVALID-ORDER-876
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_5R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_L$$

10.877 INVALID-ORDER-877
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

10.878 INVALID-ORDER-878
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_5 R_L g_m s^4 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_L s^3 + C_3 C_5 L_5 R_3 R_L g_m s^3 + C_3 C_5 R_3 R_L s^2 + C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_1 g_m s^2 + C_3 L_3 R_2 g_m s^3 + C_3 C_5 L_3 R_2 g_m s^3 + C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3$$

10.879 INVALID-ORDER-879
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_3 C_5 C_L L_3 L_5 g_m s^5 + C_3 C_5 L_4 R_3 s^4 + C_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 L_4 R_3 g_m s^3 + C_3 L_4 R_3 g_m s^3 + C_3 L_4 R_3 g_m s^3 + C_3 L_5 R_3 g_m s^3 + C_3 C_5 L_5 R_3 g_m s^3 + C_5 C_5 R_5 g_m s^3 +$$

10.880 INVALID-ORDER-880
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5L_Ll_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3s^3 + C_3C_5L_3R_Ls^3 + C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^3$$

10.881 INVALID-ORDER-881
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_5R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_Ls^4 + C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3R_3$$

10.882 INVALID-ORDER-882
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_5L_LR_3g_ms^5 + C_3C_5C_LL_3L_5g_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_3g_m$$

10.883 INVALID-ORDER-883
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.884 INVALID-ORDER-884
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_Ls^5 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_$$

10.885 INVALID-ORDER-885
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_LR_3R_Ls^5 + C_3C_5L_3L_5L_Rg_ms^5 + C_3C_5L_3L_5L_Rg_ms^5 + C_3C_5L_3L_5R_3R_Lg_ms^4 + 2C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_LR_3R_Lg_ms^4 + C_3C_5L_3L_2R_3R_Lg_ms^4 + C_3C_5L_3L_3L_2R_3R_Lg_ms^4 + C_3C_5L_3L_3L_3L_3R_Lg_ms^4 + C_3C_5L_3L_3L_3L_3R_Lg_ms^4 + C_3C_5L_3L_3L_3L_3R_Lg_ms^4 + C_3C_5L_3L_3L_3R_Lg_ms^4 + C_3C_5L_3L_3L_3R_Lg_ms^4 + C_3C_5L_3L_3L_3R_Lg_ms^2 + C_3C_5L_3L_3L_3R_Lg_ms^2 + C_3C_5L_3L_3L_3R_Lg_ms^2 + C_3C_5L_3L_3L_3R_Lg_m$$

10.886 INVALID-ORDER-886
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_2g_ms^6 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_LR_2s^5 + C_3C_5C_LL_5L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3c_LR_3s^5 + C_3C_5C_LL_3c_L$$

10.887 INVALID-ORDER-887
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 L_L R_3 g_m s^6 + C_3 C_5 C_L L_3 L_5 L_L R_L g_m s^6 + C_3 C_5 C_L L_3 L_5 R_3 R_L g_m s^5 + 2 C_3 C_5 C_L L_3 L_L R_3 R_L g_m s^5 + C_3 C_5 C_L L_3 L_L R_3 s^5 + C_3 C_5 C_L L_3 L_$$

10.888 INVALID-ORDER-888
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L\right)$$

$$H(s) = -\frac{R_3 R_L \left(C_3 L_3 s^2 + 1\right) \left(C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_3 C_5 L_3 L_5 R_3 R_L g_m s^4 + C_3 C_5 L_3 L_5 R_3 s^4 + C_3 C_5 L_5 R_3 R_L s^3 + C_3 L_3 L_5 R_3 g_m s^3 + C_3 L_3 L_5 R_L g_m s^3 + 2 C_3 L_3 R_3 R_L g_m s^2 + C_3 L_3 R_3 s^2 + C_3 L_3 R_L s^2 + C_3 L_3 R_2 g_m s^3 + C_3 L_3 R_2 g_m s^3 + C_3 L_3 R_3 R_L g_m s^3 + C_3 L_3 R_2 R_L g_m s^3 + C_3 L_3 R_2 R_L g_m s^3 + C_3 L_3 R_2 R_L g_m s^3 + C_3 L_3 R_L g_m s^3 +$$

10.889 INVALID-ORDER-889
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

10.890 INVALID-ORDER-890
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_Ls^5 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_Ls^4 + C_3C_5L_5R_3R_Ls^3 + C_3C_LL_3L_5R_3R_Lg_ms^4 + C_3C_LL_3R_3R_Ls^3 + C_3C_LL_3R_3R_Ls^$$

10.891 INVALID-ORDER-891
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_5R_3R_Ls^4 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3L_5R_3s^3 + C_3C_LL_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_3g_ms^2 + C_3C_5L_5L_5R_3g_ms^2 + C_3C_5L_5L_5R_3g_ms$$

10.892 INVALID-ORDER-892
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_5L_LR_3s^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3L_5R_3s^3 + C_3C_LL_3L_5L_Lg_ms^5 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_LL_3C_5C_Ls^6 + C_3C_5C_Ls^6 + C_3C_5C_Ls^6$$

10.893 INVALID-ORDER-893
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.894 INVALID-ORDER-894
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_Ls^5 + C_3C_5C_LL_3L_5R_3s^5 + C$$

10.895 INVALID-ORDER-895
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.896 INVALID-ORDER-896
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

10.897 INVALID-ORDER-897
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_Ls^6 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_5L_LR_3R_Ls^5 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C$$

10.898 INVALID-ORDER-898
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)$$

 $H(s) = \frac{R_3 R_L \left(C_3 L_3 s^2 + 1 + C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_5 g_m s^3 + 2 C_3 C_5 L_3 R_3 R_L g_m s^3 + C_3 C_5 L_3 R_5 R_L g_m s^3 + C_3 C_5 L_3 R_L g$

10.899 INVALID-ORDER-899
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{R_3 \left(C_3 L_3 s^2 + 1 \right) \left(C_5 L_5 g_{rec} + 2 G_5 C_L L_3 R_3 g_m s^3 + C_3 C_5 C_L L_3 R_3 g_m s^4 + C_3 C_5 L_4 R_3 g_m s^4 + 2 G_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_5 R_5 g_m s^3 + C_5 C_5 L_5 R_5 g_m s^3 + C_5$

10.900 INVALID-ORDER-900
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}\right)$$

 $H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3R_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Ls^4 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_Lg_ms^4 + C_3C_5L_3R_3R_5g_ms^3 + 2C_3C_5L_3R_3R_Lg_ms^3 + C_3C_5L_3R_3R_Lg_ms^4 + C_3C_5L_3R_3R_Lg_ms^2 + C_3$

10.901 INVALID-ORDER-901
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3g_ms^5 + C_3C_5C_LL_3L_5R_Lg_ms^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + 2C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_5R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Lg_ms^4 + C_3C_5C_LL_3R_3R_Lg_ms^2 + C_3C_5C_LL_3$$

10.902 INVALID-ORDER-902
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_Lg_ms^6 + C_3C_5C_LL_3L_5R_3g_ms^5 + 2C_3C_5C_LL_3L_LR_3g_ms^5 + C_3C_5C_LL_3L_LR_5g_ms^5 + C_3C_5C_LL_3L_Ls^5 + C_3C_5C_LL_3R_3R_5g_ms^4 + C_3C_5C_LL_3R_3s^4 + C_3C_5$$

10.903 INVALID-ORDER-903
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.904 INVALID-ORDER-904
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3 C_5 C_L L_3 L_5 L_L R_3 g_m s^6 + C_3 C_5 C_L L_3 L_5 L_L R_L g_m s^6 + C_3 C_5 C_L L_3 L_L R_3 R_5 g_m s^5 + 2 C_3 C_5 C_L L_3 L_L R_3 R_L g_m s^5 + C_3 C_5 C_L L_3 L_L R_3 s^5 + C_3 C_5 C_L L_3 L_L R_3 r_5 g_m s^5 + C_3 C_5 C_L L_3 L_L R_3$$

10.907 INVALID-ORDER-907
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_2g_ms^6 + C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + 2C_3C_5C_LL_3L_LR_3R_Lg_ms^5 + C_3C_5C_LL_3L_LR_3s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_2s^5 + C_3C_5C_LL_3L_3L_3c_5C_LL_3L_3c_5C_LL_3$$

10.908 INVALID-ORDER-908
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L\right)$$

$$H(s) = -\frac{1}{2C_3C_5L_3L_5R_3R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3L_5R_5R_Ls^4 + C_3C_5L_5R_3R_5R_Ls^3 + C_3L_3L_5R_3R_5g_ms^3 + 2C_3L_3L_5R_3R_Lg_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3L$$

10.909 INVALID-ORDER-909
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5s^5 + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_5R_3R_5s^3 + C_3C_LL_3L_5R_3R_5g_ms^4 + C_3C_LL_3L_5R_3s^4 + C_3C_LL_3R_3R_5s^3 + 2C_3L_3L_5R_3g_ms^3 + C_3C_LL_3L_5R_3R_5s^3 + C_3C_LL_3L_5R_3R_5s^3 + C_3C_LL_3L_5R_3s^3 + C_3C_LL_3L$$

10.910 INVALID-ORDER-910
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

10.911 INVALID-ORDER-911
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, R_L + \frac{1}{C_Ls}\right)$$

10.912 INVALID-ORDER-912
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

10.913 INVALID-ORDER-913
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.914 INVALID-ORDER-914
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.915 INVALID-ORDER-915
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.916 INVALID-ORDER-916
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

10.917 INVALID-ORDER-917
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3R_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3R_5s^6 + C_3C_5C_LL_3L_5L_LR_5R_Ls^6 + C_3C_5C_LL_3L_5R_3R_5R_Ls^5 + C_3C_5C_LL_5L_LR_3R_5R_Ls^5 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_LR_3R_5R_Ls^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5C_LL_3L_5L_Rs^$$

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
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5L_LL_3L_5R_3s^5 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_5L_5R_3g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^4 + C_3C_5L_5L_5R_5g_ms^2$$

10.920 INVALID-ORDER-920
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5L_5L_5R_3s^2 + C_3C_5$$

10.921 INVALID-ORDER-921
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5C_LL_5G_5$$

10.922 INVALID-ORDER-922
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_5L_LR_3R_5g_ms^5 + C_3C_5C_LL_5L_RR_3R_5g_ms^5 + C_3C_5C_LL_5L_5C_LL_5L_5C_LL_5L_5C_LL_5L_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_LL_5C_L$$

10.923 INVALID-ORDER-923
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.924 INVALID-ORDER-924
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_LL_3C_5C_$$

10.925 INVALID-ORDER-925
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.926 INVALID-ORDER-926
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3 s + \frac{1}{C_3 s}\right)}{L_3 s + R_3 + \frac{1}{C_3 s}}, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5$$

10.927 INVALID-ORDER-927
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_5s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_Rs^6 + C_3C_5$$

10.928 INVALID-ORDER-928
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L\right)$$

$$H(s) = -\frac{1}{C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5R_Lg_ms^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3R_3R_5g_ms^4 + 2C_3C_5L_3R_3R_5g_ms^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3R_5g_ms^4 + C_3C_5L_3R_5g_ms^2 +$$

10.929 INVALID-ORDER-929
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3R_3R_5s^4 + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5L_3R_5g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3R_5g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5g_ms^4 + C_3C_5L_$$

10.930 INVALID-ORDER-930
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5R_3R_5R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3R_Ls^5 + C_3C_5C_LL_3R_3R_5R_Ls^4 + C_3C_5L_3L_5R_3R_5g_ms^4 + 2C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_3R_Lg_ms^4 + C_3C_5L_3L_5R_3R_Lg_ms^2 + C_3C_5L_5L_5R_3R_Lg_ms^2 + C_3C_5L_5L_5R_2R_Lg_ms^2 + C_3C_5L_5L_5R_2R_Lg_ms^2 + C_3C_5L_5L_5R_2R_Lg_ms^2 + C_3C_$$

10.931 INVALID-ORDER-931
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right)$$

10.932 INVALID-ORDER-932
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + 2C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_LR_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + C_3C_5C_LL_3L_5R_5R_5g_ms^5 + C_3C_5C_LL_3L_5R_5g_ms^5 + C_3C_5C_LL_5R_5g_ms^5 + C_3C_5C_LL_5R$$

10.933 INVALID-ORDER-933
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_LR_3R_5s^5 + 2C_3C_5L_3L_5L_LR_3g_ms^5 + C_3C_5L_3L_5L_LR_5g_ms^5 + C_3C_5L_3L_5L_Ls^5 + C_3C_5L_3L_5R_3R_5g_ms^4}{C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_2R_3s^6 + C_3C_5C_LL_3L_5L_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3L_5C_LR_3s^6 + C_3C_5C_LL_3c_LR_3s^6 + C_3$$

10.934 INVALID-ORDER-934
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = -\frac{1}{2C_3C_5C_LL_3L_5L_LR_3g_ms^6 + C_3C_5C_LL_3L_5L_LR_5g_ms^6 + C_3C_5C_LL_3L_5L_Ls^6 + C_3C_5C_LL_3L_5R_3R_5g_ms^5 + 2C_3C_5C_LL_3L_5R_3R_Lg_ms^5 + C_3C_5C_LL_3L_5R_3s^5 + C_3C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3L_5C_5C_LL_3C_5C_LL_3C_5C$$

10.935 INVALID-ORDER-935
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

10.936 INVALID-ORDER-936
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

10.937 INVALID-ORDER-937
$$Z(s) = \left(\infty, \infty, \frac{R_3\left(L_3s + \frac{1}{C_3s}\right)}{L_3s + R_3 + \frac{1}{C_3s}}, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = -\frac{1}{C_3C_5C_LL_3L_5L_LR_3R_5g_ms^6 + 2C_3C_5C_LL_3L_5L_LR_3R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_LR_5R_Lg_ms^6 + C_3C_5C_LL_3L_5L_LR_3s^6 + C_3C_5C_LL_3L_5L_2R_3s^6 + C_3C_5C_LL_3L_5L_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3L_5L_3c_LR_3s^6 + C_3C_5C_LL_3c_LR_3s^6 + C_3C_5C_LL_$$