Filter Summary Report: TIA,some,parasitic,Z2,Z5,ZL

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December 5, 2024

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10	9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_L s}, R_L \right)$ 9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_2 s}, R_L \right)$ 9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.7 INVALID-WZ-7 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 9.8 INVALID-WZ-8 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L \right)$ 9.9 INVALID-WZ-9 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L \right)$ 10.1 INVALID-ORDER 10.1 INVALID-ORDER-1 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, R_L \right)$ 10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.4 INVALID-ORDER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{R_L}{C_5 R_5 s + 1} \right)$ 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$	42 42 43 43 43 44 43 44 44 44
10	9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_L s}, R_L \right)$ 9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_2 s}, R_L \right)$ 9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.7 INVALID-WZ-7 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 9.8 INVALID-WZ-8 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L \right)$ 9.9 INVALID-WZ-9 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L \right)$ 10.1 INVALID-ORDER 10.1 INVALID-ORDER-1 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, R_L \right)$ 10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.4 INVALID-ORDER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{R_L}{C_5 R_5 s + 1} \right)$ 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$	42 42 43 43 43 44 43 44 44 44
10	9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_{2s}}, \infty, \infty, R_{5}, R_{L} + \frac{1}{C_{Ls}}\right)$ 9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_{2s}}, \infty, \infty, R_{5} + \frac{1}{C_{5s}}, R_{L}\right)$ 9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_{5s}}{C_{2s}R_{2s}+1}, \infty, \infty, R_{5}, R_{L} + \frac{1}{C_{1s}}\right)$ 9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_{5s}}{C_{2s}R_{2s}+1}, \infty, \infty, R_{5} + \frac{1}{C_{5s}}, R_{L}\right)$ 9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_{2} + \frac{1}{C_{2s}}, \infty, \infty, R_{5}, R_{L} + \frac{1}{C_{cs}}\right)$ 9.7 INVALID-WZ-7 $Z(s) = \left(\infty, R_{2} + \frac{1}{C_{2s}}, \infty, \infty, \frac{R_{5}}{C_{2s}R_{5s}+1}, R_{L}\right)$ 9.8 INVALID-WZ-8 $Z(s) = \left(\infty, R_{2} + \frac{1}{C_{2s}}, \infty, \infty, \frac{R_{5}}{C_{2s}R_{5s}+1}, R_{L}\right)$ 9.9 INVALID-WZ-9 $Z(s) = \left(\infty, R_{2} + \frac{1}{C_{2s}}, \infty, \infty, R_{5} + \frac{1}{C_{5s}}, R_{L}\right)$ 10.1 INVALID-ORDER 10.1 INVALID-ORDER-2 $Z(s) = \left(\infty, R_{2}, \infty, \infty, R_{5}, \frac{1}{C_{2s}}, R_{L}\right)$ 10.3 INVALID-ORDER-3 $Z(s) = \left(\infty, R_{2}, \infty, \infty, R_{5}, \frac{1}{C_{2s}}, R_{L}\right)$ 10.4 INVALID-ORDER-4 $Z(s) = \left(\infty, R_{2}, \infty, \infty, R_{5}, R_{L} + \frac{1}{C_{2s}}\right)$ 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_{2}, \infty, \infty, \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{2s}}\right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_{2}, \infty, \infty, \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{2s}}\right)$ 10.7 INVALID-ORDER-6 $Z(s) = \left(\infty, R_{2}, \infty, \infty, \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{2s}}\right)$ 10.8 INVALID-ORDER-7 $Z(s) = \left(\infty, R_{2}, \infty, \infty, \frac{1}{C_{5s}}, R_{L} + \frac{1}{C_{2s}}\right)$	42 42 43 43 43 43 43 43 43 43
10	9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_L s}, R_L \right)$ 9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_5}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_2 s}, R_L \right)$ 9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s} \right)$ 9.7 INVALID-WZ-7 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 9.8 INVALID-WZ-8 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L \right)$ 9.9 INVALID-WZ-9 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L \right)$ 10.1 INVALID-ORDER 10.1 INVALID-ORDER-1 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, R_L \right)$ 10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.4 INVALID-ORDER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{R_L}{C_5 R_5 s + 1} \right)$ 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_5 R_5 s + 1} \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$ 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L \right)$	4: 4: 4: 4: 4: 4: 4: 4: 4: 4: 4: 4: 4: 4

$10.10 \text{INVALID-ORDER-10 } Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right) $
10.11INVALID-ORDER-11 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
$10.12 \text{INVALID-ORDER-} 12 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $
$10.13\text{INVALID-ORDER-}13\ Z(s) = \left(\infty,\ R_2,\ \infty,\ \infty,\ \frac{1}{C_5 s},\ \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \dots \qquad 44$
$10.14 \text{INVALID-ORDER-} 14 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L \right) $
10.15INVALID-ORDER-15 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
$10.16 \text{INVALID-ORDER-} 16 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $
10.17INVALID-ORDER-17 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right)$
10.18INVALID-ORDER-18 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.19INVALID-ORDER-19 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.20 \text{INVALID-ORDER-20 } Z(s) = \left(\infty, \ R_2, \ \infty, \ \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) $
10.21INVALID-ORDER-21 $Z(s) = (\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L)$
$10.22 \text{INVALID-ORDER-} 22 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) \dots \qquad 45$
$10.23 \text{INVALID-ORDER-} 23 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) \qquad . \qquad $
$10.24 \text{INVALID-ORDER-} 24 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $
$10.25 \text{INVALID-ORDER-} 25 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)' \dots \dots$
10.26INVALID-ORDER-26 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s} \right)$
10.27INVALID-ORDER-27 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
10.28INVALID-ORDER-28 $Z(s) = (\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L)$
10.29INVALID-ORDER-29 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)$
10.30INVALID-ORDER-30 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_{r,s}}, \frac{1}{C_{r,s}}\right)$
10.31INVALID-ORDER-31 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
$10.32 \text{INVALID-ORDER-} 32 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right) $
$10.33 \text{INVALID-ORDER-} 33 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $
$10.34 \text{INVALID-ORDER-} 34 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $
10.35INVALID-ORDER-35 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.36INVALID-ORDER-36 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$
10.37INVALID-ORDER-37 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.38INVALID-ORDER-38 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)'$
10.39INVALID-ORDER-39 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
10 40INVALID-ORDER-40 $Z(s) = \left(\begin{array}{ccc} & R_2 & \infty & \frac{L_5 s}{s} & \frac{R_L}{s} \end{array} \right)$
10.41INVALID-ORDER-41 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
$10.42 \text{INVALID-ORDER-} 42 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) $
10.41INVALID-ORDER-41 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)$ 47 10.42INVALID-ORDER-42 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right)$ 47 10.43INVALID-ORDER-43 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LLs^2+1}\right)$ 48

10.44INVALID-ORDER-44 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	18
$10.45 \text{INVALID-ORDER-} 45 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \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) $	18
10.46INVALID-ORDER-46 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	18
10.47INVALID-ORDER-47 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	18
$10.48 \text{INVALID-ORDER-} 48 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right) $	18
$10.49 \text{INVALID-ORDER-} 49 \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) \qquad \dots $	18
10.50INVALID-ORDER-50 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$	18
10.51INVALID-ORDER-51 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	19
10.52INVALID-ORDER-52 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)'$	19
10.53INVALID-ORDER-53 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	19
10.54INVALID-ORDER-54 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)$	19
10.55INVALID-ORDER-55 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	19
10.56INVALID-ORDER-56 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	19
10.57INVALID-ORDER-57 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$	19
10.58INVALID-ORDER-58 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1} \right)$	19
10.59INVALID-ORDER-59 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$	50
10.60INVALID-ORDER-60 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s} \right)$	50
10.61INVALID-ORDER-61 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)$	50
10.62INVALID-ORDER-62 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$	50
10.63INVALID-ORDER-63 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	50
10.64INVALID-ORDER-64 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	50
10.65INVALID-ORDER-65 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)'$	60
10.66INVALID-ORDER-66 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls}\right)$	50
$ \begin{array}{c} C_{5}s+R_{5}+L_{5}s} & LLs+RL+C_{L}s \\ 10.66INVALID-ORDER-66 \ Z(s) = \left(\infty, \ R_{2}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \ \frac{1}{C_{L}s}\right) \\ 10.67INVALID-ORDER-67 \ Z(s) = \left(\infty, \ R_{2}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \ \frac{R_{L}}{C_{L}R_{L}s+1}\right) \\ \end{array} $ 50.	51
10.68INVALID-ORDER-68 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right)$	51
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10.70INVALID-ORDER-70 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$.	51
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10.72INVALID-ORDER-72 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{2} + \frac{1}{2}}\right)$	51
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10.74INVALID-ORDER-74 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	51

10.75INVALID-ORDER-75 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$. 52
10.76INVALID-ORDER-76 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right)$. 52
10.77INVALID-ORDER-77 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$. 52
10.78INVALID-ORDER-78 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$. 52
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10.80INVALID-ORDER-80 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, L_Ls + R_L + \frac{1}{C_Ls}\right)$. 52
10.81INVALID-ORDER-81 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}} \right)^{\prime}$. 52
$10.82 \text{INVALID-ORDER-82 } Z(s) = \left(\infty, \ R_2, \ \infty, \ \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) $. 52
10.83INVALID-ORDER-83 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$. 53
10.84INVALID-ORDER-84 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L\right)$. 53
10.85INVALID-ORDER-85 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$. 53
$10.86 \text{INVALID-ORDER-86 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots $. 53
$10.87 \text{INVALID-ORDER-87 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots $. 53
10.88INVALID-ORDER-88 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$. 53
10.89INVALID-ORDER-89 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 53
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10.93INVALID-ORDER-93 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$. 54
$10.94 \text{INVALID-ORDER-} 94 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) $. 54
10.95INVALID-ORDER-95 $Z(s) = \left(\infty, \frac{1}{C_{rs}}, \infty, \infty, \frac{1}{C_{rs}}, L_L s + R_L + \frac{1}{C_{rs}}\right)$. 54
$10.96 \text{INVALID-ORDER-96} \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) $ $10.97 \text{INVALID-ORDER-97} \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) $. 54
$10.97 \text{INVALID-ORDER-} 97 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $. 54
10.98INVALID-ORDER-98 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)'$. 54
$10.99 \text{INVALID-ORDER-99 } Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s} \right) $. 54
10.10 0 NVALID-ORDER-100 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$. 55
10.10INVALID_ORDER_101 $Z(s) = \left(\sum_{s=1}^{n} \frac{1}{s} \sum_{s=1}^{n} \frac{L_{Ls}}{s} \right)$	55
10.10 2NVALID-ORDER-102 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$. 55
10.10 E NVALID-ORDER-103 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) \right] \dots $. 55
10.10 INVALID-ORDER-104 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 55
$10.102\text{NVALID-ORDER-}102 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ L_L s + R_L + \frac{1}{C_L s} \right)$ $10.102\text{NVALID-ORDER-}103 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ $10.102\text{NVALID-ORDER-}103 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{L_L s}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ $10.102\text{NVALID-ORDER-}104 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ $10.102\text{NVALID-ORDER-}105 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s+1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$. 55

10.106NVALID-ORDER-106 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	55
$10.10 \text{INVALID-ORDER-} 107 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right) \dots $	55
10.10\text{\text{8}NVALID-ORDER-108} $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right)$	56
10.10 9 NVALID-ORDER-109 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	56
10.11 0 NVALID-ORDER-110 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right)$	56
10.11INVALID-ORDER-111 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	56
10.112NVALID-ORDER-112 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{L_L s}}\right)$	56
$10.11 \text{ENVALID-ORDER-} 113 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \qquad . \qquad $	56
10.114NVALID-ORDER-114 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	56
10.115NVALID-ORDER-115 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$	56
10.116NVALID-ORDER-116 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	57
$10.11\text{TNVALID-ORDER-}117\ Z(s) = \left(\infty,\ \frac{1}{C_2s},\ \infty,\ \infty,\ L_5s + \frac{1}{C_5s},\ \frac{R_L}{C_LR_Ls + 1}\right) $	57
10.11\(\mathbb{E}\)NVALID-ORDER-118\(Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)\).	57
10.11 9 NVALID-ORDER-119 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	57
10.12 0 NVALID-ORDER-120 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$	57
$10.12 \text{INVALID-ORDER-} 121 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) $	57
$10.122\text{NVALID-ORDER-}122\ Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \infty,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)\ \dots \dots$	57
10.12 B NVALID-ORDER-123 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	57
10.124NVALID-ORDER-124 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	58
10.12 INVALID-ORDER-125 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$	58
10.126NVALID-ORDER-126 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$	58
10.12\text{TNVALID-ORDER-127} $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1} \right)$	58
10.12 NVALID-ORDER-128 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s} \right)$	58
10.12 9 NVALID-ORDER-129 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s} \right)$	58
10.13 0 NVALID-ORDER-130 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} \right)'$	58
10.13INVALID-ORDER-131 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s} \right)$	
10.132NVALID-ORDER-132 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	59
$10.13\text{ENVALID-ORDER-}133\ Z(s) = \left(\infty,\ \frac{1}{C_2s},\ \infty,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \qquad . $	
10.134NVALID-ORDER-134 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	59
$10.13 \text{INVALID-ORDER-} 135 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L\right) \dots \dots$	59
10.136NVALID-ORDER-136 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right)$	59
10.13 INVALID-ORDER-137 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$	59
$10.13 \text{ENVALID-ORDER-} 138 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) $	59
10.13 9 NVALID-ORDER-139 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	59
10.14@NVALID-ORDER-140 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	30

10.14INVALID-ORDER-141 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.142NVALID-ORDER-142 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_1 s}}\right)$
10.14 2 NVALID-ORDER-143 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.14\(\text{INVALID-ORDER-144}\(Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \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) \tag{0.10}
10.145NVALID-ORDER-145 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L \right)$
10.146NVALID-ORDER-146 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s} \right)$
10.14TNVALID-ORDER-147 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1} \right)$
10.14\(\mathbb{R}\)NVALID-ORDER-148\(Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right) \tag{61}
10.14 NVALID-ORDER-149 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s} \right)$
10.15 0 NVALID-ORDER-150 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$
10.15INVALID-ORDER-151 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
10.152NVALID-ORDER-152 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)^{\frac{1}{2}}$
10.15 2 NVALID-ORDER-153 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$
10.154NVALID-ORDER-154 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)^{\frac{1}{2}}$
10.15 INVALID-ORDER-155 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
10.15 6 NVALID-ORDER-156 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
$10.15 \text{INVALID-ORDER-} 157 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L}{C_L R_L s + 1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
10.15\(\text{NVALID-ORDER-158} \) $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s} \right)$
10.15 Q NVALID-ORDER-159 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
10.16 Q NVALID-ORDER-160 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)^{\prime}$
10.16INVALID-ORDER-161 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
$10.162\text{NVALID-ORDER-}162\ Z(s) = \left(\infty, \ \frac{1}{C_{10}}, \ \infty, \ \infty, \ \frac{L_{58}}{C_{10}} + R_{5}, \ \frac{1}{C_{10} + 1 + 1}\right) $
10.16 28 NVALID-ORDER-163 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.16 \text{2NVALID-ORDER-} 163 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) $ $10.16 \text{2NVALID-ORDER-} 164 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) $ $63 \text{2NVALID-ORDER-} 164 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) $
$10.16 \text{INVALID-ORDER-} 165 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) $
$10.16 \text{ 6NVALID-ORDER-} 166 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s} \right) $
$10.16 \text{ INVALID-ORDER-} 167 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right) \ \dots $
10.16\text{\text{NVALID-ORDER-168}} $Z(s) = \left(\infty, \frac{1}{G_{-}}, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{G_5}\right)}{I_5 + R_5 I_5}\right), R_L + \frac{1}{G_5}\right)$
$10.16 \text{ PNVALID-ORDER-} 169 \ Z(s) = \left(\infty, \ \frac{1}{C_{-s}}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_{-s}}\right)}{L_1 + R_1 + \frac{1}{2}}, \ L_L s + \frac{1}{C_{-s}}\right) $
$10.17 \text{ONVALID-ORDER-} 170 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) $

10.17INVALID-ORDER-171 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$. 63
$10.172 \text{NVALID-ORDER-} 172 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \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) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $. 64
$10.17 \text{ 2NVALID-ORDER-} 173 \ Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \ \dots $. 64
10.174NVALID-ORDER-174 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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 $. 64
10.175NVALID-ORDER-175 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_5, R_L\right)$. 64
10.176NVALID-ORDER-176 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, R_5, L_L s + \frac{1}{C_L s} \right)$. 64
$10.17\text{INVALID-ORDER-}177\ Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \infty,\ \infty,\ R_5,\ \frac{L_Ls}{C_LL_Ls^2+1}\right) \dots \dots$. 64
10.178NVALID-ORDER-178 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$. 64
10.179NVALID-ORDER-179 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$. 64
$10.18 \text{ @NVALID-ORDER-} 180 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \dots $. 65
$10.18 \text{INVALID-ORDER-} 181 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $. 65
$10.18 2 \text{NVALID-ORDER-} 182 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s}, \ \frac{1}{C_L s} \right) $. 65
10.18 INVALID-ORDER-183 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$. 65
$10.18 \text{ 1} \text{NVALID-ORDER-184 } Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right) $. 65
10.18 INVALID-ORDER-185 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$. 65
10.18 C NVALID-ORDER-186 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$. 65
$10.18 \text{ INVALID-ORDER-} 187 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $. 65
10.18 NVALID-ORDER-188 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$. 65
10.18 QNVALID-ORDER-189 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$. 66
$10.19 \text{ @NVALID-ORDER-190 } Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}\right)$. 66
10.19INVALID-ORDER-191 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$. 66
$10.192 \text{NVALID-ORDER-} 192 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $. 66
$10.19 \text{2NVALID-ORDER-} 192 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $10.19 \text{2NVALID-ORDER-} 193 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $ $10.19 \text{2NVALID-ORDER-} 193 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) $. 66
10.19\(\text{INVALID-ORDER-194}\) $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{2} + \frac{1}{2}} \right)$	66
$10.19 \text{ INVALID-ORDER-} 195 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) \dots $. 66
$10.19 \text{ (INVALID-ORDER-196 } Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	66
$10.19 \text{INVALID-ORDER-} 197 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right) $ $10.19 \text{INVALID-ORDER-} 198 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1} \right) $. 67
10.19 NVALID-ORDER-198 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$. 67
$10.19 \text{ INVALID-ORDER-} 199 \ Z(s) = \left(\infty, \ \frac{R_2}{GR_{20} + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{G_5}, \ R_L + \frac{1}{G_5}\right) \dots \dots$	67
10.20 0 NVALID-ORDER-200 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$. 67
10.20INVALID-ORDER-201 $Z(s) = (\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1})$. 67
$10.20 \text{@NVALID-ORDER-} 200 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) $ $10.20 \text{@NVALID-ORDER-} 201 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $10.20 \text{@NVALID-ORDER-} 202 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) $. 67
$10.20 \text{ENVALID-ORDER-} 203 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $. 67

10.20 INVALID-ORDER-204 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
$10.20 \text{INVALID-ORDER-} 205 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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 $
10.20 6 NVALID-ORDER-206 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$
10.20 T NVALID-ORDER-207 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
$10.20 \&NVALID-ORDER-208 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
10.20 9 NVALID-ORDER-209 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
10.21 INVALID-ORDER-210 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.21INVALID-ORDER-211 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
10.21\(\text{PNVALID-ORDER-212} \(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \infty, \infty, \infty, \left(L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s} \right) \tag{68}
$10.21 \text{\&NVALID-ORDER-} 213 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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 $
10.21 INVALID-ORDER-214 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.21 INVALID-ORDER-215 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
10.21 6 NVALID-ORDER-216 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$
10.21 INVALID-ORDER-217 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$ (69)
10.21 NVALID-ORDER-218 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1} \right)$ 69
10.21 9 NVALID-ORDER-219 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
$10.220 \text{NVALID-ORDER-} 220 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + \frac{1}{C_L s} \right) $
$10.22 \text{INVALID-ORDER-} 221 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) \dots $
$10.22 2 \text{NVALID-ORDER-} 222 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s} \right) \dots $
$10.22 \text{NVALID-ORDER-} 223 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{L_L s}} \right) \right) $
10.22\(\text{AVVALID-ORDER-224}\(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \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) \tag{70}
$10.22 \text{INVALID-ORDER-} 225 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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) $
10.226NVALID-ORDER-226 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
$ \begin{array}{c} \left(\begin{array}{c} C_{2}I_{2}s+1 & C_{5}L_{5}s+1 & L_{L}s+R_{L}+\overline{C_{L}s} \end{array}\right) \\ 10.22\text{ INVALID-ORDER-226 } Z(s) = \left(\infty, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, L_{5}s+R_{5}+\frac{1}{C_{5}s}, R_{L}\right) \\ 10.22\text{ INVALID-ORDER-227 } Z(s) = \left(\infty, \frac{R_{2}}{C_{2}R_{2}s+1}, \infty, \infty, L_{5}s+R_{5}+\frac{1}{C_{5}s}, \frac{1}{C_{L}s}\right) \\ \end{array} \right) \\ \end{array} $
$10.228\text{NVALID-ORDER} \cdot 228 \ Z(s) = \left(\infty, \frac{R_2}{R_2}, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{2}, \frac{R_L}{R_2}\right) $
$10.22 \mathfrak{g} \text{NVALID-ORDER-} 229 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s} \right) $ $10.23 \mathfrak{g} \text{NVALID-ORDER-} 230 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s} \right) $ $10.23 \mathfrak{g} \text{NVALID-ORDER-} 231 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $10.23 \mathfrak{g} \text{NVALID-ORDER-} 231 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $ $10.23 \mathfrak{g} \text{NVALID-ORDER-} 231 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} \right) $
10.23 0 NVALID-ORDER-230 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
10.23INVALID-ORDER-231 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} \right)$
10.232NVALID-ORDER-232 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
10.23\textbf{ENVALID-ORDER-233} $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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)^{\frac{1}{2}} $ 7. 10.23\textbf{ENVALID-ORDER-234} $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right)$ 7.
10.23 INVALID-ORDER-234 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
10.23 INVALID-ORDER-235 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)'$
$10.23\text{ENVALID-ORDER-}236 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L \right) $ $10.23\text{ENVALID-ORDER-}237 \ Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s} \right) $ $75.$
10.23 INVALID-ORDER-237 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s}\right)$

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10.23\( \text{NVALID-ORDER-238} \( Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, \frac{R_L}{C_L R_L s + 1} \right) \quad \tag{\cdots} \quad \tag{\cdots} \]
10.239NVALID-ORDER-239 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_{\varepsilon}} + \frac{1}{L_{\kappa} s}}, R_L + \frac{1}{C_L s}\right) \dots \dots \dots
10.24 \text{ INVALID-ORDER-} 243 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{I_{r,s}}}, \ \frac{1}{C_L s + \frac{1}{R_r} + \frac{1}{I_{r,s}}} \right) \ \dots 
10.24\(\text{INVALID-ORDER-244}\(Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\) \quad \tag{\text{..............}}
10.24 INVALID-ORDER-245 Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_T s}} \right)
10.24 INVALID-ORDER-246 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right) \dots \dots \dots \dots
10.24 INVALID-ORDER-247 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right) \dots \dots
10.249NVALID-ORDER-249 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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
10.250NVALID-ORDER-250 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + \frac{1}{C_Ls}\right) . . . . .
10.252NVALID-ORDER-252 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.25RNVALID-ORDER-253 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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)
10.254NVALID-ORDER-254 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots
10.25 INVALID-ORDER-255 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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)^{s}
10.25 INVALID-ORDER-257 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right) \dots \dots \dots
10.25\( \text{NVALID-ORDER-258} \( Z(s) = \int( \infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \infty, \frac{R_5 \left( L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1} \right) \quad \qua
10.26 \text{ @NVALID-ORDER-260 } Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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) 
10.26 \text{INVALID-ORDER-} 261 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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)' 
10.26 2 \text{NVALID-ORDER-} 262 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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) \ . 
10.26 \text{ INVALID-ORDER-} 263 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left( L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}} \right) \right) 
10.26\(\text{4NVALID-ORDER-264}\(Z(s) = \int(\infty), \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5(L_5s + \frac{1}{C_5s})}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\) \qquad \tag{75}
10.26 \text{INVALID-ORDER-} 265 \ Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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)
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10.26&NVALID-ORDER-268 $Z(s)=$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	75
10.26 9 NVALID-ORDER-269 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$	76
10.270NVALID-ORDER-270 $Z(s) =$	$\left(\infty,\ R_2 + \frac{1}{C_2 s},\ \infty,\ \infty,\ R_5,\ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$	76
10.27INVALID-ORDER-271 $Z(s)=$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	76
10.27 2 NVALID-ORDER-272 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$	76
10.27\$NVALID-ORDER-273 $Z(s)=$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$	76
10.27#NVALID-ORDER-274 $Z(s)=$	$\left(\infty,\ R_2+\frac{1}{C_2s},\ \infty,\ \infty,\ \frac{1}{C_5s},\ \frac{R_L}{C_LR_Ls+1}\right)$	76
10.275NVALID-ORDER-275 $Z(s) =$	$\left(\infty,\ R_2+\frac{1}{C_2s},\ \infty,\ \infty,\ \frac{1}{C_5s},\ R_L+\frac{1}{C_Ls}\right)$	76
10.276NVALID-ORDER-276 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$	76
10.27 NVALID-ORDER-277 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$	77
10.27&NVALID-ORDER-278 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$	77
10.27 9 NVALID-ORDER-279 $Z(s) =$	$\left(\infty,\ R_2 + \frac{1}{C_2 s},\ \infty,\ \infty,\ \frac{1}{C_5 s},\ \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$	77
	$\left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \frac{1}{C_{5s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	77
10.28INVALID-ORDER-281 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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) \ \dots $	77
10.282NVALID-ORDER-282 $Z(s) =$	$(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s})$	77
10.28 INVALID-ORDER-283 $Z(s) =$	$\left(\infty,\ R_2 + \frac{1}{C_2 s},\ \infty,\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \frac{R_L}{C_L R_L s + 1}\right)$	77
10.28 4 NVALID-ORDER-284 $Z(s)=$	$(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s})$	77
10.28 NVALID-ORDER-285 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right)$	78
10.286NVALID-ORDER-286 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	78
$10.28 {\hbox{\it I}} {\hbox{\it NVALID-ORDER-}} 287 \ Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	78
10.28&NVALID-ORDER-288 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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) \dots $	78
10.28 9 NVALID-ORDER-289 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	78
10.29 0 NVALID-ORDER-290 $Z(s) =$	$\left(\infty, R_{2} + \frac{1}{C_{2}s}, \infty, \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) $ $\left(\infty, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, R_{5} + \frac{1}{C_{5}s}, \frac{1}{C_{L}s}\right) $ $\left(\infty, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, R_{5} + \frac{1}{C_{5}s}, \frac{R_{L}}{C_{L}R_{L}s+1}\right) $ $\left(\infty, R_{2} + \frac{1}{C_{2}s}, \infty, \infty, R_{5} + \frac{1}{C_{5}s}, \frac{R_{L}}{C_{L}R_{L}s+1}\right) $	78
10.29 I NVALID-ORDER-291 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ \frac{1}{C_{Ls}}\right)$	78
10.29 2 NVALID-ORDER-292 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$	78
10.29BN VALID-ORDER- $293 Z(s) =$	$\{\infty, R_2 + \frac{1}{C_{22}}, \infty, \infty, R_5 + \frac{1}{C_{22}}, R_L + \frac{1}{C_{22}}\}$	79
10.29#NVALID-ORDER-294 $Z(s)=$	$\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ L_L s + \frac{1}{C_{Ls}}\right) \ \dots $ $\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right) \ \dots $	79
10.29 INVALID-ORDER-295 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$	79
10.29 6 NVALID-ORDER-296 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$	79
10.29 T NVALID-ORDER-297 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_{5s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) $ $\left(\infty, \ R_2 + \frac{1}{C_{2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $	79
10.29\NVALID-ORDER-298 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \infty, R_5 + \frac{1}{C_{5s}}, \frac{L_{Ls}}{C_L L_{Ls}^2 + 1} + R_L\right)$	79
10.29 9 NVALID-ORDER-299 $Z(s) =$	$\begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s^2 + 1 + L_L\right)}{L_L s + R_L + \frac{1}{C_L s}} \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s^2 + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}} \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \end{pmatrix} \\ \begin{pmatrix} \infty, \ R_2 + \frac{1}{C_5 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac$	79
10.30 0 NVALID-ORDER-300 $Z(s) =$	$\left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$	79
10.30INVALID-ORDER-301 $Z(s) = $	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$	80

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10.302NVALID-ORDER-302 Z(s) = \left(\infty, R_2 + \frac{1}{C_{28}}, \infty, \infty, L_5 s + \frac{1}{C_{58}}, \frac{R_L}{C_{48}}\right)
 10.30 NVALID-ORDER-303 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right) \dots \dots
 10.304NVALID-ORDER-304 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) \dots \dots
 10.30 INVALID-ORDER-305 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots
 10.30 INVALID-ORDER-306 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . .
10.30 INVALID-ORDER-307 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_r} + \frac{1}{L_r s}}\right)
 10.30 NVALID-ORDER-308 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots
 10.309NVALID-ORDER-309 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
 10.31 INVALID-ORDER-310 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) ......
 10.31INVALID-ORDER-311 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right) \dots \dots
 10.312NVALID-ORDER-312 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2}s}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L}{C_LR_Ls+1}\right) \dots
 10.312NVALID-ORDER-313 Z(s) = \left(\infty, R_2 + \frac{1}{C_{0.8}}, \infty, \infty, \frac{L_{5.8}}{C_{5.1}L_{5.8}^{2}+1}, R_L + \frac{1}{C_{1.8}}\right)
 10.31 INVALID-ORDER-314 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots
 10.31 INVALID-ORDER-315 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . .
 10.316NVALID-ORDER-316 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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
10.31 INVALID-ORDER-317 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{L_5 s} + \frac{1}{L_5 s}}\right) \dots \dots \dots
 10.31 NVALID-ORDER-318 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . .
 10.31 INVALID-ORDER-319 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)
 10.320NVALID-ORDER-320 Z(s) = \left(\infty, R_2 + \frac{1}{C_{0s}}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_{cs}}, R_L\right) . . . . . .
 10.32INVALID-ORDER-321 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots
 10.322NVALID-ORDER-322 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
 10.32\( \text{SNVALID-ORDER-323} \( Z(s) = \left( \infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, R_5 + R_5 + \frac{1}{C_2 s}, R_L + \frac{1}{C_L s} \right) \\ \tag{1...}
 10.324NVALID-ORDER-324 Z(s) = \left(\infty, R_2 + \frac{1}{C_{C_s}}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_{C_s}}, L_L s + \frac{1}{C_{C_s}}\right) . . . . . .
 10.32 INVALID-ORDER-325 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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
 10.32TNVALID-ORDER-327 Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{L_1 s} + \frac{1}{L_2 s}} \right)
 10.32 INVALID-ORDER-329 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
10.33@NVALID-ORDER-330 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, R_L\right) \dots \dots
10.33INVALID-ORDER-331 Z(s) = \left( \infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_x} + \frac{1}{L_x s}}, \frac{1}{C_L s} \right) . . . . . . .
10.332NVALID-ORDER-332 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_{\kappa}} + \frac{1}{L_{\kappa} s}}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots \dots
10.33ENVALID-ORDER-333 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R s} + \frac{1}{L s}}, R_L + \frac{1}{C_L s}\right) \dots
10.33\(\text{INVALID-ORDER-334}\(Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_\pi} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\)\\ \tag{1} \\ \tag{1}
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10.33 Б NVALID-ORDER-335 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{1}{C_5s+rac{1}{R_5}+rac{1}{L_5s}},\ rac{L_Ls}{C_LL_Ls^2+1} ight)$	84
10.336NVALID-ORDER-336 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{1}{C_5s+rac{1}{R_5}+rac{1}{L_5s}},\ L_Ls+R_L+rac{1}{C_Ls} ight)$	84
10.33 T NVALID-ORDER-337 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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) \dots $	84
	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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 $	84
10.33 9 NVALID-ORDER-339 $Z(s) =$	$= \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ . \dots \dots$	84
10.34 0 NVALID-ORDER-340 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ R_L ight)$	84
10.34INVALID-ORDER-341 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ rac{1}{C_Ls} ight)$	85
10.342NVALID-ORDER-342 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ rac{\dot{R}_L}{C_LR_Ls+1} ight)$	85
10.34 % NVALID-ORDER-343 $Z(s) =$	$=\left(\infty,\ R_2+\frac{1}{C_2s},\ \infty,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ R_L+\frac{1}{C_Ls}\right)$	85
10.34#NVALID-ORDER-344 $Z(s) =$	$\sum_{k=0}^{\infty} \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s} \right)$	85
10.34 5 NVALID-ORDER-345 $Z(s) =$	$=\left(\infty,\ R_2+\frac{1}{C_2s},\ \infty,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \frac{L_Ls}{C_LL_Ls^2+1}\right)$	85
10.346NVALID-ORDER-346 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots $	85
10.34 NVALID-ORDER-347 $Z(s) =$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{L_5s}{C_5L_5s^2+1}+R_5,\ rac{1}{C_Ls+rac{1}{R_L}+rac{1}{L_Ls}} ight)$	85
	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	85
10.349NVALID-ORDER-349 $Z(s) =$	$= \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \ \dots $	86
10.35 0 NVALID-ORDER-350 $Z(s) =$	$=\left(\infty,\;R_{2}+rac{1}{C_{2}s},\;\infty,\;\infty,\;rac{R_{5}\left(L_{5}s+rac{1}{C_{5}s} ight)}{L_{5}s+R_{5}+rac{1}{C_{5}s}},\;R_{L} ight)\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots\;\ldots$	86
	$=\left(\infty,\;R_2+rac{1}{C_2s},\;\infty,\;\infty,\;rac{R_5\left(L_5s+rac{1}{C_5s} ight)}{L_5s+R_5+rac{1}{C_5s}},\;rac{1}{C_Ls} ight)$	86
10.352NVALID-ORDER-352 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right) \dots $	86
	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right) \ \dots $	86
10.354NVALID-ORDER-354 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s} \right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s} \right) \dots \right)$	86
10.35 \mathbf{b} NVALID-ORDER-355 $Z(s)=$	$=\left(\infty,\ R_2+rac{1}{C_2s},\ \infty,\ \infty,\ rac{R_5\left(L_5s+rac{1}{C_5s} ight)}{L_5s+R_5+rac{1}{C_5s}},\ rac{L_Ls}{C_LL_Ls^2+1} ight)$	86
	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right) \dots \right)$	
10.35 T NVALID-ORDER-357 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right) \right)' $	87
10.35&NVALID-ORDER-358 $Z(s) =$	$\left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots \right)$	87
10.35 9 NVALID-ORDER-359 $Z(s) =$	$ \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)^{\prime} \dots \right) \\ = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s} \right) \dots $	87
10.36 ONVALID-ORDER- 360 $Z(s) =$	$\left(\infty,\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ R_5,\ \frac{1}{C_Ls}\right)$	87
10.36 INVALID-ORDER-361 $Z(s) =$	$\left(\infty, L_{2}s + \frac{1}{2}, \infty, \infty, R_{5}, \frac{R_{L}}{2}\right)$	87
10.362NVALID-ORDER-362 $Z(s) =$	$\left(\infty,\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ R_5,\ R_L+\frac{1}{C_Ls}\right)$	87
10.36%NVALID-ORDER-363 $Z(s) =$	$\begin{array}{c} (\infty,\ L_{2}s+\frac{1}{C_{2}s},\ \infty,\ \infty,\ R_{5},\ R_{L}+\frac{1}{C_{L}s})\\ (\infty,\ L_{2}s+\frac{1}{C_{2}s},\ \infty,\ \infty,\ R_{5},\ R_{L}+\frac{1}{C_{L}s})\\ (\infty,\ L_{2}s+\frac{1}{C_{2}s},\ \infty,\ \infty,\ R_{5},\ L_{L}s+\frac{1}{C_{L}s})\\ (\infty,\ L_{2}s+\frac{1}{C_{2}s},\ \infty,\ \infty,\ R_{5},\ \frac{L_{L}s}{C_{L}L_{L}s^{2}+1})\\ (\infty,\ L_{2}s+\frac{1}{C_{2}s},\ \infty,\ \infty,\ R_{5},\ L_{L}s+R_{L}+\frac{1}{C_{L}s})\\ \end{array}$	87
10.36#NVALID-ORDER-364 $Z(s) =$	$\left(\infty,\ L_2s+\frac{1}{C_2s},\ \infty,\ \infty,\ R_5,\ \frac{L_Ls}{C_L\overline{L}_Ls^2+1}\right)$	87
10.36 5 NVALID-ORDER-365 $Z(s)=$	$\left(\infty, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$	88

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10.366NVALID-ORDER-366 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
10.36 INVALID-ORDER-367 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots
10.36\( \) NVALID-ORDER-368 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_T s}} \right) \ \dots \dots
10.369NVALID-ORDER-369 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L\right) \dots \dots
10.37 INVALID-ORDER-370 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0s}}, \infty, \infty, \frac{1}{C_{rs}}, \frac{1}{C_{rs}}\right) \dots
10.37INVALID-ORDER-371 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right).
10.372NVALID-ORDER-372 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) \dots
10.378NVALID-ORDER-373 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_2 s}, L_L s + \frac{1}{C_2 s}\right) . . .
10.37\(\text{INVALID-ORDER-374}\(Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\) \ldots \tau \tau.
10.37 INVALID-ORDER-375 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.376NVALID-ORDER-376 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right)
10.37 INVALID-ORDER-377 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots
10.37\bar{NVALID-ORDER-378} Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \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)
10.379NVALID-ORDER-379 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right) \dots \dots
10.38 INVALID-ORDER-380 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_4 s}\right) \dots
10.38INVALID-ORDER-381 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_4 R_4 s + 1}\right) \dots
10.382NVALID-ORDER-382 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_4 s}\right)
10.382NVALID-ORDER-383 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)
10.384NVALID-ORDER-384 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots
10.38 INVALID-ORDER-385 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . . .
10.386NVALID-ORDER-386 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_L s}} \right) . . . . . . . . . . . . . . . .
10.38TNVALID-ORDER-387 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots \dots \dots
10.38\( \text{NVALID-ORDER-388} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \ \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)^{\frac{1}{C_1 s}} \)
10.389NVALID-ORDER-389 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right) \dots \dots
10.39@NVALID-ORDER-390 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0s}}, \infty, \infty, R_5 + \frac{1}{C_{rs}}, \frac{1}{C_{rs}}\right) \dots
10.39INVALID-ORDER-391 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_4 s + 1}\right)...
10.392NVALID-ORDER-392 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2} s}, \infty, \infty, R_5 + \frac{1}{C_{5} s}, R_L + \frac{1}{C_{L} s}\right)
10.39 INVALID-ORDER-393 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{cs}}, \infty, \infty, R_5 + \frac{1}{C_{cs}}, L_L s + \frac{1}{C_{cs}}\right)
10.394NVALID-ORDER-394 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots
10.39 INVALID-ORDER-395 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . .
10.396NVALID-ORDER-396 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{L_T s} + \frac{1}{L_T s}}\right)
10.39 INVALID-ORDER-397 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \ \dots \dots \dots \dots
10.39 NVALID-ORDER-398 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
10.399NVALID-ORDER-399 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right).
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10.400NVALID-ORDER-400 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right).
10.40INVALID-ORDER-401 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right) \dots \dots
10.402NVALID-ORDER-402 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, L_5 s + \frac{1}{C_{5s}}, R_L + \frac{1}{C_{Ls}}\right) . . . .
10.40 RNVALID-ORDER-403 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0.8}}, \infty, \infty, L_5 s + \frac{1}{C_{0.8}}, L_L s + \frac{1}{C_{0.8}}\right) \dots
10.404NVALID-ORDER-404 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots
10.40 INVALID-ORDER-405 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . .
10.40 INVALID-ORDER-406 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{B_L} + \frac{1}{L_L s}}\right)
10.40 TNVALID-ORDER-407 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . .
10.40\( \) NVALID-ORDER-408 Z(s) = \left( \infty, L_2 s + \frac{1}{C_2 s}, \infty, \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)
 10.40 NVALID-ORDER-409 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) \dots \dots \dots
10.410NVALID-ORDER-410 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right) \dots \dots
10.41INVALID-ORDER-411 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_5 R_1 s + 1}\right)
10.412NVALID-ORDER-412 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) \dots
 10.41 NVALID-ORDER-413 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
 10.41 INVALID-ORDER-414 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_5 L_5 s^2 + 1}\right) \dots
10.41 INVALID-ORDER-415 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_2 L_2 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.416NVALID-ORDER-416 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{L_L s}}\right)
10.41 INVALID-ORDER-417 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1} + R_L\right) \dots
10.41 NVALID-ORDER-418 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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)
10.419NVALID-ORDER-419 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots \dots
10.420NVALID-ORDER-420 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.42INVALID-ORDER-421 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
10.42PNVALID-ORDER-422 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{C_2} s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_{C_2} s}, R_L + \frac{1}{C_{C_2} s}\right) . . .
10.428NVALID-ORDER-423 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_4 s}\right)
10.424NVALID-ORDER-424 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.42 INVALID-ORDER-425 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . .
10.426NVALID-ORDER-426 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) \dots \dots \dots
10.42TNVALID-ORDER-427 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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) . . . . . . .
10.42\( \text{NVALID-ORDER-428} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right) \)
10.429NVALID-ORDER-429 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, R_L\right)
10.432NVALID-ORDER-432 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{L_2 s}}, R_L + \frac{1}{C_L s}\right) \dots
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10.43\(\text{INVALID-ORDER-434}\(Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \\ \tag{1.5}\]
10.43 INVALID-ORDER-435 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots
10.43 INVALID-ORDER-437 Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \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
10.43 NVALID-ORDER-438 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{B_c} + \frac{1}{L_c s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_c s}}\right)
10.43 NVALID-ORDER-439 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right) \dots \dots \dots
10.440NVALID-ORDER-440 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)
10.44INVALID-ORDER-441 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_2 L_5 s^2 + 1} + R_5, \frac{R_L}{C_4 R_4 s + 1}\right)
10.442NVALID-ORDER-442 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right).
10.44\(\text{NVALID-ORDER-443}\) Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)
10.44\(\text{INVALID-ORDER-444}\(Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_1 L_1 s^2 + 1}\right) \\\ \ldots \\\ \text{1.5.1}\]
10.44 INVALID-ORDER-445 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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).
10.446NVALID-ORDER-446 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{B_2} + \frac{1}{L_5 s}}\right)
10.44 INVALID-ORDER-447 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{0s}}, \infty, \infty, \frac{L_5 s}{C_{1s} L_5 s^2 + 1} + R_5, \frac{L_L s}{C_1 L_1 s^2 + 1} + R_L\right) \dots \dots \dots
10.44\( \text{NVALID-ORDER-448} \( Z(s) = \left( \infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left( L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_2 s}} \right) \)
10.449NVALID-ORDER-449 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \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) \quad \dots \quad \dots
10.45 INVALID-ORDER-450 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)...
10.45INVALID-ORDER-451 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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).
10.45ENVALID-ORDER-453 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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)
10.454NVALID-ORDER-454 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \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)
10.456NVALID-ORDER-456 Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \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)
10.45 INVALID-ORDER-457 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots
10.45 INVALID-ORDER-458 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_7 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_7 s}}\right)
10.459NVALID-ORDER-459 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_0 s}, \infty, \infty, R_5, \frac{1}{C_1 s}\right) \dots \dots \dots
10.46@NVALID-ORDER-460 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.46INVALID-ORDER-461 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)
10.462NVALID-ORDER-462 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right) \dots \dots
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10.46 INVALID-ORDER-463 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . . . . .
10.464NVALID-ORDER-464 Z(s) = (\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}) . . . . . . . .
10.46 INVALID-ORDER-465 Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_L s}} \right) \dots \dots
10.46 INVALID-ORDER-466 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . .
10.46TNVALID-ORDER-467 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)^{\frac{1}{2}} \dots
10.46 NVALID-ORDER-468 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_0 s}, \infty, \infty, \frac{1}{C_0 s}, R_L\right) \dots \dots \dots
10.469NVALID-ORDER-469 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_5 s}\right) \dots \dots \dots
10.470NVALID-ORDER-470 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_L s}, \frac{R_L}{C_L R_L s + 1}\right) . . . .
10.47INVALID-ORDER-471 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right) \dots
10.472NVALID-ORDER-472 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right) . . . . . . . . .
10.478NVALID-ORDER-473 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) \dots \dots
10.474NVALID-ORDER-474 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots
10.47 INVALID-ORDER-475 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)
10.476NVALID-ORDER-476 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{7}s}, \infty, \infty, \frac{1}{C_{5}s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots
10.47 INVALID-ORDER-477 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_2 s}}\right)
10.479NVALID-ORDER-479 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_4 s}\right) . . .
10.48 INVALID-ORDER-480 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right).
10.48INVALID-ORDER-481 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right) . . . . . .
10.482NVALID-ORDER-482 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right) \dots \dots
10.48 INVALID-ORDER-483 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{7} s}, \infty, \infty, \frac{R_5}{C_7 R_7 s + 1}, \frac{L_L s}{C_1 L_1 s^2 + 1}\right)
10.484NVALID-ORDER-484 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right) . . . . . . . . .
10.48 INVALID-ORDER-485 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right) . . . . . . . . . .
10.48 INVALID-ORDER-486 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) . . . . . . . .
10.48TNVALID-ORDER-487 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)^{\prime} \dots \dots
10.489NVALID-ORDER-489 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right) \dots
10.49@NVALID-ORDER-490 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right).
10.49INVALID-ORDER-491 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right) \dots \dots
10.492NVALID-ORDER-492 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_4 s}\right) . . . . . . . .
10.49 INVALID-ORDER-493 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_7 s}, \infty, \infty, R_5 + \frac{1}{C_7 s}, \frac{L_L s}{C_7 L_1 s^2 + 1}\right) \dots \dots \dots
10.49\(\text{INVALID-ORDER-494}\) Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right) \dots \dots \dots
10.49 INVALID-ORDER-495 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)
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10.49 INVALID-ORDER-497 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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 \dots \dots
10.499NVALID-ORDER-499 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
10.50@NVALID-ORDER-500 Z(s) = (\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls + 1}) \dots
10.50INVALID-ORDER-501 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right) . . . .
10.502NVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_7 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)...
10.50 INVALID-ORDER-503 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right) . . . . . .
10.50 INVALID-ORDER-506 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots \dots \dots
10.50TNVALID-ORDER-507 Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)
10.50 NVALID-ORDER-508 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right) \dots \dots \dots
10.509NVALID-ORDER-509 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_4 s}\right) \dots
10.510NVALID-ORDER-510 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{0.8}}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_5 R_5 s + 1}\right) . . .
10.51INVALID-ORDER-511 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_0 s}, \infty, \infty, \frac{L_5 s}{C_7 L_7 s^2 + 1}, R_L + \frac{1}{C_7 s}\right) \dots
10.512NVALID-ORDER-512 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)
10.51 NVALID-ORDER-513 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_5 L_5 s^2 + 1}\right) \dots \dots
10.514NVALID-ORDER-514 Z(s) = (\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}) . . . . . . . .
10.51 INVALID-ORDER-515 Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{L_L s}} \right)
10.516NVALID-ORDER-516 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1} + R_L\right) \dots \dots
10.51 INVALID-ORDER-517 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_2 s}}\right)
10.518NVALID-ORDER-518 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right) \dots \dots
10.519NVALID-ORDER-519 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s}\right)
10.520NVALID-ORDER-520 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_{2s}}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_{5s}}, \frac{R_L}{C_L R_L s + 1}\right) \dots
10.52INVALID-ORDER-521 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_1 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right) . . . .
10.52PNVALID-ORDER-522 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)
10.52 INVALID-ORDER-523 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
10.52\(\text{LNVALID-ORDER-524}\(Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\) \\ \ldots \\ \text{...} \\ \text{...}
10.52\( \text{INVALID-ORDER-525} \( Z(s) = \left( \infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{L_L s} + \frac{1}{L_L s}} \right) \end{array}
10.529NVALID-ORDER-529 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{P_2} + \frac{1}{T_{co}}}, \frac{1}{C_L s}\right)
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10.56 \text{INVALID-ORDER-} 561 \ Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_0 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right) 
10.57 \text{ INVALID-ORDER-570 } Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_0 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_t s}, \ R_L + \frac{1}{C_t s}\right) 
10.586NVALID-ORDER-586 Z(s) = \left( \infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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)
         10.58\( \text{NVALID-ORDER-588} \( Z(s) = \left( \infty, \frac{L_2s}{C_2L_0s^2+1} + R_2, \infty, \infty, \infty, \infty, \frac{1}{C_1s}, \frac{1}{C_1s} \right) \\ \tag{115}
10.59@NVALID-ORDER-590 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right) ......
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10.59 INVALID-ORDER-595 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) .....
10.59TNVALID-ORDER-597 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L\right) \dots \dots \dots \dots \dots
10.59 NVALID-ORDER-599 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_4 R_4 s + 1}\right) \dots
10.600NVALID-ORDER-600 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right) \dots \dots \dots
10.60INVALID-ORDER-601 Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right) \dots \dots
10.602NVALID-ORDER-602 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) \dots \dots
10.60 \text{ INVALID-ORDER-} 604 \ Z(s) = \left( \infty, \ \frac{L_2s}{C_2L_2s^2 + 1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_*} + \frac{1}{L_*s}} \right) 
10.60 \text{ INVALID-ORDER-} 606 \ Z(s) = \left( \infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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_Ts}} \right) \ \dots 
10.60 NVALID-ORDER-608 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_4 s}\right) \dots \dots \dots
10.60 NVALID-ORDER-609 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_1 R_1 s + 1}\right) \dots
10.610NVALID-ORDER-610 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right) . . . . . . . . .
10.61INVALID-ORDER-611 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_Ls + \frac{1}{C_Ls}\right) \dots
10.612NVALID-ORDER-612 Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_4 L_4 s^2 + 1}\right) .....
10.61\( \text{NVALID-ORDER-618} \( Z(s) = \left( \infty, \frac{L_2 s}{C_0 L_0 s^2 + 1} + R_2, \infty, \infty, \infty, \frac{L_5 s}{C_5 s} + R_5 + \frac{1}{C_5 s}, \frac{1}{C_5 s} \right) \\ \tag{1...} \quad \quad \tag{1...} \quad \quad \tag{1...} \quad \quad \tag{1...} \quad \tag{1...} \quad \tag{1...} \quad \tag{1...} \quad \tag{1...} \quad \tag{1...} \quad \quad \tag{1...} \quad \tag{1...} \quad \quad \tag{1...} \quad \quad \tag{1...} \quad \quad \tag{1...} \quad 
10.619NVALID-ORDER-619 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right) . . . .
10.620NVALID-ORDER-620 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right) \dots \dots
10.62INVALID-ORDER-621 Z(s) = \left( \infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_5 s} \right) . . . . . . . .
10.624NVALID-ORDER-624 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_s} + \frac{1}{L_Ls}}\right)
10.626NVALID-ORDER-626 Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \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_2s}}\right)
10.62 INVALID-ORDER-627 Z(s) = \left( \infty, \ \frac{L_{2s}}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{D_2} + \frac{1}{T_{2s}}}, \ R_L \right).
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10.62&NVALID-ORDER-628 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls}\right) $
10.62 9 NVALID-ORDER-629 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L}{C_LR_Ls+1}\right) \ \dots \ $
10.63 0 NVALID-ORDER-630 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ R_L + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.63 I NVALID-ORDER-631 $Z(s) =$	$(\infty, \frac{L_2s}{C_2L_2s^2+1}+R_2, \infty, \infty, \frac{1}{C_5s+\frac{1}{R_5}+\frac{1}{L_5s}}, L_Ls+\frac{1}{C_Ls})$
10.632NVALID-ORDER-632 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right) $
10.63\$NVALID-ORDER-633 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.634NVALID-ORDER-634 $Z(s)=$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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 $
	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \ \dots \ $
10.636NVALID-ORDER-636 $Z(s) =$	$\left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \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)' \right) $
	$(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L)$
10.63&NVALID-ORDER-638 $Z(s) =$	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$
10.63 9 NVALID-ORDER-639 $Z(s) =$	$\left(\infty, \frac{L_{2s}}{C_2L_0s^2+1} + R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{R_L}{C_LR_Ls+1}\right)$
	$\left(\infty, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, R_L + \frac{1}{C_Ls}\right) \dots \dots$
	$\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, L_{L}s + \frac{1}{C_{L}s}\right) \dots \dots$
	$\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1} + R_{5}, \frac{L_{L}s}{C_{L}L_{L}s^{2}+1}\right) \dots \dots$
	$\left(\infty, \frac{L_{2S}}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_{5S}}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_I} + \frac{1}{L_Is}}\right) \ \dots \ $
10.645NVALID-ORDER-645 $Z(s) =$	$\left(\infty, \frac{L_{2}s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
10.646NVALID-ORDER-646 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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)\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $
10.64TNVALID-ORDER- 647 $Z(s) =$	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_2s+R_2+1}, R_L\right) \dots \dots$
10.64&NVALID-ORDER-648 $Z(s)=$	$ \left(\infty, \frac{L_{2s}}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{1}{C_{L}s}\right) \\ \left(\infty, \frac{L_{2s}}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \infty, \frac{R_{5}\left(L_{5}s + \frac{1}{C_{5}s}\right)}{L_{5}s + R_{5} + \frac{1}{C_{5}s}}, \frac{R_{L}}{C_{L}R_{L}s + 1}\right) \\ \left(\infty, \frac{L_{2s}}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) \\ \left(\infty, \frac{L_{2s}}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) \\ 12$
10.64 9 NVALID-ORDER-649 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls + 1}\right) \dots 12$
10.65 0 NVALID-ORDER-650 $Z(s) =$	$\left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, R_L + \frac{1}{C_Ls}\right) \dots \dots$
10.65 I NVALID-ORDER-651 $Z(s)=$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right) \dots \dots \dots \dots \dots \dots \dots \dots \dots $
10.65 2 NVALID-ORDER-652 $Z(s) =$	$\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) $ $\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) $ 12
10.65 0 NWALID ODDED 652.7(a) -	$\begin{pmatrix} c_{12} & c_{12} & c_{13} & c_{14} & c_{15} &$
10.654NVALID-ORDER-654 $Z(s)=$	$\left(\infty, \frac{C_{2}L_{2}s^{2}+1}{C_{5}L_{5}s^{2}+1} + R_{2}, \infty, \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) \right) $ $\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) $ $\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) \right) $ $\left(\infty, \frac{L_{2}s}{C_{2}L_{2}s^{2}+1} + R_{2}, \infty, \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) $ 12
10.65 % NVALID-ORDER-655 $Z(s)=$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right) \ \dots \ $
10.65 6 NVALID-ORDER-656 $Z(s) =$	$\left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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)^{\frac{1}{2}} \dots $

10.65 T NVALID-ORDER-657 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, R_5, \frac{1}{C_L s}$		 	 	 	124
10.65&NVALID-ORDER-658 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}$		 	 	 	124
10.65 9 NVALID-ORDER-659 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, R_L + \frac{1}{C_L s}$		 	 	 	124
10.66 0 NVALID-ORDER-660 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}$		 	 	 	124
10.66INVALID-ORDER-661 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	125
10.66 2 NVALID-ORDER-662 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, L_L s + R_L +$	$\frac{1}{C_L s}$)	 	 	 	125
10.66 & NVALID-ORDER-663 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L}}$,	 	 	 	125
10.664NVALID-ORDER-664 $Z(s) = 10.664$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$, ∞ , ∞ , R_5 , $\frac{L_L s}{C_L L_L s^2 + 1} +$	R_L)	 	 	 	125
10.66 5 NVALID-ORDER-665 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$, ∞ , ∞ , R_5 , $\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\left(\frac{1}{2}\right)$	 	 	 	125
10.66 6 NVALID-ORDER-666 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, R_L$)		 	 	 	125
10.66 T NVALID-ORDER-667 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}$		 	 	 	125
10.66&NVALID-ORDER-668 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}$		 	 	 	125
10.66 9 NVALID-ORDER-669 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}$		 	 	 	126
10.670NVALID-ORDER-670 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}$		 	 	 	126
10.67INVALID-ORDER-671 $\boldsymbol{Z}(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}$		 	 	 	126
10.672NVALID-ORDER-672 $Z(s) =$	(22	$, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L -$	/	 	 	 	126
10.67 B NVALID-ORDER-673 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L^2}}$	$\frac{1}{s}$	 	 	 	126
10.67#NVALID-ORDER-674 $Z(s)=$ 10.67#NVALID-ORDER-675 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$, ∞ , ∞ , $\frac{1}{C_5 s}$, $\frac{L_L s}{C_L L_L s^2 + 1}$ +	R_L	 	 	 	126
10.67 5 NVALID-ORDER-675 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L}\right)}{L_L s + R_L + \frac{1}{C_L}}$	$\frac{\overline{s}}{\overline{s}}$	 	 	 	126
10.676NVALID-ORDER-676 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L$		 	 	 	126
10.67 T NVALID-ORDER-677 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}$		 	 	 	127
10.67&NVALID-ORDER-678 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s}$	$\overline{-1}$)	 	 	 	127
10.67 9 NVALID-ORDER-679 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{R_5}{C_5R_5s+1}$	$\left(\frac{1}{C_L s}\right)$	 	 	 	127
10.67 6 NVALID-ORDER-676 $Z(s) = 10.67$ 5 NVALID-ORDER-677 $Z(s) = 10.67$ 5 NVALID-ORDER-678 $Z(s) = 10.67$ 5 NVALID-ORDER-679 $Z(s) = 10.68$ 6 NVALID-ORDER-680 $Z(s) = 10.68$ 6 NVALID-ORDER-681 $Z(s) = 10.68$ 5 NVALID-ORDER-682 $Z(s) = 10.68$ 6 NVALID-ORDER-682 $Z(s) = 10.68$ 6 NVALID-ORDER-682 $Z(s) = 10.68$ 6 NVALID-ORDER-682 $Z(s) = 10.68$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$, ∞ , ∞ , $\frac{R_5}{C_5R_5s+1}$, L_Ls +	$\left(\frac{1}{C_L s}\right)$	 	 	 	127
10.68INVALID-ORDER-681 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2}$	$\overline{+1}$)	 	 	 	127
10.682NVALID-ORDER-682 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls +$	$R_L + \frac{1}{C_L s}$)	 	 	 	127

$10.68 \text{ INVALID-ORDER-} 683 \ Z(s) = \left(\infty, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \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) \right. \ \dots $	127
$10.68 \text{ INVALID-ORDER-} 684 \ Z(s) = \left(\infty, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right) \dots $	127
$10.68 \text{INVALID-ORDER-} 685 \ Z(s) = \left(\infty, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right) \right) \dots $	128
$10.68 \text{ 6NVALID-ORDER-} 686 \ Z(s) = \left(\infty, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ R_L\right) \ \dots $	128
10.68 T NVALID-ORDER-687 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$	128
10.68 NVALID-ORDER-688 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_L R_L s + 1}\right)$	128
10.68 9 NVALID-ORDER-689 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$	128
10.69@NVALID-ORDER-690 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$	128
10.69INVALID-ORDER-691 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	128
10.69 2 NVALID-ORDER-692 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	128
10.69 B NVALID-ORDER-693 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$	129
10.694NVALID-ORDER-694 $Z(s) = \left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$	129
$10.69 \text{INVALID-ORDER-} 695 \ Z(s) = \left(\infty, \ \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \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 $	129
10.696NVALID-ORDER-696 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$	129
$10.69 \text{INVALID-ORDER-} 697 \ Z(s) = \left(\infty, \ \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right) \ \dots $	129
10.69 INVALID-ORDER-698 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_L R_L s + 1}\right)$	129
10.69 9 NVALID-ORDER-699 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$	129
10.70@NVALID-ORDER-700 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$ 10.70@NVALID-ORDER-701 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$ 10.70@NVALID-ORDER-702 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	129
10.70INVALID-ORDER-701 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$	130
10.70 2 NVALID-ORDER-702 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$	130
$10.70 \text{\&nvalid-order-} Z(s) = \left(\infty, \ \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) \right) $ $10.70 \text{\&nvalid-order-} Z(s) = \left(\infty, \ \frac{R_2 \left(L_2 s + \frac{1}{C_2 s} \right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L \right) $	130
10.70 INVALID-ORDER-704 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$	130
10.70 INVALID-ORDER-705 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right) \dots \dots$	130
$ \begin{array}{l} 10.70 \text{Envalue} \text{ Gas} \ L_{2}s + R_{2} + \frac{1}{C_{2}s}, \ \text{ Gen} \ L_{2}s + R_{2} + \frac{1}{C_{2}s}, \ \text{ Gen} \ L_{2}s + R_{2} + \frac{1}{C_{2}s} \\ 10.70 \text{Envalue} \text{ Gen} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \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) \\ 10.70 \text{Envalue} \text{ Grown} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ R_{L} \right) \\ 10.70 \text{Envalue} \text{ Grown} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{1}{C_{L}s} \right) \\ 10.70 \text{Envalue} \text{ Grown} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ 10.70 \text{Envalue} \text{ Grown} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ 10.70 \text{Envalue} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ 10.70 \text{Envalue} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ 10.70 \text{Envalue} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{L}}{C_{L}R_{L}s + 1} \right) \\ 10.70 \text{Envalue} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_{2} + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ \infty, \ \frac{L_{5}s}{C_{5}L_{5}s^{2} + 1}, \ \frac{R_{2} \left(L_{5}s + \frac{1}{C_{5}s} \right)}{L_{5}s + 1} \right) \\ 10.70 \text{Envalue} \ Z(s) = \left(\infty, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + 1}, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + 1}, \ \frac{R_{2} \left(L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + 1}, \ $	130
10.70 INVALID-ORDER-707 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \frac{L_5s}{C_5L_5s^2 + 1}, \frac{1}{C_Ls}\right)$	130
$10.70 \&NVALID-ORDER-708 \ Z(s) = \left(\infty, \ \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L}{C_L R_L s + 1}\right) \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	130

10.70 9 NVALID-ORDER-709 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \right)$	$, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_I$	$L + \frac{1}{C_L s}$. 131
10.71 0 NVALID-ORDER-710 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_L$	$s + \frac{1}{C_L s}$. 131
10.71INVALID-ORDER-711 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{C_L}{C_L}$	$\frac{L_L s}{L_L s^2 + 1}$. 131
10.712NVALID-ORDER-712 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, L_L$	$s + R_L + \frac{1}{C_L s}$. 131
10.71 & NVALID-ORDER-713 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_5 s}{C_L}$	$\frac{1}{s + \frac{1}{R_L} + \frac{1}{L_L s}} \right) .$. 131
10.71 4 NVALID-ORDER-714 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, C_L$	$\frac{L_L s}{L_L s^2 + 1} + R_L$. 131
10.71 5 NVALID-ORDER-715 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, \frac{L_{5s}}{C_5L_{5s}^2+1}, \frac{R_L}{L_L}$	$\frac{\left(L_L s + \frac{1}{C_L s}\right)}{c_L s + R_L + \frac{1}{C_L s}}$. 131
10.71 6 NVALID-ORDER-716 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}\right)$	$, \infty, \infty, \infty, L_5 s + R_5 + \overline{c}$	$\frac{1}{r_5 s}, R_L$)		 	 	 	 . 131
10.71 T NVALID-ORDER-717 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, L_5 s + R_5 + \overline{c}$	$\left(\frac{1}{c_5 s}, \frac{1}{C_L s}\right) \dots$. 132
10.71&NVALID-ORDER-718 $Z(s)=$	(2s	$, \infty, \infty, \infty, L_5 s + R_5 + \overline{c}$	/		 	 	 	 . 132
10.71 9 NVALID-ORDER-719 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, L_5s + R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $R_L + \frac{1}{C_L s}$. 132
10.72 0 NVALID-ORDER-720 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, L_5s + R_5 + \overline{c}$	$\frac{1}{C_5 s}$, $L_L s + \frac{1}{C_L s}$. 132
10.72INVALID-ORDER-721 $Z(s) = \displaystyle$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, L_5s + R_5 + \overline{c}$	$\left(\frac{1}{c_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$. 132
10.72 2 NVALID-ORDER-722 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \infty, L_5s + R_5 + \overline{c}$	$\frac{1}{5s}$, $L_L s + R_L +$	$-\frac{1}{C_L s}$ \cdot \cdot \cdot	 	 	 	 . 132
10.72 & NVALID-ORDER-723 $Z(s)=$	($, \infty, \infty, L_5 s + R_5 + \overline{c}$	·L L		 	 	 	 . 132
10.72#NVALID-ORDER-724 $Z(s)=$	(23	$, \infty, \infty, L_5 s + R_5 + \overline{c}$,		 	 	 	 . 132
10.72\$NVALID-ORDER-725 $Z(s) =$	\	$, \infty, \infty, L_5 s + R_5 + \overline{c}$	° L	, ~ /	 	 	 	 . 133
10.72 6 NVALID-ORDER-726 $Z(s) =$ 10.72 7 NVALID-ORDER-727 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	R_L)		 	 	 	 . 133
10.72 T NVALID-ORDER-727 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s}$ \cdots		 	 	 	 . 133
10.72 NVALID-ORDER-728 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L}{C_L R_L s + 1}$. 133
10.72 9 NVALID-ORDER-729 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$R_L + \frac{1}{C_L s}$.		 	 	 	 . 133
10.73 0 NVALID-ORDER-730 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + \frac{1}{C_L s}$.		 	 	 	 . 133
10.73INVALID-ORDER-731 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} \bigg) \qquad .$. 133
10.72 INVALID-ORDER-727 $Z(s) =$ 10.72 INVALID-ORDER-728 $Z(s) =$ 10.72 INVALID-ORDER-729 $Z(s) =$ 10.73 INVALID-ORDER-730 $Z(s) =$ 10.73 INVALID-ORDER-731 $Z(s) =$ 10.73 INVALID-ORDER-732 $Z(s) =$ 10.73 INVALID-ORDER-733 $Z(s) =$ 10.73 INVALID-ORDER-734 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$L_L s + R_L + \frac{1}{C_L}$	\overline{s}	 	 	 	 . 133
10.73 % NVALID-ORDER-733 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$. 134
10.734NVALID-ORDER-734 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \right)$	$, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + R_I$	<i>a</i>)	 	 	 	 . 134

10.73 Б NVALID-ORDER-735 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}},$	$\frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$)	 .	 	 	 	 	 	 . 134
10.73 6 NVALID-ORDER-736 $Z(s) =$	$L_2s+R_2+C_2s$			/			 	 	 	 	 	 . 134
10.73 T NVALID-ORDER-737 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$	$C_5, \frac{1}{C_L s}$. 134
10.73&NVALID-ORDER-738 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}\right)$	$-$, ∞ , ∞ ,	$\frac{L_5s}{C_5L_5s^2+1} + R$	$\left(\frac{R_L}{C_L R_L s + 1} \right)$. 134
10.73 9 NVALID-ORDER-739 $Z(s) =$	$\left(\begin{array}{ccc} L_{2^{S}} + It_{2} + C_{2^{S}} \end{array}\right)$			/			 	 	 	 	 	 . 134
10.74 0 NVALID-ORDER-740 $Z(s) =$	\ - · · · · · · · · · · · · · · · · · ·		$\frac{L_5 s}{C_5 L_5 s^2 + 1} + R$,	/		 	 	 	 	 	 . 134
10.74 INVALID-ORDER-741 $Z(s) = \displaystyle$	$L_{2s+R_2+C_2s}$			/		 .	 	 	 	 	 	 . 135
10.742NVALID-ORDER-742 $Z(s) =$	\ 2				/)	 	 	 	 	 	 . 135
10.74 B NVALID-ORDER-743 $Z(s) =$	(2			- L I	, ,		 	 	 	 	 	 . 135
10.74 #NVALID-ORDER-744 $Z(s) = \displaystyle$	(,	\ /		 	 	 	 	 	 . 135
10.74 Б NVALID-ORDER-745 $Z(s) =$	(23		$\frac{L_5s}{C_5L_5s^2+1} + R$	\circ_I	$\left(\frac{\overline{s}}{L^s}\right)$.		 	 	 	 	 	 . 135
10.74 6 NVALID-ORDER-746 $Z(s) =$	(023		$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	/			 	 	 	 	 	 . 135
10.74¶NVALID-ORDER-747 $Z(s) =$	$L_2s+It_2+C_2s$			/			 	 	 	 	 	 . 135
10.74&NVALID-ORDER-748 $Z(s) =$			$\frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}},$	/			 	 	 	 	 	 . 135
10.74 9 NVALID-ORDER-749 $Z(s) =$	$\bigcup_{D_2 s + D_2 s} C_{2s}$		- 5-	/			 	 	 	 	 	 . 136
10.75 0 NVALID-ORDER-750 $Z(s) =$	$L_2s+It_2+C_2s$	$-$, ∞ , ∞ ,	050	$L_L s + \frac{1}{C_L s}$. 136
10.75INVALID-ORDER-751 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}},$	$\left(\frac{L_L s}{C_L L_L s^2 + 1}\right)$. 136
10.75 2 NVALID-ORDER-752 $Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$L_L s + R_L + \frac{1}{2}$	$\frac{1}{C_L s}$. 136
$10.75 \text{2NVALID-ORDER-}752 \ Z(s) =$ $10.75 \text{2NVALID-ORDER-}753 \ Z(s) =$ $10.75 \text{4NVALID-ORDER-}754 \ Z(s) =$ $10.75 \text{4NVALID-ORDER-}755 \ Z(s) =$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}$)		 	 	 	 	 	 . 136
10.754NVALID-ORDER-754 $Z(s)=$	$\left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}\right)$	$-$, ∞ , ∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{L_L s}{C_L L_L s^2 + 1} + 1$	R_L).		 	 	 	 	 	 . 136
10.75 % NVALID-ORDER-755 $Z(s)=$	$\left(\infty, \frac{R_2 \left(L_2 s + \frac{1}{C_2 s}\right)}{L_2 s + R_2 + \frac{1}{C_2 s}}\right)$	$-$, ∞ , ∞ ,	$\frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}},$	$\frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}$	<u>-</u>)		 	 	 	 	 	 . 136

 $\textbf{1} \quad \textbf{Examined} \ \ H(z) \ \ \textbf{for TIA some parasitic Z2 Z5 ZL:} \ \ \frac{Z_L(Z_2Z_5g_mr_o + Z_2Z_5 - Z_2r_o + Z_5r_o)}{Z_2Z_5g_mr_o + Z_2Z_5 + 2Z_2Z_Lg_mr_o + 4Z_2Z_L + Z_2r_o + Z_5r_o + 4Z_Lr_o}$

$$H(z) = \frac{Z_L \left(Z_2 Z_5 g_m r_o + Z_2 Z_5 - Z_2 r_o + Z_5 r_o \right)}{Z_2 Z_5 g_m r_o + Z_2 Z_5 + 2 Z_2 Z_L g_m r_o + 4 Z_2 Z_L + Z_2 r_o + Z_5 r_o + 4 Z_L r_o}$$

- 2 HP
- 3 BP
- **3.1** BP-1 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{C_L L_L R_2 R_5 g_m r_o s^2 + C_L L_L R_2 r_o s^2 + C_L L_L R_5 r_o s^2 + 2L_L R_2 g_m r_o s + 4L_L R_2 s + 4L_L r_o s + R_2 R_5 g_m r_o + R_2 R_5 + R_2 r_o + R_5 r_o}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{C_L\sqrt{\frac{1}{C_LL_L}}}{2(R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{2(R_2g_mr_o + 2R_2 + 2r_o)}{C_L(R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o)} \\ \text{K-LP:} \ 0 \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

3.2 BP-2 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

Q:
$$\frac{C_L R_L \sqrt{\frac{1}{C_L L_L}} (R_2 R_5 g_m r_o + R_2 R_5 + R_2 r_o + R_5 r_o)}{R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}$$
 wo:
$$\sqrt{\frac{1}{C_L L_L}}$$
 bandwidth:
$$\frac{R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}{C_L R_L (R_2 R_5 g_m r_o + R_2 R_5 + R_2 r_o + R_5 r_o)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_L (R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o)}{R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}$$
 Qz: 0 Wz: None

- 4 LP
- 5 BS

5.1 BS-1
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

 $\begin{aligned} & \text{Q:} \ \frac{2L_L\sqrt{\frac{1}{C_LL_L}}(R_2g_mr_o + 2R_2 + 2r_o)}{R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o} \\ & \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ & \text{bandwidth:} \ \frac{R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o}{2L_L(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-LP:} \ \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-HP:} \ \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-BP:} \ 0 \\ & \text{Qz:} \ \text{None} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{aligned}$

5.2 BS-2
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{R_L\left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

Parameters:

$$\begin{aligned} &\text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_L(R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o)} \\ &\text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ &\text{bandwidth:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 + R_2r_o + R_5r_o)}{L_L(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)} \\ &\text{K-LP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ &\text{K-HP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ &\text{K-BP:} \ 0 \\ &\text{Qz:} \ \text{None} \\ &\text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{aligned}$$

6 **GE**

6.1 GE-1
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

$$\begin{aligned} & \text{Q: } \frac{2L_L\sqrt{\frac{1}{C_LL_L}}(R_2g_mr_o + 2R_2 + 2r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ & \text{wo: } \sqrt{\frac{1}{C_LL_L}} \\ & \text{bandwidth: } \frac{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}{2L_L(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-LP: } \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-HP: } \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{K-BP: } \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \end{aligned}$$

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

6.2 GE-2
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_L\sqrt{\frac{1}{C_LL_L}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ & \text{bandwidth:} \ \frac{2(R_2g_mr_o + 2R_2 + 2r_o)}{C_L(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)} \\ & \text{K-LP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ & \text{K-HP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o} \\ & \text{K-BP:} \ \frac{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{2(R_2g_mr_o + 2R_2 + 2r_o)} \\ & \text{Qz:} \ C_LR_L\sqrt{\frac{1}{C_LL_L}} \end{aligned}$$

6.3 GE-3
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$$

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

Parameters:

$$\begin{aligned} &\text{Q: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_mr_o + R_2 + r_o)}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \\ &\text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth: } \frac{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o}{L_5(R_2g_mr_o + R_2 + r_o)} \\ &\text{K-LP: } R_L \\ &\text{K-HP: } R_L \\ &\text{K-BP: } -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \\ &\text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(-R_2g_mr_o - R_2 - r_o)}{R_2r_o} \\ &\text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.4 GE-4
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1}, R_L\right)$$

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

$$\begin{aligned} &\text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)}{R_2g_mr_o + R_2 + r_o} \\ &\text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ &\text{bandwidth:} \ \frac{R_2g_mr_o + R_2 + r_o}{C_5(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)} \\ &\text{K-LP:} \ -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \end{aligned}$$

6.5 GE-5
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

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

$$\begin{aligned} & \text{Q: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_mr_o + R_2 + r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ & \text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth: } \frac{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}{L_5(R_2g_mr_o + R_2 + r_o)} \\ & \text{K-LP: } R_L \\ & \text{K-HP: } R_L \\ & \text{K-BP: } \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ & \text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_mr_o + R_2 + r_o)}{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o} \\ & \text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.6 GE-6
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

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

Parameters:

$$\begin{aligned} & \text{Q: } \frac{C_5R_5\sqrt{\frac{1}{C_5L_5}}(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ & \text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth: } \frac{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}{C_5R_5(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)} \\ & \text{K-LP: } -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \\ & \text{K-HP: } -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \\ & \text{K-BP: } \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o)} \\ & \text{Qz: } -\frac{C_5R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o} \\ & \text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.7 GE-7
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

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

Q:
$$\frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_2g_mr_o + R_2 + r_o}$$
 wo:
$$\sqrt{\frac{1}{C_5L_5}}$$

bandwidth:
$$\frac{R_2g_mr_o + R_2 + r_o}{C_5(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}$$
K-LP:
$$\frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}$$
K-HP:
$$\frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}$$
K-BP:
$$R_L$$
Qz:
$$\frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2g_mr_o + R_2r_o + R_5r_o}$$
Wz:
$$\sqrt{\frac{1}{C_5L_5}}$$

6.8 GE-8
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^$$

$$\begin{array}{l} \text{Q:} \ \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)}{R_5(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)} \\ \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ \text{bandwidth:} \ \frac{R_5(2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)}{L_5(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o)} \\ \text{K--LP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)} \\ \text{K--HP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ \text{K--BP:} \ -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + 4R_Lr_o} \\ \text{Qz:} \ \frac{L_5\sqrt{\frac{1}{C_5L_5}}(-R_2R_5g_mr_o - R_2R_5 + R_2r_o - R_5r_o)}{R_2R_5r_o} \\ \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{array}$$

6.9 GE-9
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L\right)$$

Parameters:

Q:
$$\frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)}{r_o(R_5 + 4R_L)}$$
wo:
$$\sqrt{\frac{1}{C_2L_2}}$$
bandwidth:
$$\frac{r_o(R_5 + 4R_L)}{L_2(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)}$$
K-LP:
$$\frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}$$
K-HP:
$$\frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}$$
K-BP:
$$\frac{R_5R_L}{R_5 + 4R_L}$$
Qz:
$$\frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_mr_o + R_5 - r_o)}{R_5r_o}$$
Wz:
$$\sqrt{\frac{1}{C_2L_2}}$$

6.10 GE-10
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 + 2 C_2 L_2 R_L g_m r_o s^2 + 4 C_2 L_2 R_L s^2 + C_2 L_2 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s + 2 C_2 R_2 R_L g_m r_o s + 4 C_2 R_2 r_o s + C_2 R_5 r_o s + 4 C_2 R_2 r_o s + C_2 R_5 r_o s + C_2 R_$$

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 \begin{array}{l} \text{Q:} \  \, \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ \text{wo:} \  \, \sqrt{\frac{1}{C_2L_2}} \\ \text{bandwidth:} \  \, \frac{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}{L_2(R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o)} \\ \text{K-LP:} \  \, \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{K-HP:} \  \, \frac{R_L(R_5g_mr_o + R_5 - r_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{K-BP:} \  \, \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ \text{Qz:} \  \, \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_mr_o + R_5 - r_o)}{R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o} \\ \text{Wz:} \  \, \sqrt{\frac{1}{C_2L_2}} \end{array}
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6.11 GE-11
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + L_2 R_5 g_m r_o s + L_2 R_5 s - L_2 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_5 g^2 + 4 C_2 L_2 R_2 R_5 r_o s^2 + 4 C_2 L_2 R_2 r_o s^2 + 4 C_$$

$$\begin{array}{l} \text{Q:} \ \frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o} \\ \text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ \text{bandwidth:} \ \frac{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_L + r_o}{C_2(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)} \\ \text{K-LP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ \text{K-HP:} \ \frac{R_L(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o} \\ \text{K-BP:} \ \frac{R_L(R_3g_mr_o + R_5 + 2R_Lg_mr_o + 4R_Lr_o)}{R_5g_mr_o + R_5 + 2R_Lg_mr_o + 4R_Lr_o} \\ \text{Qz:} \ \frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_5g_mr_o + R_5 - r_o}}{R_5g_mr_o + R_5 - r_o} \\ \text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{array}$$

6.12 GE-12
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_5 r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 R_2 R_5 r_o s + 4 C_$$

Parameters:

$$Q \colon \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_2r_o(R_5 + 4R_L)}$$
 wo:
$$\sqrt{\frac{1}{C_2L_2}}$$
 bandwidth:
$$\frac{R_2r_o(R_5 + 4R_L)}{L_2(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}$$
 K-LP:
$$\frac{R_L(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}$$
 K-HP:
$$\frac{R_L(R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o)}{R_2R_5g_mr_o + R_2R_5 + 2R_2R_Lg_mr_o + 4R_2R_L + R_2r_o + R_5r_o + 4R_Lr_o}$$
 K-BP:
$$\frac{R_5R_L}{R_5 + 4R_L}$$
 Qz:
$$\frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o)}{R_2R_5r_o}$$
 Wz:
$$\sqrt{\frac{1}{C_2L_2}}$$

7 AP

8 INVALID-NUMER

8.1 INVALID-NUMER-1
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{C_5 C_L R_2 R_L r_o s^2 + 2 C_5 R_2 R_L g_m r_o s + 4 C_5 R_2 R_L s + C_5 R_2 r_o s + 4 C_5 R_L r_o s + C_L R_2 R_L g_m r_o s + C_L R_2 R_L s + C_L R_L r_o s + R_2 g_m r_o + R_2 + r_o}$$

Parameters:

Q: $\frac{C_5C_LR_2R_Lr_o\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_5C_LR_2R_Lr_o}}}{2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}}$ wo: $\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_5C_LR_2R_Lr_o}}$ bandwidth: $\frac{2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}{C_5C_LR_2R_Lr_o}}$ K-LP: R_L K-HP: 0
K-BP: $-\frac{C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o}{2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_LR_2r_o}$ Qz: 0 Wz: None

8.2 INVALID-NUMER-2 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5R_2R_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{C_5C_LR_2R_5r_os^2 + 2C_5R_2R_5g_mr_os + 4C_5R_2R_5s + 4C_5R_5r_os + C_LR_2R_5g_mr_os + C_LR_2R_5s + C_LR_2r_os + C_LR_5r_os + 2R_2g_mr_o + 4R_2 + 4r_o}$$

Parameters:

8.3 INVALID-NUMER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

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

$$Q\colon \frac{C_5C_LR_2R_5R_Lr_o\sqrt{\frac{R_2R_5g_mr_o+R_2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_5C_LR_2R_5R_Lr_o}}}{\frac{C_5C_LR_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}}{C_5C_LR_2R_5R_Lr_o}}$$
 wo:
$$\sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_5C_LR_2R_5R_Lr_o}}}$$
 bandwidth:
$$\frac{2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}{C_5C_LR_2R_5R_Lr_o}}$$
 K-LP:
$$\frac{R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}}{K-HP: 0}$$
 K-HP:
$$0$$
 K-BP:
$$-\frac{C_5R_2R_5R_Lr_o}{2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o}{C_5C_LR_2R_5R_Lr_o}}{Q_2: 0}$$
 Wz: None

8.4 INVALID-NUMER-4 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

Parameters:

Q: $\frac{C_5C_LR_L\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_5C_LR_L(R_2R_5g_mr_o+R_2R_5+R_2r_o+R_5r_o)}}}{C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2R_b+C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}$ wo: $\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_5C_LR_L(R_2R_5g_mr_o+R_2R_5+R_2r_o+R_5r_o)}}}$ bandwidth: $\frac{C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}{C_5C_LR_L(R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+R_5r_o)}}$ K-LP: R_L K-HP: 0K-BP: $\frac{C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+R_2R_5-R_2r_o+R_5r_o)}{C_5R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}}$ Qz: 0Wz: None

8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o}{C_2 C_L R_5 r_o s^2 + 4 C_2 r_o s + C_L R_5 g_m r_o s + C_L R_5 s + C_L r_o s + 2 g_m r_o + 4}$$

Parameters:

8.6 INVALID-NUMER-6 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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

8.7 INVALID-NUMER-7 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

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

Parameters:

Q: $\frac{2C_{2}C_{5}R_{L}r_{o}\sqrt{\frac{g_{m}r_{o}+1}{C_{2}C_{5}R_{L}r_{o}}}}{C_{2}r_{o}+2C_{5}R_{L}g_{m}r_{o}+4C_{5}R_{L}+C_{5}r_{o}}$ wo: $\frac{\sqrt{\frac{g_{m}r_{o}+1}{C_{2}C_{5}R_{L}r_{o}}}}{2}$ bandwidth: $\frac{C_{2}r_{o}+2C_{5}R_{L}g_{m}r_{o}+4C_{5}R_{L}+C_{5}r_{o}}{4C_{2}C_{5}R_{L}r_{o}}$ K-LP: R_{r} K-LP: R_L K-HP: 0 K-BP: $\frac{R_L r_o(C_2 - C_5)}{C_2 r_o + 2C_5 R_L g_m r_o + 4C_5 R_L + C_5 r_o}$ Qz: 0 Wz: None

8.8 INVALID-NUMER-8 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

Parameters:

$$\begin{array}{l} \text{Q:} & \frac{R_L r_o \sqrt{\frac{g_m r_o + 1}{R_L r_o (4C_2 C_5 + C_2 C_L + C_5 C_L)}}}{(4C_2 C_5 + C_2 C_L + C_5 C_L)} \\ \text{Q:} & \frac{g_m r_o + 1}{C_2 r_o + 2C_5 R_L g_m r_o + 4C_5 R_L + C_5} \\ \text{Wo:} & \sqrt{\frac{g_m r_o + 1}{R_L r_o (4C_2 C_5 + C_2 C_L + C_5 C_L)}} \\ \text{bandwidth:} & \frac{C_2 r_o + 2C_5 R_L g_m r_o + 4C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L}{R_L r_o (4C_2 C_5 + C_2 C_L + C_5 C_L)} \\ \text{K-LP:} & R_L \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_L r_o (C_2 - C_5)}{C_2 r_o + 2C_5 R_L g_m r_o + 4C_5 R_L + C_5 r_o + C_L R_L g_m r_o + C_L R_L} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

8.9 INVALID-NUMER-9 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{4 C_2 C_5 R_5 R_L r_o s^2 + C_2 R_5 r_o s + 4 C_2 R_L r_o s + 2 C_5 R_5 R_L g_m r_o s + 4 C_5 R_5 R_L s + C_5 R_5 r_o s + R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}$$

Parameters:
$$\begin{aligned} & \text{Q:} \ \, \frac{2C_2C_5R_5R_Lr_o\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_2C_5R_5R_Lr_o}}}{C_2R_5r_o+4C_2R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o} \\ & \text{wo:} \ \, \frac{\sqrt{\frac{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o}{C_2C_5R_5R_Lr_o}}}{2} \\ & \text{bandwidth:} \ \, \frac{C_2R_5r_o+4C_2R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o}{4C_2C_5R_5R_Lr_o} \\ & \text{K-LP:} \ \, \frac{R_L(R_5g_mr_o+R_5-r_o)}{R_5g_mr_o+R_5+2R_Lg_mr_o+4R_L+r_o} \\ & \text{K-HP:} \ \, 0 \\ & \text{K-BP:} \ \, \frac{R_5R_Lr_o(C_2-C_5)}{C_2R_5r_o+4C_2R_Lr_o+2C_5R_5R_Lg_mr_o+4C_5R_5R_L+C_5R_5r_o} \\ & \text{Qz:} \ \, 0 \\ & \text{Wz:} \ \, \text{None} \end{aligned}$$

8.10 INVALID-NUMER-10 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2R_5r_os - C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{4C_2C_5R_5r_os^2 + C_2C_LR_5r_os^2 + 4C_2r_os + C_5C_LR_5r_os^2 + 2C_5R_5g_mr_os + 4C_5R_5s + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_5R_5g_mr_os + C_LR_5g_mr_os + C_LR_5s + C_LR_5g_mr_os + C_LR_5g_mr_$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_5r_o\sqrt{\frac{g_mr_o+2}{R_5r_o(4C_2C_5+C_2C_L+C_5C_L)}}(4C_2C_5+C_2C_L+C_5C_L)}{4C_2r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o} \\ \text{wo:} \ \sqrt{2}\sqrt{\frac{g_mr_o+2}{R_5r_o(4C_2C_5+C_2C_L+C_5C_L)}} \\ \text{bandwidth:} \ \frac{4C_2r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o}{R_5r_o(4C_2C_5+C_2C_L+C_5C_L)} \\ \text{K-LP:} \ \frac{R_5g_mr_o+R_5-r_o}{2(g_mr_o+2)} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_5r_o(C_2-C_5)}{4C_2r_o+2C_5R_5g_mr_o+4C_5R_5+C_LR_5g_mr_o+C_LR_5+C_Lr_o} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

8.11 INVALID-NUMER-11 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

Parameters:

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

8.12 INVALID-NUMER-12 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5, \frac{1}{C_Ls}\right)$

$$H(s) = \frac{C_2R_2R_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{C_2C_LR_2R_5r_os^2 + 4C_2R_2r_os + C_LR_2R_5g_mr_os + C_LR_2R_5s + C_LR_2r_os + C_LR_5r_os + 2R_2g_mr_o + 4R_2 + 4r_o}$$

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$

Parameters:

Q: $\frac{C_2C_LR_2R_5R_Lr_o\sqrt{\frac{R_2R_5gmr_o+R_2R_5+2R_2R_Lgm_r_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_2C_LR_2R_5R_Lr_o}}{C_2R_2R_5r_o+4C_2R_2R_Lr_o+C_LR_2R_5R_Lgm_r_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}}$ wo: $\sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_2C_LR_2R_5R_Lr_o}}}$ bandwidth: $\frac{C_2R_2R_5r_o+4C_2R_2R_Lr_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}{C_2C_LR_2R_5R_Lr_o}}{C_2C_LR_2R_5R_Lr_o}$ K-LP: $\frac{R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}}$ K-HP: 0
K-BP: $\frac{C_2R_2R_5r_o+4C_2R_2R_Lr_o+C_LR_2R_5R_Lr_o}{C_2R_2R_5R_Lr_o}}{C_2R_2R_5R_Lr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}$ Qz: 0
Wz: None

8.14 INVALID-NUMER-14 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{1}{C_5s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{4 C_2 C_5 R_2 R_L r_o s^2 + C_2 R_2 r_o s + 2 C_5 R_2 R_L g_m r_o s + 4 C_5 R_2 R_L s + C_5 R_2 r_o s + 4 C_5 R_L r_o s + R_2 g_m r_o + R_2 + r_o}$$

Parameters:

$$\begin{array}{c} \text{Q:} & \frac{2C_2C_5R_2R_Lr_o\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_2C_5R_2R_Lr_o}}}{C_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o} \\ \text{wo:} & \frac{\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_2C_5R_2R_Lr_o}}}{2} \\ \text{bandwidth:} & \frac{2C_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o}}{4C_2C_5R_2R_Lr_o} \\ \text{K-LP:} & R_L \\ \text{K-HP:} & 0 \\ \text{K-BP:} & \frac{R_2R_Lr_o(C_2-C_5)}{C_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o}}{Qz:} \\ \text{Qz:} & 0 \\ \text{Wz:} & \text{None} \end{array}$$

8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$

$$H(s) = \frac{R_L \left(C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{4 C_2 C_5 R_2 R_L r_o s^2 + C_2 C_L R_2 R_L r_o s^2 + C_2 R_2 r_o s + C_5 C_L R_2 R_L r_o s^2 + 2 C_5 R_2 R_L g_m r_o s + 4 C_5 R_2 R_L s + C_5 R_2 r_o s + 4 C_5 R_L r_o s + C_L R_2 R_L g_m r_o s + C_L R_2 R_L r_o s + C_L R_2 R_$$

$$\begin{array}{c} R_2R_Lr_o\sqrt{\frac{R_2g_mr_o+R_2+r_o}{R_2R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}}}(4C_2C_5+C_2C_L+C_5C_L)\\ Q\colon \frac{R_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}{C_2R_2R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}\\ \text{wo: } \sqrt{\frac{R_2g_mr_o+R_2+r_o}{R_2R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}}\\ \text{bandwidth: } \frac{C_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}{R_2R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}\\ \text{K-LP: } R_L\\ \text{K-HP: } 0\\ \text{K-BP: } \frac{R_2R_Lr_o(C_2-C_5)}{C_2R_2r_o+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+4C_5R_Lr_o+C_LR_2R_Lg_mr_o+C_LR_2R_L+C_LR_Lr_o}{Q_{Z: } 0}\\ \text{Wz: None} \end{array}$$

8.16 INVALID-NUMER-16
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 R_2 R_5 r_o s - C_5 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{4 C_2 C_5 R_2 R_5 R_L r_o s^2 + C_2 R_2 R_5 r_o s + 4 C_2 R_2 R_L r_o s + 2 C_5 R_2 R_5 R_L r_o s + 4 C_5 R_2 R_5 r_o s + 4 C_5 R_5 R_L r_o s + 2 C_5 R_2 R_5 r_o s + 4 C_5 R_5 R_L r_o s + 2 C_5 R_L r_o s + 2 C_5$$

Parameters:

 $Q\colon \frac{2C_2C_5R_2R_5R_Lr_o\sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_2C_5R_2R_5R_Lr_o}}{C_2R_2R_5r_o+4C_2R_2R_Lr_o+2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o}}\\ \text{wo:} \frac{\sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{C_2C_5R_2R_5R_Lr_o}}}}{2}\\ \text{bandwidth:} \frac{C_2R_2R_5r_o+4C_2R_2R_Lr_o+2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o}{4C_2C_5R_2R_5R_Lr_o}}{R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}\\ \text{K-LP:} \frac{R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}}{R_2R_5R_Lr_o+R_5r_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}}\\ \text{K-HP:} 0\\ \text{K-BP:} \frac{R_2R_5R_Lr_o(C_2-C_5)}{C_2R_2R_5r_o+4C_2R_2R_Lr_o+2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_5R_Lr_o}}{Q_{Z:} 0}\\ \text{Wz:} \text{ None}$

8.17 INVALID-NUMER-17 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2R_2R_5r_os - C_5R_2R_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{4C_2C_5R_2R_5r_os^2 + C_2C_LR_2R_5r_os^2 + 4C_2R_2r_os + C_5C_LR_2R_5r_os^2 + 2C_5R_2R_5g_mr_os + 4C_5R_2R_5s + 4C_5R_2r_os + C_LR_2R_5g_mr_os + C_LR_2R_5s + C_LR_2r_os + C_LR_2r_os + C_LR_2r_os + 2R_2g_mr_o + 4R_2 + 4r_o}$$

Parameters:

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

8.18 INVALID-NUMER-18 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 R_2 R_5 r_o s - C_5 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{4 C_2 C_5 R_2 R_5 R_L r_o s^2 + C_2 C_L R_2 R_5 R_L r_o s^2 + C_2 R_2 R_5 r_o s + 4 C_5 R_2 R_5 R_L r_o s + 4 C_5 R_2 R_5 R_L r_o s + C_L R_2 R_5 R_L r_o s + C_L$

$$\begin{array}{c} R_2R_5R_Lr_o\sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{R_2R_5R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}} \\ Q: \frac{1}{C_2R_2R_5r_o+4C_2R_2R_Lr_o+2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5R_L+C_5R_2R_5r_o+4C_5R_2R_5R_Lg_mr_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o} \\ wo: \sqrt{\frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{R_2R_5R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)}} \\ \\ \text{bandwidth:} \frac{C_2R_2R_5r_o+4C_2R_2R_Lr_o+2C_5R_2R_5R_Lg_mr_o+4C_5R_2R_5r_o+4C_5R_2R_5r_o+4C_5R_2R_5R_Lr_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L+C_LR_2R_Lr_o+C_LR_5R_Lr_o}{R_2R_5R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)} \\ \\ \text{K-LP:} \frac{R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{R_2R_5R_Lr_o(4C_2C_5+C_2C_L+C_5C_L)} \\ \\ \text{K-BP:} \frac{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o}{R_2R_5R_Lr_o+C_LR_2R_5R_Lr_o+C_$$

8.19 INVALID-NUMER-19 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2R_2R_5g_mr_os + C_2R_2R_5s - C_2R_2r_os + C_2R_5r_os + R_5g_mr_o + R_5 - r_o}{C_2C_LR_2R_5g_mr_os^2 + C_2C_LR_2r_os^2 + C_2C_LR_5r_os^2 + 2C_2R_2g_mr_os + 4C_2R_2s + 4C_2r_os + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_2r_os + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_2r_os + C_LR_5g_mr_os + C_LR_5s + C_LR_$$

Parameters:

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

8.20 INVALID-NUMER-20 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 R_2 R_5 g_m r_o s + C_2 R_2 r_o s + C_2 R_2 r_o s + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 C_L R_2 R_5 R_L g_m r_o s^2 + C_2 C_L R_2 R_L r_o s^2 + C_2 C_L R_5 R_L r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_L g_m r_o s + C_2 R_2 r_o s + C_2 R_5 r_$

Parameters:

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

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

$$\text{bandwidth: }\frac{C_{2}R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2C_{2}R_{2}R_{L}g_{m}r_{o}+4C_{2}R_{2}R_{L}+C_{2}R_{2}r_{o}+C_{2}R_{5}r_{o}+4C_{2}R_{L}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+R_{2}r_{o}+R_{5}r_{o})}}$$

$$\text{K-LP: }\frac{R_{L}(R_{5}g_{m}r_{o}+R_{5}-r_{o})}{R_{5}g_{m}r_{o}+R_{5}+2R_{L}g_{m}r_{o}+4R_{L}+r_{o}}}}{C_{2}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o})}$$

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

$$\text{K-BP: }\frac{C_{2}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o})}{C_{2}R_{2}R_{2}R_{5}+2C_{2}R_{2}R_{L}g_{m}r_{o}+4C_{2}R_{2}R_{L}+C_{2}R_{2}r_{o}+C_{2}R_{5}r_{o}+4C_{2}R_{L}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}+C_{L}R_{L}r_{o}}{C_{2}R_{2}R_{2}R_{2}R_{2}R_{2}+C_{2}R_{2}R_{2}R_{2}+C_{2}R_{2}R_{2}R_{2}+C_{2}R_{2}+C_{2}R_{2}R_{2}+C_{2}R_{2}+C_{2}R_{2}R_{2}+C_{2}R_{2}+C_{2}$$

9 INVALID-WZ

9.1 INVALID-WZ-1 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

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

$$Q\colon \frac{\sqrt{2}C_5C_LR_5\sqrt{\frac{R_2g_mr_o+2R_2+2r_o}{C_5C_LR_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}}}{2C_5R_2R_5g_mr_o+4C_5R_2R_5+4C_5R_5r_o+C_LR_2R_5g_mr_o+C_LR_2R_5+2C_LR_2R_Lg_mr_o+4C_LR_2R_L+C_LR_2r_o+C_LR_5r_o+4C_LR_Lr_o}}\\ \text{wo: } \sqrt{2}\sqrt{\frac{R_2g_mr_o+2R_2+2r_o}{C_5C_LR_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}}}\\ \text{bandwidth: } \frac{2C_5R_2R_5g_mr_o+4C_5R_2R_5+4C_5R_5r_o+C_LR_2R_5g_mr_o+C_LR_2R_5+2C_LR_2R_Lg_mr_o+4C_LR_2R_L+C_LR_2r_o+C_LR_5r_o+4C_LR_Lr_o}{C_5C_LR_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}}\\ \text{K-LP: } \frac{R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o}{2(R_2g_mr_o+2R_2+2r_o)}}{(R-HP: -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o}}{(R-HP: -\frac{R_2R_Lr_o}{2C_5R_2R_5g_mr_o+4C_LR_2R_5R_L+C_LR_2R_5R_L-C_LR_2R_Lr_o+C_LR_5R_Lr_o}{2C_5R_2R_5g_mr_o+4C_LR_2R_5g_mr_o+C_LR_2R_5R_L-C_LR_2R_Lr_o+C_LR_5R_Lr_o}}\\ \text{K-BP: } \frac{-C_5R_2R_5r_o+C_LR_2R_5r_o+C_LR_2R_5R_Lg_mr_o+C_LR_2R_5R_L-C_LR_2R_Lr_o+C_LR_5R_Lr_o}{(R_2g_mr_o+4C_LR_2R_5r_o+C_LR_2R_5r_o+C_LR_2R_Lr_o+C_LR_2R_Lr_o+C_LR_2R_Lr_o+C_LR_2R_Lr_o+C_LR_2r_o+C_L$$

Wz:
$$\sqrt{\frac{-R_2R_5g_mr_o - R_2R_5 + R_2r_o - R_5r_o}{C_5C_LR_2R_5R_Lr_o}}$$

9.2 INVALID-WZ-2 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

Parameters:

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

9.3 INVALID-WZ-3 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 R_5 r_o s^2 + 4 C_2 C_5 R_L r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

Parameters:

$$\begin{array}{c} C_2C_5r_o\sqrt{\frac{g_mr_o+1}{C_2C_5r_o(R_5+4R_L)}}(R_5+4R_L) \\ \text{Q:} \ \, \frac{1}{C_2r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ \text{Wo:} \ \, \sqrt{\frac{g_mr_o+1}{C_2C_5r_o(R_5+4R_L)}} \\ \text{bandwidth:} \ \, \frac{C_2r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_2C_5r_o(R_5+4R_L)} \\ \text{K-LP:} \ \, R_L \\ \text{K-HP:} \ \, \frac{R_5R_L}{R_5+4R_L} \\ \text{K-BP:} \ \, \frac{R_L(C_2r_o+C_5R_5g_mr_o+C_5R_5-C_5r_o)}{C_2r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ \text{Qz:} \ \, \frac{C_2C_5R_5r_o\sqrt{\frac{g_mr_o+1}{C_2C_5r_o(R_5+4R_L)}}}{C_2r_o+C_5R_5g_mr_o+C_5R_5-C_5r_o} \\ \text{Wz:} \ \, \sqrt{\frac{g_mr_o+1}{C_2C_5R_5r_o}} \end{array}$$

9.4 INVALID-WZ-4 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

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

$$\begin{array}{c} \sqrt{2}C_{2}C_{L}R_{2}r_{o}\sqrt{\frac{R_{2}g_{m}r_{o}+2R_{2}+2r_{o}}{C_{2}C_{L}R_{2}r_{o}(R_{5}+4R_{L})}}}(R_{5}+4R_{L}) \\ \text{Q:} \ \frac{1}{4C_{2}R_{2}r_{o}+C_{L}R_{2}R_{5}g_{m}r_{o}+C_{L}R_{2}R_{5}+2C_{L}R_{2}R_{L}g_{m}r_{o}+4C_{L}R_{2}R_{L}+C_{L}R_{2}r_{o}+C_{L}R_{5}r_{o}+4C_{L}R_{L}r_{o}}}{\sqrt{2}\sqrt{\frac{R_{2}g_{m}r_{o}+2R_{2}+2r_{o}}{C_{2}C_{L}R_{2}r_{o}(R_{5}+4R_{L})}}}} \\ \text{bandwidth:} \ \frac{4C_{2}R_{2}r_{o}+C_{L}R_{2}R_{5}g_{m}r_{o}+C_{L}R_{2}R_{5}+2C_{L}R_{2}R_{L}g_{m}r_{o}+4C_{L}R_{2}R_{L}+C_{L}R_{2}r_{o}+C_{L}R_{5}r_{o}+4C_{L}R_{L}r_{o}}}{C_{2}C_{L}R_{2}r_{o}(R_{5}+4R_{L})}} \\ \text{K-LP:} \ \frac{R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}}{2(R_{2}g_{m}r_{o}+2R_{2}+2r_{o})} \end{array}$$

```
 \begin{aligned} & \text{K-HP: } \frac{R_5 R_L}{R_5 + 4 R_L} \\ & \text{K-BP: } \frac{C_2 R_2 R_5 r_o + C_L R_2 R_5 R_L g_m r_o + C_L R_2 R_5 R_L - C_L R_2 R_L r_o + C_L R_5 R_L r_o}{4 C_2 R_2 r_o + C_L R_2 R_5 g_m r_o + C_L R_2 R_5 R_L g_m r_o + 4 C_L R_2 R_L + C_L R_2 r_o + C_L R_5 r_o + 4 C_L R_L r_o} \\ & \sqrt{2} C_2 C_L R_2 R_5 R_L r_o \sqrt{\frac{R_2 g_m r_o + 2 R_2 + 2 r_o}{C_2 C_L R_2 r_o (R_5 + 4 R_L)}}} \\ & \text{Qz: } \frac{C_2 R_2 R_5 r_o + C_L R_2 R_5 R_L g_m r_o + C_L R_2 R_5 R_L - C_L R_2 R_L r_o + C_L R_5 R_L r_o}{C_2 C_L R_2 R_5 R_L g_m r_o + C_L R_5 R_L r_o} \\ & \text{Wz: } \sqrt{\frac{R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o}{C_2 C_L R_2 R_5 R_L r_o}}} \end{aligned}
```

9.5 INVALID-WZ-5 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 s - C_5 R_2 r_o s + C_5 R_5 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_L r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 s + 2 C_5 R_2 R_L g_m r_o s + 4 C_5 R_2 r_o s + C_5 R_5 r_o s + 4 C_5 R_L r_o s + R_2 g_m r_o + R_2 + r_o}$$

Parameters:

$$Q\colon \frac{C_2C_5R_2r_o\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_2C_5R_2r_o(R_5+4R_L)}}(R_5+4R_L)}{C_2R_2r_o+C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o}$$
 wo:
$$\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_2C_5R_2r_o(R_5+4R_L)}}$$
 bandwidth:
$$\frac{C_2R_2r_o+C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2R_L+C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o}{C_2C_5R_2r_o(R_5+4R_L)}$$
 K-LP:
$$R_L$$
 K-HP:
$$\frac{R_5R_L}{R_5+4R_L}$$
 K-BP:
$$\frac{R_L(C_2R_2r_o+C_5R_2R_5g_mr_o+C_5R_2R_5-C_5R_2r_o+C_5R_5r_o)}{C_2R_2r_o+C_5R_2R_5g_mr_o+C_5R_2R_5+2C_5R_2R_Lg_mr_o+4C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o}}$$
 Qz:
$$\frac{C_2C_5R_2r_o+C_5R_2R_5g_mr_o+C_5R_2R_5g_mr_o+C_5R_2R_5-C_5R_2r_o+C_5R_5r_o+4C_5R_Lr_o}{C_2C_5R_2r_o(R_5+4R_L)}}$$
 Wz:
$$\sqrt{\frac{R_2g_mr_o+R_2+r_o}{C_2C_5R_2R_5g_m}r_o+C_5R_2R_5-C_5R_2r_o+C_5R_5r_o}}{C_2C_5R_2R_5r_o}}$$

9.6 INVALID-WZ-6 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_L R_2 R_5 g_m r_o s^2 + C_2 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_L R_2 r_o s^2 + C_2 C_L R_5 r_o s^2 + 4 C_2 C_L R_2 r_o s^2 + 2 C_2 R_2 g_m r_o s + 4 C_2 R_2 s + 4 C_2 r_o s + C_L R_5 g_m r_o s + C_L R_5 g_m r_o s + C_L R_5 g_m r_o s + 4 C_L R_5 g_m r_o s + 4 C_L R_5 g_m r_o s + C_L R_5 g_m$$

Parameters:

$$\begin{array}{c} \sqrt{2}C_{2}C_{L}\sqrt{\frac{g_{m}r_{o}+2}{C_{2}C_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o})}}}{2C_{2}R_{2}g_{m}r_{o}+4C_{2}R_{2}+4C_{2}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}}\\ wo: \sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{2}C_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o})}}{2C_{2}C_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}}\\ wo: \sqrt{2}\sqrt{\frac{g_{m}r_{o}+2}{C_{2}C_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o})}}\\ bandwidth: \frac{2C_{2}R_{2}g_{m}r_{o}+4C_{2}R_{2}+4C_{2}r_{o}+C_{L}R_{5}g_{m}r_{o}+C_{L}R_{5}+2C_{L}R_{L}g_{m}r_{o}+4C_{L}R_{L}+C_{L}r_{o}}}{C_{2}C_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o})}\\ W_{1}H^{2}: \frac{R_{5}g_{m}r_{o}+R_{5}r_{o}}{R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+R_{5}r_{o}+4R_{L}r_{o}}}\\ W_{2}: \frac{\sqrt{2}C_{2}R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+R_{5}r_{o}+R_{5}r_{o}+4R_{L}r_{o}}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o})}\\ W_{2}: \sqrt{\frac{R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o})}}}}} \\ (R_{2}: \frac{\sqrt{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}+2R_{2}R_{L}g_{m}r_{o}+4R_{2}R_{L}+R_{2}r_{o}+R_{5}r_{o}+4R_{L}r_{o}}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{L}r_{o}}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o})}} \\ (R_{2}: \frac{\sqrt{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}+C_{L}R_{5}R_{L}g_{m}r_{o}+C_{L}R_{5}R_{L}-C_{L}R_{L}r_{o}}}{C_{2}C_{L}R_{L}(R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o})}} \\ (R_{2}: \frac{R_{2}g_{m}r_{o}+R_{2}R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}+C_{L}R_{5$$

9.7 INVALID-WZ-7 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1 \right)}{2 C_2 C_5 R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_L r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

```
\begin{aligned} & \text{Q:} & \frac{C_2C_5\sqrt{\frac{g_mr_o+1}{C_2C_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}}(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}{C_2R_2g_mr_o+C_2R_2+C_2r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ & \text{wo:} & \sqrt{\frac{g_mr_o+1}{C_2C_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)}} \\ & \text{bandwidth:} & \frac{C_2R_2g_mr_o+C_2R_2+C_2r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_2C_5(2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o)} \\ & \text{K-LP:} & R_L \\ & \text{K-HP:} & -\frac{R_2R_Lr_o}{2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+4R_Lr_o} \\ & \text{K-BP:} & \frac{R_L(C_2R_2g_mr_o+C_2R_2+C_2r_o-C_5r_o)}{C_2R_2g_mr_o+C_2R_2+C_2r_o+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ & \text{Qz:} & -\frac{C_2C_5R_2r_o}{C_2R_2g_mr_o+C_2R_2+C_2r_o-C_5r_o} \\ & \text{Wz:} & \sqrt{\frac{-g_mr_o-1}{C_2C_5R_2r_o}} \end{aligned}
```

9.8 INVALID-WZ-8 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{2 C_2 C_5 R_2 R_5 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_5 r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + 4 C_2 R_2 r_o s + C_2 R$

Parameters:

```
Q: \frac{C_2C_5R_5\sqrt{\frac{R_5gmro+R_5+2R_Lgmro+4R_L+ro}{C_2C_5R_5(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}}}{(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}
Q: \frac{C_2R_2R_5gmro+C_2R_2R_5+2C_2R_2R_Lgmro+4C_2R_2R_L+C_2R_2ro+C_2R_5ro+4C_2R_Lro+2C_5R_5R_Lgmro+4C_5R_5R_L+C_5R_5ro}}{C_2C_5R_5(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}}
wo: \sqrt{\frac{R_5gmro+R_5+2R_Lgmro+4R_L+ro}{C_2C_5R_5(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}}}
bandwidth: \frac{C_2R_2R_5gmro+C_2R_2R_5+2C_2R_2R_Lgmro+4C_2R_2R_L+C_2R_2ro+C_2R_5ro+4C_2R_Lro+2C_5R_5R_Lgmro+4C_5R_5R_L+C_5R_5ro}}{C_2C_5R_5(2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro)}}
K-LP: \frac{R_L(R_5gmro+R_5-ro)}{R_5gmro+R_5+2R_Lgmro+4R_L+ro}}
K-HP: -\frac{R_2R_Lro}{2R_2R_Lgmro+4R_2R_L+R_2ro+4R_Lro}}{R_L(C_2R_2R_5gmro+4C_2R_2R_5-C_2R_2ro+C_2R_5ro-C_5R_5ro)}}
K-BP: \frac{R_2R_Lro}{C_2R_2R_5gmro+C_2R_2R_5+2C_2R_2R_Lgmro+4C_2R_2R_5-C_2R_2ro+C_2R_5ro-C_5R_5ro)}}{R_L(C_2R_2R_5gmro+4R_2R_L+R_2ro+4R_Lro)}}
Qz: -\frac{C_2C_5R_2R_5gmro+C_2R_2R_5+2C_2R_Lgmro+4R_Lro}{C_2C_5R_5gmro+R_5+2R_Lgmro+4R_Lro}}
Qz: -\frac{C_2C_5R_2R_5gmro+C_2R_2R_5+2C_2R_2R_Lgmro+4R_Lro}{C_2C_5R_5gmro+R_5+2R_Lgmro+4R_Lro}}
Qz: -\frac{C_2C_5R_2R_5gmro+C_2R_2R_5-C_2R_2ro+C_2R_5ro-C_5R_5ro}{C_2C_5R_5gmro+C_2R_2R_5-C_2R_2ro+C_2R_5ro-C_5R_5ro}}{C_2C_5R_5gmro+C_2R_2R_5-C_2R_2ro+C_2R_5ro-C_5R_5ro}}
```

9.9 INVALID-WZ-9 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 s^2 - C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_5 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + C_2 C_$

Parameters:

$$\begin{array}{l} \text{Q:} & \frac{C_2C_5\sqrt{\frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o)}}{C_2R_2g_mr_o+C_2R_2+C_2r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o} \\ \text{Wo:} & \frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o)} \\ \text{bandwidth:} & \frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+C_5R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o)} \\ \text{bandwidth:} & \frac{C_2R_2g_mr_o+C_2R_2+C_2r_o+C_5R_5g_mr_o+C_5R_5+2C_5R_Lg_mr_o+4C_5R_L+C_5r_o}{C_2C_5(R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o)} \\ \text{K-LP:} & \frac{R_L(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}{R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o} \\ \text{K-BP:} & \frac{R_L(C_2R_2g_mr_o+C_2R_2+C_2r_o+C_5R_5g_mr_o+C_5R_5-C_5r_o)}{C_2R_2g_mr_o+C_2R_2+C_2r_o+C_5R_5g_mr_o+C_5R_5-C_5r_o)} \\ \text{Qz:} & \frac{C_2C_5\sqrt{\frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+R_2R_5+2R_2R_Lg_mr_o+4R_2R_L+R_2r_o+R_5r_o+4R_Lr_o)}} {C_2R_2g_mr_o+C_2R_2+C_2r_o+C_5R_5g_mr_o+C_5R_5-C_5r_o} \\ \text{Wz:} & \sqrt{\frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}} \\ \text{Wz:} & \sqrt{\frac{g_mr_o+1}{C_2C_5(R_2R_5g_mr_o+R_2R_5-R_2r_o+R_5r_o)}}{C_2R_2g_mr_o+R_2R_5-R_2r_o+R_5r_o)}}} \\ \end{array}$$

10 INVALID-ORDER

10.1 INVALID-ORDER-1 $Z(s) = (\infty, R_2, \infty, \infty, R_5, R_L)$

$$H(s) = \frac{R_L \left(R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}$$

10.2 INVALID-ORDER-2 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{1}{C_{Ls}}\right)$

$$H(s) = \frac{R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o}{C_L R_2 R_5 g_m r_o s + C_L R_2 R_5 s + C_L R_2 r_o s + C_L R_5 r_o s + 2 R_2 g_m r_o + 4 R_2 + 4 r_o}$$

10.3 INVALID-ORDER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{C_L R_2 R_5 R_L g_m r_o s + C_L R_2 R_5 R_L s + C_L R_2 R_L r_o s + C_L R_5 R_L r_o s + R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}$$

10.4 INVALID-ORDER-4 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{C_L R_2 R_5 g_m r_o s + C_L R_2 R_5 s + 2C_L R_2 R_L g_m r_o s + 4C_L R_2 R_L s + C_L R_2 r_o s + C_L R_5 r_o s + 4C_L R_L r_o s + 2R_2 g_m r_o + 4R_2 + 4r_o}$$

10.5 INVALID-ORDER-5 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(-C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{2C_5 R_2 R_L g_m r_o s + 4C_5 R_2 R_L s + C_5 R_2 r_o s + 4C_5 R_L r_o s + R_2 g_m r_o + R_2 + r_o}$$

10.6 INVALID-ORDER-6 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o}{s \left(C_5 C_L R_2 r_o s + 2 C_5 R_2 g_m r_o + 4 C_5 R_2 + 4 C_5 r_o + C_L R_2 g_m r_o + C_L R_2 + C_L r_o\right)}$$

10.7 INVALID-ORDER-7 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{s \left(2C_5 C_L R_2 R_L g_m r_o s + 4C_5 C_L R_2 R_L s + C_5 C_L R_2 r_o s + 4C_5 C_L R_L r_o s + 2C_5 R_2 g_m r_o + 4C_5 R_2 + 4C_5 r_o + C_L R_2 g_m r_o + C_L R_2 + C_L r_o\right)}$$

10.8 INVALID-ORDER-8 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.9 INVALID-ORDER-9 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.10 INVALID-ORDER-10 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.11 INVALID-ORDER-11 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

10.12 INVALID-ORDER-12 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.13 INVALID-ORDER-13 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

10.14 INVALID-ORDER-14 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

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

10.15 INVALID-ORDER-15 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.16 INVALID-ORDER-16 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.17 INVALID-ORDER-17 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.18 INVALID-ORDER-18 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

10.19 INVALID-ORDER-19 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.20 INVALID-ORDER-20 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

10.21 INVALID-ORDER-21 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

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

10.22 INVALID-ORDER-22 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 s - C_5 R_2 r_o s + C_5 R_5 r_o s + R_2 g_m r_o + R_2 + r_o}{s \left(C_5 C_L R_2 R_5 g_m r_o s + C_5 C_L R_2 R_5 s + C_5 C_L R_2 r_o s + C_5 C_L R_5 r_o s + 2 C_5 R_2 g_m r_o + 4 C_5 R_2 + 4 C_5 r_o + C_L R_2 g_m r_o + C_L R_2 + C_L r_o\right)}$

10.23 INVALID-ORDER-23 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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

10.24 INVALID-ORDER-24 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.25 INVALID-ORDER-25 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.26 INVALID-ORDER-26 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.27 INVALID-ORDER-27
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

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

10.28 INVALID-ORDER-28 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.29 INVALID-ORDER-29
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.30 INVALID-ORDER-30
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_5L_5R_2g_mr_os^2 + C_5L_5R_2s^2 + C_5L_5r_os^2 - C_5R_2r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_5C_LL_5R_2g_mr_os^2 + C_5C_LL_5R_2s^2 + C_5C_LL_5r_os^2 + C_5C_LR_2r_os + 2C_5R_2g_mr_o + 4C_5R_2 + 4C_5r_o + C_LR_2g_mr_o + C_LR_2 + C_Lr_o\right)}$$

10.31 INVALID-ORDER-31
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.32 INVALID-ORDER-32
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.33 INVALID-ORDER-33
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$$

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

10.34 INVALID-ORDER-34
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.35 INVALID-ORDER-35 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.36 INVALID-ORDER-36 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

10.37 INVALID-ORDER-37 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.38 INVALID-ORDER-38 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

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

10.39 INVALID-ORDER-39 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_5L_5R_2r_os^2 + L_5R_2g_mr_os + L_5R_2s + L_5r_os - R_2r_o}{C_5C_LL_5R_2r_os^3 + 2C_5L_5R_2g_mr_os^2 + 4C_5L_5R_2s^2 + 4C_5L_5r_os^2 + C_LL_5R_2g_mr_os^2 + C_LL_5R_2s^2 + C_LL_5r_os^2 + C_LR_2r_os + 2R_2g_mr_o + 4R_2 + 4r_o}$

10.40 INVALID-ORDER-40 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

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

10.41 INVALID-ORDER-41 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.42 INVALID-ORDER-42 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.43 INVALID-ORDER-43 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.44 INVALID-ORDER-44 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.45 INVALID-ORDER-45 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$

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

10.46 INVALID-ORDER-46 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.47 INVALID-ORDER-47 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

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

10.48 INVALID-ORDER-48 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_5L_5R_2g_mr_os^2 + C_5L_5R_2s^2 + C_5L_5r_os^2 + C_5R_2R_5g_mr_os + C_5R_2R_5s - C_5R_2r_os + C_5R_5r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_5C_LL_5R_2g^2 + C_5C_LL_5r_os^2 + C_5C_LR_2R_5g_mr_os + C_5C_LR_2r_os + C_$

10.49 INVALID-ORDER-49 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

10.50 INVALID-ORDER-50 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_7 s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s + C$

10.51 INVALID-ORDER-51 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{5}L_{5}R_{2}g_{m}r_{o}s^{2}+C_{5}L_{5}R_{2}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}R_{2}R_{5}g_{m}r_{o}s+C_{5}R_{2}R_{5}s-C_{5}R_{2}r_{o}s+C_{5}R_{$ 10.52 INVALID-ORDER-52 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s + C_5 R_2 r_o s + C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{C_5 C_L L_5 L_L R_2 g_m r_o s^4 + C_5 C_L L_L R_2 r_o s^3 + C_5 C_L L_L R_2 r_o s^3 + C_5 C_L L_L R_2 r_o s^3 + C_5 L_L R_2 r_o s^3 + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 r_o s^2 + 2 C_5 L_L R_2 g_m r_o s^2 + 4 C_5 L_L R_2 s^2 + 4 C_5 L_L R_2 r_o s^3 + C_5 R_2 r_o s^$ 10.53 INVALID-ORDER-53 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}L_{5}R_{2}g_{m}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}L_{5}r_{o}s^{2} + C_{5}R_{2}r_{o}s + C_{5}R_{2}r_{o}s$ 10.54 INVALID-ORDER-54 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_5} + \frac{1}{L_5 s}}\right)$ $L_L R_L s \left(C_5 L_5 R_2 g_m r_o s^2 + \right)$ 10.55 INVALID-ORDER-55 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $(C_L L_L R_L s^2 + L_L s + R_L) (C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_5 R_5 r_o s^2 + C_5 R_5 R_5 r_o s^2 + C_5 R_5 R_5 r_o s^2 + C_5 R$ $H(s) = \frac{(C_L L_L K_L s^2 + L_L s + K_L) (C_5 L_5 K_2 g_m r_o s^2 + C_5 L_5 K_2 s^2 + C_5 L_5 r_o s^2 + C_5 K_2 K_5 g_m r_o s + C_5 L_5 R_2 s^2 + C_5 L_5$ 10.56 INVALID-ORDER-56 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_5 s}} \right)$ $H(s) = \frac{-c_L C_L L_2 L_2 R_2 r_0 s^4 + C_5 C_L L_5 L_4 R_2 r_0 s^4 + C_5 C_L L_5 L_4 R_2 r_0 s^3 + C_5 C_L L_5 R_2 R_2 r_0 s^3 + C_5 C_L L_5 R_2 R_2 r_0 s^3 + C_5 C_L L_5 R_2 R_2 r_0 s^3 + C_5 C_L L_4 R_2 R_5 r_0 s^3 + C_5 C_L L_5 R_5 r_$ 10.57 INVALID-ORDER-57 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$ $H(s) = \frac{-C_5L_5R_2R_5r_os^2 + L_5R_2R_5g_mr_os + L_5R_2R_5g_mr_os + L_5R_2r_os - R_2R_5r_o}{C_5C_LL_5R_2R_5r_os^3 + 2C_5L_5R_2R_5g_mr_os^2 + 4C_5L_5R_2R_5s^2 + C_LL_5R_2R_5g_mr_os^2 + C_LL_5R_2r_os^2 + C_LL_$ 10.58 INVALID-ORDER-58 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L}{C_L R_L s + 1} \right)$

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

10.59 INVALID-ORDER-59
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L + \frac{1}{C_L s}\right)$$

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

10.60 INVALID-ORDER-60
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$$

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

10.61 INVALID-ORDER-61
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.62 INVALID-ORDER-62
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.63 INVALID-ORDER-63
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

 $H(s) = \frac{L_L \kappa_L s \left(-C_5 L_5 K_2 R_5 r_o s^3 + L_5 L_5 L_6 R_2 R_5 r_o s^3 + L_5 L_5 L_6 R_2 R_5 R_L r_o s^3 + C_5 L_5 L_4 R_5 R_L r_o s^3 + C_5 L_5 L_5 R_5 R_L r_o s^3 + C_5 L_5 R_5 R_L r_o s^3 + C_5$

10.64 INVALID-ORDER-64
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.65 INVALID-ORDER-65
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = -\frac{1}{2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_2R_5R_Ls^4 + C_5C_LL_5L_LR_2R_5r_os^4 + 4C_5C_LL_5L_LR_2R_5R_Lr_os^4 + C_5C_LL_5R_2R_5R_Lr_os^3 + 2C_5L_5R_2R_5R_Lg_mr_os^2 + 4C_5L_5R_2R_5R_Ls^2 + C_5L_5R_2R_5R_Lr_os^2 + 4C_5L_5R_2R_5R_Lr_os^2 + 4C_5R_5R_Lr_os^2 + 4C_5R_5R_Lr_os^2 + 4C_5R_Lr_os^2 + 4C_5R_$

10.66 INVALID-ORDER-66
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_5L_5R_2R_5g_mr_os^2 + C_5L_5R_2r_os^2 + C_5L_5R_2r_os^2 + C_5L_5R_2r_os^2 + L_5R_2g_mr_os + L_5R_2s + L_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{C_5C_LL_5R_2r_os^3 + C_5C_LL_5R_2r_os^3 + C_5C_LL_5R_2r_os^3 + 2C_5L_5R_2g_mr_os^2 + 4C_5L_5r_os^2 + 4C_5L_5r_os^2 + C_LL_5R_2g_mr_os^2 + C_LL_5R_2g_mr_os + C_LR_2r_os + C_LR_2r$

- **10.67** INVALID-ORDER-67 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s + L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 +$
- 10.68 INVALID-ORDER-68 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 R_2 r_o + R_5 r_o s^2 + R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^3 + C_5 C_L L_5 R_2 r_o s^3 + C_5 C_L$
- **10.69** INVALID-ORDER-69 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 R_2 r_o + R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 g_m r_o s^4 + 4 C_5 C_L L_5 L_4 R_2 s^4 + 4 C_5 C_L L_5 R_2 R_5 g_m r_o s^3 + C_5 C_L L_5 R_2 r_o s^3 + C_5 C_L L_5 R_2 r_o s^3 + 2 C_5 L_5 R_2 g_m r_o s^2 + 4 C_5 L_5 R_2 g_m r_o s^2 + C_L L_5 R_2 g_m r_o s^2 +$
- 10.70 INVALID-ORDER-70 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_L s \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 R_5 s^2 C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s^2 + L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 r_o$
- 10.71 INVALID-ORDER-71 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{5}L_{5}R_{2}R_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}R_{2}r_{o}s^{2} + C_{5}L_{5}R_{2}r_{o}s^{2} + C_{5}L_{5}R_{5}r_{o}s^{2} + L_{5}L_{5}R_{5}r_{o}s^{2} + L_{5}L_{5}R_{5}r_{o}s^{2} + C_{5}L_{5}R_{5}r_{o}s^{2} + C_{5}L_{5}R_{5}r_{o}s^{3} + C_{5}C_{L}L_{5}R_{2}r_{o}s^{3} + C_{5}C_{L}L$
- 10.72 INVALID-ORDER-72 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_5C_LL_5L_LR_2R_5R_Lg_mr_os^4 + C_5C_LL_5L_LR_2R_5R_Ls^4 + C_5C_LL_5L_LR_2R_Lr_os^4 + C_5C_LL_5L_LR_2R_5g_mr_os^3 + C_5L_5L_LR_2R_5g_mr_os^3 + C_5L_5L_RR_2R_5g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr_os^3 + C_5L_5L_RR_2g_mr$
- 10.73 INVALID-ORDER-73 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{U(s)}{C_5C_LL_5L_LR_2R_5g_mr_os^4 + C_5C_LL_5L_LR_2R_5s^4 + 2C_5C_LL_5L_LR_2R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_LR_2r_os$
- 10.74 INVALID-ORDER-74 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_5C_LL_5L_LR_2R_5g_mr_os^4 + C_5C_LL_5L_LR_2R_5s^4 + 2C_5C_LL_5L_LR_2R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_RR_2r_os^4 + 4C_5C_LL_5L_RR_2r_os^4$

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10.75 INVALID-ORDER-75 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)
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 $H(s) = \frac{C_5L_5R_2R_5g_mr_os^2 + C_5L_5R_2R_5s^2 - C_5L_5R_2r_os^2 + C_5L_5R_2r_os^2 + C_5L_5R_5r_os^2 - C_5R_2R_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{C_5C_LL_5R_2r_os^3 + C_5C_LL_5R_2r_os^3 + C_5C_LL_5R_2r_os^3 + C_5C_LL_5R_2r_os^2 + 2C_5L_5R_2g_mr_os^2 + 4C_5L_5r_os^2 + 2C_5R_2R_5g_mr_os + 4C_5R_2R_5s + 4C_5R_2r_os + C_LR_2R_5g_mr_os + C_LR_2R_5s + C_LR_2r_os + C_L$

10.76 INVALID-ORDER-76
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.77 INVALID-ORDER-77
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$$

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

10.78 INVALID-ORDER-78
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$$

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

10.79 INVALID-ORDER-79
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L s \left(C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_2 r_o s^3 + 4 C_5 L_4 L_4 R_2 r_o s^3 + 4 C_5 L_5 L_5 R_2 r_o s^3 + 4 C_5 L_5 L_5 R_2 r_o s^3 + 4 C_5 L_5 R_5 r_o s^3$

10.80 INVALID-ORDER-80
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{(C_L L_L s_S - C_L L_S L_L R_2 g_m r_o s_s^4 + 4 C_5 C_L L_5 L_L R_2 s_s^4 + 4 C_5 C_L L_5 R_2 R_5 g_m r_o s_s^3 + C_5 C_L L_5 R_2 R_5 g_m r_o s_s^3 + 2 C_5 C_L L_5 R_2 R_5 g_m r_o s_s^3 + 4 C_5 C_L L_5 R_5 R_5 g_m r_o s_s^3 + 4 C_5 C_L L_5 R_5 R_5 g_m r_o s_s^3 + 4 C_5 C_L L_5 R_5 R_5 g_m r_o s_s^3 + 4 C_5 C_L L_5 R_5 R_5$

10.81 INVALID-ORDER-81
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.82 INVALID-ORDER-82
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_5C_LL_5L_LR_2R_5q_mr_os^4 + C_5C_LL_5L_LR_2R_5s^4 + 2C_5C_LL_5L_LR_2R_Lq_mr_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_2r_os^4 + 4C_5C_LL_5L_3r_o$

10.83 INVALID-ORDER-83
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_5C_LL_5L_LR_2R_5g_mr_os^4 + C_5C_LL_5L_LR_2R_5s^4 + 2C_5C_LL_5L_LR_2R_Lg_mr_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_LR_2r_os^4 + 4C_5C_LL_5L_RR_2r_os^4 + 4C_5C_LL_5L_RR_2r_os^4$$

10.84 INVALID-ORDER-84 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 R_5 r_o s + 4 C_2 R_L r_o s + R_5 g_m r_o + R_5 + 2 R_L g_m r_o + 4 R_L + r_o}$$

10.85 INVALID-ORDER-85 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{4 C_2 C_L L_L r_o s^3 + C_2 C_L R_5 r_o s^2 + 4 C_2 r_o s + 2 C_L L_L g_m r_o s^2 + 4 C_L L_L s^2 + C_L R_5 g_m r_o s + C_L R_5 s + C_L r_o s + 2 g_m r_o + 4}$$

10.86 INVALID-ORDER-86 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_L L_L R_5 r_o s^3 + 4 C_2 L_L r_o s^2 + C_2 R_5 r_o s + C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 s^2 + C_L L_L r_o s^2 + 2 L_L g_m r_o s + 4 L_L s + R_5 g_m r_o + R_5 + r_o}$$

10.87 INVALID-ORDER-87 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.88 INVALID-ORDER-88 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$H(s) = \frac{L_L R_L s \left(C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_L L_L R_5 R_L r_o s^3 + C_2 L_L R_5 r_o s^2 + 4 C_2 L_L R_L r_o s^2 + C_2 R_5 R_L r_o s + C_L L_L R_5 R_L g_m r_o s^2 + C_L L_L R_5 r_o s^2 + L_L R_5 g_m r_o s + L_L R_5 s + 2 L_L R_L g_m r_o s + 4 L_L R_L s + L_L r_o s + R_5 R_L g_m r_o + R_5 R_L + R_L r_o s + R_5 R_L r_o s +$$

10.89 INVALID-ORDER-89 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.90 INVALID-ORDER-90 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 C_L L_L R_5 r_o s^3 + 4 C_2 C_L L_L R_L r_o s^3 + C_2 C_L R_5 R_L r_o s^2 + C_2 R_5 r_o s + 4 C_2 R_L r_o s + C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 g_m r_o s^2 + 4 C_L L_L R_L g_m r_o s^2 + 4 C_L L_L R_L g_m r_o s + C_L R_5 R_L g_m r_o s + C_L R_5 R_L g_m r_o + R_5 + 2 R_L g_m r_o s + 4 R_L r_o s^2 + 4 R_L R_5 r_o s^2 + C_L R_5 R_L g_m r_o s + C_L$$

10.91 INVALID-ORDER-91
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

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

10.92 INVALID-ORDER-92
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.93 INVALID-ORDER-93
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.94 INVALID-ORDER-94
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

10.95 INVALID-ORDER-95
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.96 INVALID-ORDER-96
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

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

10.97 INVALID-ORDER-97
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.98 INVALID-ORDER-98
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

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

10.99 INVALID-ORDER-99
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{4 C_2 C_5 C_L R_5 R_L r_o s^3 + 4 C_2 C_5 R_5 r_o s^2 + 2 C_2 C_L R_5 r_o s^2 + 4 C_2 C_L R_5 r_o s^2 + 2 C_5 C_L R_5 R_L g_m r_o s^2 + 4 C_5 C_L R_5 r_o s^2 + 2 C_5 R_5 g_m r_o s + 4 C_5 R_5 g_m$$

10.100 INVALID-ORDER-100 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + 1\right)\left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{4C_2 C_5 C_L L_L R_5 r_o s^4 + 4C_2 C_5 R_5 r_o s^2 + 4C_2 C_L L_L r_o s^3 + C_2 C_L R_5 r_o s^2 + 4C_2 r_o s + 2C_5 C_L L_L R_5 g_m r_o s^3 + 4C_5 C_L L_L R_5 s^3 + C_5 C_L R_5 r_o s^2 + 2C_5 R_5 g_m r_o s + 4C_5 R_5 s + 2C_L L_L g_m r_o s^2 + 4C_L L_L s^2 + C_L R_5 g_m r_o s + C_L R_5 s + C_L r_o s + 2g_m r_o s + 4C_L R_5 r_o s^2 + 4C_L$ 10.101 INVALID-ORDER-101 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{4 C_2 C_5 L_L R_5 r_o s^3 + C_2 C_L L_L R_5 r_o s^3 + 4 C_2 L_L r_o s^2 + C_2 R_5 r_o s + C_5 C_L L_L R_5 r_o s^3 + 2 C_5 L_L R_5 g_m r_o s^2 + 4 C_5 L_L R_5 s^2 + C_5 R_5 r_o s + C_L L_L R_5 g_m r_o s^2 + C_L L_L R_5 s^2 + C_L L_L r_o s^2 + 2 L_L g_m r_o s + 4 L_L s + R_5 g_m r_o + R_5 + r_o s^2 + C_L R_5 r_o$ **10.102** INVALID-ORDER-102 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}R_{5}r_{o}s - C_{5}R_{5}r_{o}s + R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{4C_{2}C_{5}C_{L}L_{L}R_{5}r_{o}s^{4} + 4C_{2}C_{5}L_{L}R_{5}r_{o}s^{4} + 4C_{2}C_{5}R_{5}r_{o}s^{2} + 4C_{2}C_{L}L_{L}r_{o}s^{3} + 4C_{2}C_{L}R_{5}r_{o}s^{2} + 4C_{2}C_{L}R_{5}r_{o}s^{2} + 4C_{2}C_{L}R_{5}r_{o}s^{2} + 4C_{5}C_{L}R_{5}R_{L}r_{o}s^{2} + 4C_{5}C_{L}R_{5}R_{L}r_{o}s^{2} + 4C_{5}C_{L}R_{5}R_{L}r_{o}s^{2} + 4C_{5}C_{L}R_{5}R_{L}r_{o}s^{2} + 4C_{5}C_{L}R_{5}r_{o}s^{2} + 4C_$ 10.103 INVALID-ORDER-103 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{L_L R_L s \left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{4 C_2 C_5 L_L R_5 R_L r_o s^3 + C_2 C_L L_L R_5 r_o s^2 + 4 C_2 L_L R_5 r_o s^2 + C_2 R_5 R_L r_o s^3 + 2 C_5 L_L R_5 R_L g_m r_o s^2 + 4 C_5 L_L R_5 R_L r_o s^2 + C_5 L_$ **10.104** INVALID-ORDER-104 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $(C_L L_L R_L s^2 + L_L s + R_L) (C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o)$ $H(s) = \frac{(C_L L_L R_5 R_L r_o s^4 + 4C_2 C_5 L_L R_5 R_c r_o s^3 + 4C_2 C_5 R_5 R_c r_o s^3 + 4C_2 C_L L_L R_5 r_o s^3 + 4C_2 L_L R_5 r$ 10.105 INVALID-ORDER-105 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$ $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{4 C_2 C_5 C_L L_L R_5 R_L r_o s^4 + 4 C_2 C_5 R_5 R_L r_o s^3 + 4 C_2 C_L L_L R_5 r_o s^3 + 4 C_2 C_L R_5 r_o s^3 + 4$

10.106 INVALID-ORDER-106 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$ $H(s) = \frac{C_2C_5R_5r_os^2 + C_2r_os + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LR_5r_os^2 + 4C_2C_5r_os + C_2C_Lr_os + C_5C_LR_5g_mr_os + C_5C_LR_5s + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.107 INVALID-ORDER-107 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 C_L R_5 R_L r_o s^3 + C_2 C_5 R_5 r_o s^2 + 4 C_2 C_5 R_L r_o s^2 + C_2 C_L R_L r_o s^2 + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 C_L R_5 R_L g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5$

10.108 INVALID-ORDER-108
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L R_5 r_o s^2 + 4 C_2 C_5 C_L R_L r_o s^2 + 4 C_2 C_5 r_o s + C_2 C_L r_o s + C_5 C_L R_5 g_m r_o s + C_5 C_L R_5 s + 2 C_5 C_L R_L g_m r_o s + 4 C_5 C_L R_L s + C_5 C_L r_o s + 2 C_5 g_m r_o + 4 C_5 + C_L g_m r_o + C_L\right)}$$

10.109 INVALID-ORDER-109 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.110 INVALID-ORDER-110 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_L R_5 r_o s^4 + 4 C_2 C_5 L_L r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 C_L L_L r_o s^3 + C_2 r_o s + C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L L_L R_5 s^3 + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 R_5 g_m r_o s + C_5 R_5 g_$$

10.111 INVALID-ORDER-111 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.112 INVALID-ORDER-112 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

$$H(s) = \frac{L_L R_L s \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_L R_5 R_L r_o s^4 + C_2 C_5 L_L R_5 r_o s^3 + 4 C_2 C_5 L_L R_5 r_o s^3 + C_2 C_L L_L R_1 r_o s^3 + C_2 C_L L_L R_1 r_o s^3 + C_2 L_L R_5 R_L r_o s^3 + C_5 C_L L_L R_5 R_L r_o s^3 + C_5 L_L R_5 r_o s^3$$

10.113 INVALID-ORDER-113 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.114 INVALID-ORDER-114 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 g_m$$

10.115 INVALID-ORDER-115 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

$$H(s) = \frac{R_L \left(C_2 C_5 L_5 r_o s^3 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 L_5 r_o s^3 + 4 C_2 C_5 R_L r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$$

10.116 INVALID-ORDER-116
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_5L_5r_os^3 + C_2r_os + C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_5r_os^3 + 4C_2C_5r_os + C_2C_Lr_os + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$$

10.117 INVALID-ORDER-117
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.118 INVALID-ORDER-118
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.119 INVALID-ORDER-119 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.120 INVALID-ORDER-120 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(C_2 C_5 L_5 r_o s^3 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_5 L_L r_o s^5 + C_2 C_5 L_5 r_o s^3 + 4 C_2 C_5 L_L r_o s^3 + C_2 C_L L_L r_o s^3 + C_5 C_L L_5 L_L g_m r_o s^4 + C_5 C_L L_5 L_L s^4 + C_5 C_L L_L r_o s^3 + C_5 L_5 g_m r_o s^2 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L L_L s^2 + g_m r_o + 1}$$

10.121 INVALID-ORDER-121 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.122 INVALID-ORDER-122 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

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

10.123 INVALID-ORDER-123 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.124 INVALID-ORDER-124
$$Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 C_5 L_5 r_o s^3 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 C_L L_5 L_L r_o s^5 + C_2 C_5 C_L L_5 R_L r_o s^4 + 4 C_2 C_5 L_L r_o s^3 + 4 C_2 C_5 L_L r_o s^3 + 4 C_2 C_5 L_L r_o s^3 + C_2 C_L r_o s^3 + C_$

10.125 INVALID-ORDER-125 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

10.126 INVALID-ORDER-126 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2L_5r_os^2 - C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o}{4C_2C_5L_5r_os^3 + C_2C_LL_5r_os^3 + 4C_2r_os + C_5C_LL_5r_os^3 + 2C_5L_5g_mr_os^2 + 4C_5L_5s^2 + C_LL_5g_mr_os^2 + C_LL_5s^2 + C_Lr_os + 2g_mr_o + 4C_5r_os^2 + C_5r_os^2 + C_5r_os$$

10.127 INVALID-ORDER-127 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

10.128 INVALID-ORDER-128 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

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

10.129 INVALID-ORDER-129 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.130 INVALID-ORDER-130 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.131 INVALID-ORDER-131 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.132 INVALID-ORDER-132 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

$$L_L R_L s \left(C_2 L_5 r_o s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)$$

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

10.133 INVALID-ORDER-133 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $(C_L L_L R_L s^2 + L_L s + R_L) (C_2 L_5 r_o s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o)$

10.134 INVALID-ORDER-134 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 L_5 r_o s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{4 C_2 C_5 C_L L_5 L_L r_o s^5 + 4 C_2 C_5 L_5 L_L r_o s^4 + C_2 C_L L_5 L_L r_o s^4 + C_5 C_$

10.135 INVALID-ORDER-135 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + 4 C_2 C_5 R_L r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.136 INVALID-ORDER-136 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_5r_os^3 + C_2C_5R_5r_os^2 + C_2r_os + C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_5r_os^3 + C_2C_5C_LR_5r_os^2 + 4C_2C_5r_os + C_2C_Lr_os + C_5C_LL_5g_mr_os^2 + C_5C_LL_5s^2 + C_5C_LR_5g_mr_os + C_5C_LR_5s + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.137 INVALID-ORDER-137 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 C_L L_5 R_L r_o s^4 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 C_L R_L r_o s^2 + C_2 C_L R_L r_o s^2 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L L_5 R_L g_m r_o s^3 + C_5 C_L R_5 R_L g_m r_o s^2 + C_5 L_5 g_m r_o s^$

10.138 INVALID-ORDER-138 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L L_5 r_o s^3 + C_2 C_5 C_L R_5 r_o s^2 + 4 C_2 C_5 r_o s + C_2 C_L r_o s + C_5 C_L L_5 g_m r_o s^2 + C_5 C_L R_5 g_m r_o s + C_5 C_L R_5 g_m r_o$

10.139 INVALID-ORDER-139 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_7 s}\right)$

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

10.140 INVALID-ORDER-140 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_5 L_L r_o s^5 + C_2 C_5 L_L L_R r_o s^4 + C_2 C_5 L_L r_o s^3 + C_5 C_L L_L R_5 g_m r_o s^4 + C_5 C_L L_L R_5 g_m r_o s^3 + C_5 C_L R_5 g_m r_o s^3 + C_5 C_L R_5 g_m r_o s^3 + C_5 C_L R_5 g_m r_o s^3 + C_5 R_5 g_m r_o s^3 + C_5$ 10.141 INVALID-ORDER-141 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}C_{5}L_{5}r_{o}s^{3} + C_{2}C_{5}R_{5}r_{o}s^{2} + C_{2}L_{5}g_{m}r_{o}s^{2} + C_{5}L_{5}g_{m}r_{o}s + C_{5}R_{5}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(C_{2}C_{5}C_{L}L_{5}r_{o}s^{3} + 4C_{2}C_{5}C_{L}L_{5}r_{o}s^{2} + 4C_{2}C_{5}C_{L}R_{5}r_{o}s^{2} + 4C_{2}C_{5}r_{o}s + C_{5}C_{L}L_{5}g_{m}r_{o}s^{2} + C_{5}C_{L}L_{5}s^{2} + 2C_{5}C_{L}L_{5}g_{m}r_{o}s^{2} + 4C_{5}C_{L}L_{5}s^{2} + 2C_{5}C_{L}R_{5}g_{m}r_{o}s + C_{5}C_{L}R_{5}g_{m}r_{o}s + C_{5}C_{$ 10.142 INVALID-ORDER-142 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}} \right)$ $H(s) = \frac{C_2C_5C_LL_5L_LR_Lr_os^5 + C_2C_5L_LL_Rs_RL_ros^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_LR_5r_os^3 + C_2C_5L_LR_Lr_os^3 + C_2C_5L_Lr_os^3 + C_2C_5L_Lr_os^3 + C_2C_5L_Lr_os^3$ 10.143 INVALID-ORDER-143 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $(C_L L_L R_L s^2 + L_L s + R_L) (C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2)$ $H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s^2 + C_5 L_5 g_m r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5 L_4 r_o s^3 + C_5 C_4 L_4 R_5 r_o s^4 + C_5 C_4 L_4 R_5 r_o s^4 + C_5 C_4 L_4 R_5 r_o s^3 + C_5 C_5 L_5 L_4 r_o s^3 + C_5 C_5 L_5 L_4 r_o s^3 + C_5 C_5 L_5 L_4 r_o s^3 + C_5 C_5 L_5 L_5 r_o s^3 + C_5 C_5 L_5 r_o s^3 + C_5 C_5 L_5 r_o s^3 + C_5 C_5 r_o s^3 + C_5$ 10.144 INVALID-ORDER-144 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_T s}}\right)$ $R_L (C_L L_L s^2 + 1) (C_2 C_5 L_5 r_o s^3)$ $H(s) = \frac{\frac{1}{C_L C_L C_S C_L L_5 L_L r_o s^5 + C_2 C_5 C_L L_5 R_L r_o s^4 + C_2 C_5 C_L L_2 R_5 r_o s^4 + C_2 C_5 L_4 R_5 r_o s^4 + C_2 C_5 L_5 R_4 r_o s^4 + C_2 C_5 L_5 R_5 r_o s^3 + C_2 C_5 R_5 r_o s^3$ 10.145 INVALID-ORDER-145 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L \right)$ $H(s) = \frac{R_L \left(C_2 L_5 R_5 r_o s^2 - C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{4 C_2 C_5 L_5 R_5 R_L r_o s^3 + C_2 L_5 R_5 r_o s^2 + 4 C_2 L_5 R_L r_o s^2 + 4 C_2 R_5 R_L r_o s^2 + 4 C_5 L_5 R_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 g_m r_o s + L_5 R_5 g_m r_o s + 4 L_5 R_L s + L_5 r_o s + 2 R_5 R_L g_m r_o s + 4 R_5 R_L + R_5 r_o s^2 + 4 R_5 R_L r_o s^$ **10.146** INVALID-ORDER-146 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{1}{C_L s}\right)$ $H(s) = \frac{C_2L_5R_5r_os^2 - C_5L_5R_5r_os^2 + L_5R_5g_mr_os + L_5R_5s - L_5r_os - R_5r_o}{4C_2C_5L_5R_5r_os^3 + C_2C_LL_5R_5r_os^2 + 4C_2R_5r_os + C_5C_LL_5R_5r_os^3 + 2C_5L_5R_5g_mr_os^2 + 4C_5L_5R_5g_mr_os^2 + 4C_5L_5R_5g_mr_os^2 + C_LL_5R_5g_mr_os^2 + C_LL_5r_os^2 + C_LL_$

10.147 INVALID-ORDER-147
$$Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{R_L \left(C_2 L_5 R_5 r_o s^2 - C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o \right)}{4 C_2 C_5 L_5 R_5 R_L r_o s^3 + C_2 L_L F_6 F_6 r_o s^2 + 4 C_2 L_5 F_6 r_o s^2 + 4 C_2 F_6 F_6 r_o s^3 + 2 C_5 L_5 F_6 F_6 r_o s^2 + 4 C_5 F_6 F_6 r_o s^2 + 4 C_5 F_6 F_6 r_o s^2 + 2 C_5 F_6 F_6 r_o s^2 + C_5 F_6 r_$

10.148 INVALID-ORDER-148 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{5}R_{5}r_{o}s^{2}-C_{5}L_{5}R_{5}r_{o}s^{2}+L_{5}R_{5}g_{m}r_{o}s+L_{5}R_{5}s-L_{5}r_{o}s-R_{5}r_{o}\right)}{4C_{2}C_{5}C_{L}L_{5}R_{5}R_{L}r_{o}s^{4}+4C_{2}C_{5}L_{5}R_{5}r_{o}s^{3}+C_{2}C_{L}L_{5}R_{5}r_{o}s^{3}+4C_{2}C_{L}L_{5}R_{5}r_{o}s^{2}+4C_{2}L_{5}r_{o}s^{2}+4C_{2}L_{5}r_{o}s^{2}+4C_{2}L_{5}R_{5}R_{L}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{5}R_{5}r_{o}s^{3}+2C_{5}L_{5}R_{5}g_{m}r_{o}s^{2}+4C_{5}L_{5}R_{5}g_{m}r_{o}s^{2}+4C_{2}L_{5}R_{5}r_{o}s^{3}+4C_{5}C_{L}L_{5}R_{5}r_{o}s$ **10.149** INVALID-ORDER-149 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{2}L_{5}R_{5}r_{o}s^{2}-C_{5}L_{5}R_{5}r_{o}s^{2}+L_{5}R_{5}g_{m}r_{o}s+L_{5}R_{5}s-L_{5}r_{o}s-R_{5}r_{o}\right)}{4C_{2}C_{5}C_{L}L_{5}L_{L}R_{5}r_{o}s^{5}+4C_{2}C_{L}L_{5}L_{c}r_{o}s^{4}+C_{2}C_{L}L_{5}R_{5}r_{o}s^{3}+4C_{2}C_{L}L_{5}R_{5}r_{o}s^{3}+4C_{2}L_{L}R_{5}r_{o}s^{4}+C_{2}C_{L}L_{5}L_{c}R_{5}r_{o}s^{4}+C_{2}C_{L$ 10.150 INVALID-ORDER-150 $Z(s) = \left(\infty, \frac{1}{C_{2s}}, \infty, \infty, \frac{1}{C_{5s + \frac{1}{R_{5}} + \frac{1}{L_{5s}}}}, \frac{L_{Ls}}{C_{L}L_{L}s^{2} + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 L_5 R_5 r_o s^2 - C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s + L_5 R_5 s - L_5 r_o s - R_5 r_o\right)}{4 C_2 C_5 L_5 L_L R_5 r_o s^4 + 4 C_2 L_L L_L R_5 r_o s^2 + 4 C_2 L_L R_5 r_o s^2 + 2 C_5 L_L L_L R_5 r_o s^4 + 2 C_5 L_L L_L R_5 r_o s^4 + 2 C_5 L_L L_L R_5 r_o s^4 + 2 C_5 L_L L_L R_5 r_o s^3 + 4 C_5 L_L L_L R_5 r_o s^3 + C_L L_5 L_L R_$ 10.151 INVALID-ORDER-151 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_c} + \frac{1}{L_c s}}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + C_L R_S r_o s^3 + 4C_2 C_L L_5 R_L r_o s^3 + 4C_$ 10.152 INVALID-ORDER-152 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$ $H(s) = \frac{L_L R_L s \left(C_2 L_5 R_5 r_o s^2 - C_5 L_5 R_5 r_o s^2 + L_5 R_5 g_m r_o s^2 + C_5 L_L R_5 R_L r_o s^4 + C_2 L_L$

10.153 INVALID-ORDER-153 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.154 INVALID-ORDER-154 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{4C_2C_5C_LL_5L_LR_5R_Lr_os^5 + 4C_2C_5L_5R_5R_Lr_os^3 + C_2C_LL_5L_LR_5r_os^4 + 4C_2C_LL_5L_LR_5r_os^4 + 4C_2C_LL_5R_5R_Lr_os^3 + 4C_2C_LL_5R_Lr_os^3 + 4C_2C_LL_5R_Lr$

10.155 INVALID-ORDER-155 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_5 r_o s^3 + C_2 L_5 r_o s^2 + C_2 R_5 r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 C_5 L_5 R_5 r_o s^3 + 4 C_2 C_5 L_5 R_L r_o s^3 + C_2 L_5 r_o s^2 + C_2 R_5 r_o s + 4 C_2 R_L r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 + 2 C_5 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + R_5 g_m$

10.158 INVALID-ORDER-158
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_5 R_5 r_o s^3 + C_2 L_5 r_o s^2 + C_2 R_5 r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_5 C_L L_5 R_5 r_o s^4 + 4 C_2 C_5 C_L L_5 R_c s^4 + 4 C_2 C_5 L_5 r_o s^3 + C_2 C_L R_5 r_o s^2 + 4 C_2 C_L R_L r_o s^2 + 4 C_2 C_L R_5 r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + C_5 C_L L_5 R_5 g_m r_o s^3 + 2 C_5 C_L L_5 R_L r_o s^3 + 2 C_5 L_5 R_5 r_o s^3 + 2 C_5 L_5 R_$$

10.159 INVALID-ORDER-159
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_s^2 + 1\right)\left(C_2 C_5 L_5 R_5 r_o s^3 + C_2 L_5 r_o s^2 + C_2 R_5 r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 s + R_5 g_m r_o s + L_5 r_o s^2 + L_5 g_m r_o s^2 + C_5 L_5 L_5 L_5 r_o s^2 + L_5 R_5 r_o s^2 + C_5 L_5 L_5 R_5 r_o s^2 + C_5 L_5 L_5 R_5 r_o s^2 + C_5 L_5 L_5 R_5 r_o s^3 + C_5 L_5 L_5 r_o s^3 + C_5 L_5 R_5 r_o s^3 + C_5 L_$$

10.160 INVALID-ORDER-160
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_5 r_o s^3 + C_2 L_5 r_o s^2 + C_2 R_5 r_o s^2 + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + R_5 r_o s^2 + C_5 r_o s^2 + C_5$$

10.161 INVALID-ORDER-161
$$Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

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

10.162 INVALID-ORDER-162
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

10.163 INVALID-ORDER-163
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{(C_L L_L R_L s + L_S L_L R_S r_o s^5 + 4C_2 C_5 L_L L_L R_L r_o s^5 + 4C_2 C_5 L_L L_L R_L r_o s^4 + C_2 C_L L_L L_L R_S r_o s^3 + 4C_2 C_L L_L R_L r_o s^4 + C_2 C_L R_L r_o s^4 + C_2 C$$

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H(s) = \frac{R_L \left( C_2 C_5 L_5 R_5 r_o s^3 + C_2 R_5 r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 C_5 L_5 R_5 r_o s^3 + 4 C_2 C_5 L_5 R_L r_o s^2 + C_2 R_5 r_o s + 4 C_2 R_L r_o s^2 + C_5 L_5 R_5 q_m r_o s^2 + C_5 L_5 R_5 q_m r_o s^2 + 2 C_5 L_5 R_L q_m r_o s^2 + 2 C_5 R_5 R_L q_m r_o s^2 + 2 
10.166 INVALID-ORDER-166 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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_2C_5L_5R_5r_os^3 + C_2R_5r_os + C_5L_5R_5g_mr_os^2 + C_5L_5R_5s^2 - C_5L_5r_os^2 - C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_2C_5C_LL_5R_5r_os^4 + 4C_2C_5L_5r_os^3 + 4C_2C_5R_5r_os^2 + 4C_2r_os + C_5C_LL_5R_5g_mr_os^3 + C_5C_LL_5R_5s^3 + C_5C_LL_5r_os^3 +
10.167 INVALID-ORDER-167 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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_2 C_5 L_5 R_5 r_o s^3 + C_2 R_5 r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + R_5 r_o s + R_5 g_m r_o s^2 + C_5 L_5 R_5 r_o s^3 + C_5 C_4 L_5 R_5 R_4 r_o s^3 + C_5 C_4 R_5 R_5 r_o s^3 + C_5 C_5 R_5 r_o s^3 + C_5 C_5 R_5 r_o s^3 + C_5 C_5 R_5 r_o s^3 + C_
10.168 INVALID-ORDER-168 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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{\left(C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{5}R_{5}r_{o}s^{3}+C_{2}R_{5}r_{o}s^{3}+C_{5}L_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}R_{5}s^{2}-C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{
10.169 INVALID-ORDER-169 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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_{2}C_{5}L_{5}R_{5}r_{o}s^{3}+C_{2}R_{5}r_{o}s^{3}+C_{2}L_{5}R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}R_{5}s^{2}-C_{5}L_{5}r_{o}s^{2}-C_{5}R_{5}r_{o}s+R_{5}g_{m}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{5}L_{5}R_{5}r_{o}s^{2}+C_{
10.170 INVALID-ORDER-170 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L_L s \left(C_2 C_5 L_5 R_5 r_o s^3 + C_2 R_5 r_o s + C_5 L_5 R_5 g_m r_o s^2 + C_5 L_5 R_5 s^2 - C_5 L_5 r_o s^2 - C_5 R_5 r_o s + R_5 g_m r_o + C_5 R_5 r_o s^2 + C_5 R_5 r_o 
H(s) = \frac{LLs\left(C_2C_5L_5R_5r_os + C_2L_5R_5r_os + C_5L_5R_5g_mr_os + C_5L_5R_5g_mr_os + C_5L_5R_5g_mr_os + C_5L_5r_os - C_5R_5r_os + C_5L_5r_os - C_5R_5r_os + C_5L_5r_os + C
10.171 INVALID-ORDER-171 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \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{(CL^2L^2 + CL^2L^2)}{4C_2C_5C_LL_5L_Lr_os^5 + C_2C_5C_LL_5R_5r_os^4 + 4C_2C_5C_LL_5R_Lr_os^4 + 4C_2C_5C_LL_5R_5r_os^4 + 4C_2C_5L_5r_os^3 + 4C_2C_5C_5L_5r_os^3 + 4C_2C_5C_5L_5r_os^3 + 4C_2C_5C_5L_5r_os^3 + 4C_2C_
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 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_5r_os^5 + 4C_2C_5C_LL_5L_LR_Lr_os^5 + C_2C_5C_LL_5R_5r_os^3 + 4C_2C_5L_5R_5r_os^3 + 4C_2C_LL_5L_Lr_os^4 + C_2C_LL_5R_Lr_os^3 + C_2C_LL_5R_Lr_os^3$

10.164 INVALID-ORDER-164 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.165 INVALID-ORDER-165 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$

10.172 INVALID-ORDER-172 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_5R_Lr_os^5 + C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_LR_5R_Lr_os^3 + 4C_2C_5L_LR_5R_Lr_os^3 + 4C_2C_5L_LR_5r_os^3 + 4C_2C_5L_LR$

10.173 INVALID-ORDER-173 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_5r_os^5 + 4C_2C_5C_LL_5L_LR_5r_os^5 + 4C_2C_5C_LL_LR_5R_Lr_os^4 + 4C_2C_5L_5L_Lr_os^4 + 4C_2C_5L_5R_5r_os^3 + 4C_2C_5L_LR_5r_os^3 + 4C_2C_5L_LR_5$

10.174 INVALID-ORDER-174 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_5r_os^5 + 4C_2C_5C_LL_5L_LR_Lr_os^5 + C_2C_5C_LL_5R_5R_Lr_os^4 + 4C_2C_5L_LR_5r_os^3 + 4C_2C_5L_5R_Lr_os^3 + 4C_2C_5L_LR_5r_os^3 + 4C_2C_LL_LR_5r_os^3 + 4C_2C_LL_LR_5r$

10.175 INVALID-ORDER-175 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{C_2 R_2 R_5 r_o s + 4 C_2 R_2 R_L r_o s + R_2 R_5 g_m r_o + R_2 R_5 + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + R_5 r_o + 4 R_L r_o}$

10.176 INVALID-ORDER-176 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{4 C_2 C_L L_L R_2 r_o s^3 + C_2 C_L R_2 R_5 r_o s^2 + 4 C_2 R_2 r_o s + 2 C_L L_L R_2 g_m r_o s^2 + 4 C_L L_L R_2 s^2 + 4 C_L L_L r_o s^2 + C_L R_2 R_5 g_m r_o s + C_L R_2 r_o s + C_L R_2 r_o s + C_L R_2 r_o s + 2 R_2 g_m r_o + 4 R_2 + 4 r_o}$

10.177 INVALID-ORDER-177 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{C_2 C_L L_L R_2 R_5 r_o s^3 + 4 C_2 L_L R_2 r_o s^2 + C_2 R_2 R_5 r_o s + C_L L_L R_2 R_5 g_m r_o s^2 + C_L L_L R_2 r_o s^2 + C_L L_L R_2 r_o s^2 + C_L L_L R_2 r_o s^2 + 2 L_L R_2 g_m r_o s + 4 L_L R_2 s + 4 L_L r_o s + R_2 R_5 g_m r_o + R_2 R_5 r_o + R_2 r_$

10.178 INVALID-ORDER-178 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.179 INVALID-ORDER-179 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{C_2 C_L L_L R_2 R_5 R_L r_o s^3 + C_2 L_L R_2 R_5 r_o s^2 + 4 C_2 L_L R_2 R_5 R_L r_o s^2 + C_L L_L R_2 R_5 R_L s^2 + C_L L_L R_2 R_5 R_L r_o s^2 + C_L L_L R_2 R_5 R_L r_o s^2 + L_L R_2 R_5 g_m r_o s + L_L R_2 R_5 g_m r_o s + L_L R_2 R_5 g_m r_o s + 4 L_L R_2 R_5 r_o s + L_L R_2 R_5 r_o s^2 + L_L R_2 R_$

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10.180 INVALID-ORDER-180 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
H(s) = \frac{\left(C_{L}L_{L}R_{2}^{2} + L_{L}s + R_{L}\right)\left(C_{2}R_{2}R_{5}r_{o}s + R_{2}R_{5}g_{m}r_{o} + R_{2}R_{5} - R_{2}r_{o} + R_{5}r_{o}\right)}{C_{2}C_{L}L_{L}R_{2}R_{5}r_{o}s^{3} + 4C_{2}C_{L}L_{R}2R_{5}r_{o}s^{3} + 4C_{2}L_{L}R_{2}r_{o}s^{2} + C_{L}L_{L}R_{2}R_{5}g_{m}r_{o}s^{2} + C_{L}L_{L}R_{2}R_{5}g_{m}r_{o}s^{2} + 4C_{L}L_{L}R_{2}r_{o}s^{2} + C_{L}L_{L}R_{2}r_{o}s^{2} + C_{L}L_{L}R_{2}r_{o
10.181 INVALID-ORDER-181 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)
H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o \right)}{C_2 C_L L_L R_2 R_5 r_o s^3 + 4 C_2 C_L L_L R_2 R_5 r_o s^3 + 4 C_2 C_L L_L R_2 R_5 r_o s^3 + 4 C_2 L_L R_2 R_5 r_o 
10.182 INVALID-ORDER-182 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{1}{C_5s}, \frac{1}{C_{Ls}}\right)
                                                                                                                                                                                                                                                                                                                 H(s) = \frac{C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o}{s \left(4 C_2 C_5 R_2 r_o s + C_2 C_L R_2 r_o s + C_5 C_L R_2 r_o s + 2 C_5 R_2 g_m r_o + 4 C_5 R_2 + 4 C_5 r_o + C_L R_2 g_m r_o + C_L R_2 + C_L r_o\right)}
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10.183 INVALID-ORDER-183 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}r_{o}s-C_{5}R_{2}r_{o}s+R_{2}g_{m}r_{o}+R_{2}+r_{o}\right)}{s\left(4C_{2}C_{5}C_{L}R_{2}R_{L}r_{o}s^{2}+4C_{2}C_{5}R_{2}r_{o}s+C_{2}C_{L}R_{2}r_{o}s+2C_{5}C_{L}R_{2}R_{L}g_{m}r_{o}s+4C_{5}C_{L}R_{2}r_{o}s+4C_{5}C_{L}R_{2}r_{o}s+4C_{5}R_{2}g_{m}r_{o}+4C_{5}R_{2}+4C_{5}r_{o}+C_{L}R_{2}g_{m}r_{o}+C_{L}R_{2}+C_{L}r_{o}\right)}$

10.184 INVALID-ORDER-184 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{s \left(4C_2 C_5 C_L L_L R_2 r_o s^3 + 4C_2 C_5 R_2 r_o s + 2C_5 C_L L_L R_2 g_m r_o s^2 + 4C_5 C_L L_L R_2 s^2 + 4C_5 C_L L_L r_o s^2 + C_5 C_L R_2 r_o s + 2C_5 R_2 g_m r_o + 4C_5 R_2 + 4C_5 r_o + C_L R_2 g_m r_o + C_L R_2 + C_L r_o\right)}$

10.185 INVALID-ORDER-185 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{4 C_2 C_5 L_L R_2 r_o s^3 + C_2 C_L L_L R_2 r_o s^3 + C_5 C_L L_L R_2 r_o s^3 + 2 C_5 L_L R_2 g_m r_o s^2 + 4 C_5 L_L R_2 s^2 + 4 C_5 L_L R_2 g_m r_o s^2 + C_L L_L R_2 g_m r_o s^2 + C_L L_L R_2 s^2 + C_L L_L R_2 r_o s^2 + R_2 g_m r_o + R_2 + r_o\right)}$

10.186 INVALID-ORDER-186 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.187 INVALID-ORDER-187 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{4 C_2 C_5 L_L R_2 R_L r_o s^3 + C_2 C_L L_L R_2 R_L r_o s^2 + C_5 C_L L_L R_2 R_L r_o s^3 + 2 C_5 L_L R_2 R_L r_o s^2 + 4 C_5 L_L R_2 R_L r_o s^2 + 4 C_5 L_L R_2 R_L r_o s^2 + C_5 L_L R_2 R_L r_o$

10.188 INVALID-ORDER-188 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $(C_L L_L R_L s^2 + L_L s + R_L) (C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o)$ $H(s) = \frac{\left(C_{L}L_{R}L_{S}^{2} + L_{L}s + R_{L}\right)\left(C_{2}R_{2}r_{o}s - C_{5}R_{2}r_{o}s + R_{2}g_{m}r_{o} + R_{2} + r_{o}\right)}{4C_{2}C_{5}C_{L}L_{L}R_{2}R_{L}r_{o}s^{4} + 4C_{2}C_{5}L_{L}R_{2}r_{o}s^{3} + 4C_{2}C_{5}R_{2}R_{L}r_{o}s^{2} + 2C_{5}L_{L}R_{2}r_{o}s^{3} + 4C_{5}C_{L}L_{L}R_{2}r_{o}s^{3} + 4C_{5}C_{L}L_{L}R_{2}r_{o}s^{3} + 4C_{5}L_{L}R_{2}r_{o}s^{3} +$

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10.189 INVALID-ORDER-189 Z(s) = \left( \infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)
H(s) = \frac{RL\left(C_LL_Ls^2 + 1\right)\left(C_2R_2r_os - C_5R_2r_os + R_2g_mr_o + R_2 + r_o\right)}{4C_2C_5C_LL_LR_2R_Lr_os^4 + 4C_2C_5R_2R_Lr_os^2 + C_2C_LL_LR_2r_os^3 + C_5C_LL_LR_2R_Lg_mr_os^3 + 4C_5C_LL_LR_2R_Lg^3 + C_5C_LL_LR_2r_os^3 + 4C_5C_LL_LR_2r_os^3 + 4C_5C_LL_Rr_os^3 + C_5C_LR_2R_Lr_os^2 + 2C_5R_2R_Lg_mr_os + 4C_5R_2r_os + 4C_5
10.190 INVALID-ORDER-190 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}R_{5}r_{o}s-C_{5}R_{2}R_{5}r_{o}s+R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}\right)
H(s) = \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}R_{2}R_{5}r_{o}s-C_{5}R_{2}R_{5}r_{o}s+R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}\right)}{4C_{2}C_{5}C_{L}R_{2}R_{5}R_{L}r_{o}s^{3}+4C_{2}C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{2}C_{L}R_{2}R_{5}r_{o}s^{2}+4C_{2}C_{L}R_{2}R_{5}r_{o}s^{2}+4C_{5}C_{L}R_{2}R_{5}R_{L}r_{o}s^{2}+4C_{5}C_{L}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R_{L}R_{5}r_{o}s^{2}+4C_{5}R
10.191 INVALID-ORDER-191 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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_{2}R_{2}R_{5}r_{o}s-C_{5}R_{2}R_{5}r_{o}s+R_{2}R_{5}g_{m}r_{o}+R_{2}R_{5}-R_{2}r_{o}+R_{5}r_{o}\right)}{4C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}r_{o}s^{4}+4C_{2}C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{2}C_{L}L_{R}R_{2}r_{o}s^{3}+C_{2}C_{L}L_{R}R_{2}R_{5}g_{m}r_{o}s^{3}+4C_{5}C_{L}L_{L}R_{5}r_{o}s^{3}+C_{5}C_{L}R_{2}R_{5}r_{o}s^{2}+2C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+4C_{5}R_{2}R_{5}r_{o}s^{2}+
10.192 INVALID-ORDER-192 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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_2 R_2 R_5 r_o s - C_5 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{4 C_2 C_5 L_L R_2 R_5 r_o s^3 + C_2 C_L L_L R_2 R_5 r_o s^3 + 4 C_2 L_L R_2 r_o s^2 + C_2 R_2 R_5 r_o s^3 + 2 C_5 L_L R_2 R_5 g_m r_o s^2 + 4 C_5 L_L R_2 R_5 r_o s^2 + C_
10.193 INVALID-ORDER-193 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)
H(s) = \frac{(C_L L_L s^2 + C_L R_L s + 1)(C_2 R_2 R_5 r_o s - C_5 R_5 R_5 r_o s - C_5 R
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10.194 INVALID-ORDER-194 $Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls+\frac{1}{R_L}+\frac{1}{L_Ls}}\right)$

 $H(s) = \frac{L_L R_L s \left(C_2 R_2 R_5 r_o s - C_5 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 r_o s +$

10.195 INVALID-ORDER-195 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.196 INVALID-ORDER-196 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{4C_2C_5C_LL_LR_2R_5R_Lr_os^4 + 4C_2C_5R_2R_5R_Lr_os^2 + C_2C_LL_LR_2R_5r_os^3 + 4C_2C_LL_LR_2R_5r_os^3 + 4C_2C_LL_RR_2R_5r_os^3 + 4C_2C_LR_2R_5r_os^3 + 4C_$

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H(s) = \frac{R_L \left( C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 s - C_5 R_2 r_o s + C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{C_2 C_5 C_L R_2 R_5 R_L r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_L r_o s^2 + C_5 C_L R_2 R_L r_o s^2 + C_5 C_L R_2 R_L r_o s^2 + C_5 C_L R_2 R_L r_o s^2 + C_5 R_2 R_5 r_o s^2 + C_5 R_5 R_5 r_o s^2 + C_5 
10.199 INVALID-ORDER-199 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{s \left(C_2 C_5 C_L R_2 R_5 r_o s^2 + 4 C_2 C_5 C_L R_2 R_5 r_o s + C_5 C_L R_2 R_5 g_m r_o s + C_5 C_L R_2 R_5 g_m r_o s + C_5 C_L R_2 R_5 g_m r_o s + C_5 C_L R_2 R_5 r_o s + 4 C_5 C_L R_2 r_o s + C_5 C_L 
10.200 INVALID-ORDER-200 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}C_{5}R_{2}R_{5}r_{o}s^{2}+C_{2}R_{2}r_{o}s+C_{5}R_{2}R_{5}g_{m}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s+C_{5}R_{2}r_{o}s
10.201 INVALID-ORDER-201 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 s - C_5 R_2 r_o s + C_5 R_2 r
10.202 INVALID-ORDER-202 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \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_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}C_{5}R_{2}R_{5}r_{o}s^{2} + C_{2}R_{2}r_{o}s + C_{5}R_{2}R_{5}g_{m}r_{o}s + C_{5}R_{2}r_{o}s + C_{5}R_{2}r_{o}s
10.203 INVALID-ORDER-203 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_r} + \frac{1}{L_r s}}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L_L R_L s \left( C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s^2 \right)
                                         \frac{L_L u_L s}{C_2 C_5 C_L L_L R_2 R_5 R_L r_o s^4 + C_2 C_5 L_L R_2 R_5 r_o s^3 + 4 C_2 C_5 L_L R_2 R_L r_o s^3 + C_2 C_5 R_2 R_5 R_L r_o s^3 + C_2 L_L R_2 R_L r_o s^3 + C_2 L_L R_2 R_L r_o s^3 + C_5 L_L L_R R_5 R_L r_o s^3 + C_5 L_L L_R R_5 R_L r_o s^3 + C_5 L_L R_2 R_L r_o s
10.204 INVALID-ORDER-204 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (C_L L_L R_L s^2 + L_L s + R_L) (C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 R_2 R_5 g_m r_o s^2)
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 $H(s) = \frac{C_2C_5R_2R_5r_os^2 + C_2R_2r_os + C_5R_2R_5g_mr_os + C_5R_2R_5s - C_5R_2r_os + C_5R_5r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_2C_5C_LR_2R_5r_os^2 + 4C_2C_5R_2r_os + C_5C_LR_2R_5g_mr_os + C_5C_LR_2R_5s + C_5C_LR_2r_os + C_5C_LR_2r_os$

10.197 INVALID-ORDER-197 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

10.198 INVALID-ORDER-198 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

10.205 INVALID-ORDER-205
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{L_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_L s}} \right)$$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + \frac{1}{C_2 C_5 C_L L_L R_2 R_5 r_o s^4 + 4 C_2 C_5 C_L R_2 R_5 R_L r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_L r_o s^3 + C_2 C_L L_L R_2 r_o s^3 + C_2 C_L R_2 R_L r_o s^3 + C_2 C_L L_L R_2 r_o s^3 + C_5 C_L L_L R_2 R_5 g_m r_o s^3 + C_5 C_L L_L R_2 R_5 g_m r_o s^3 + C_5 C_L L_L R_2 R_5 g_m r_o s^3 + C_5 C_L L_L R_2 R_5 g_m r_o s^3 + 4 C_5 C_L L_L R_2 R_5 g_m r_o s^3 + 4 C_5 C_L L_L R_2 R_5 g_m r_o s^3 + C_5 C_L L_L R_2 R_5 g_m$$

10.207 INVALID-ORDER-207 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$

$$H(s) = \frac{C_2C_5L_5R_2r_os^3 + C_2R_2r_os + C_5L_5R_2g_mr_os^2 + C_5L_5R_2s^2 + C_5L_5r_os^2 - C_5R_2r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_2C_5C_LL_5R_2r_os^3 + 4C_2C_5R_2r_os + C_5C_LL_5R_2g_mr_os^2 + C_5C_LL_5R_2s^2 + C_5C_LL_5r_os^2 + C_5C_LR_2r_os + 2C_5R_2g_mr_o + 4C_5R_2 + 4C_5r_o + C_LR_2g_mr_o + C_LR_2 + C_Lr_o\right)}$$

10.208 INVALID-ORDER-208 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{C_2 C_5 C_L L_5 R_2 R_L r_o s^4 + C_2 C_5 L_5 R_2 r_o s^3 + 4 C_2 C_5 R_2 R_L r_o s^2 + C_5 L_5 R_2 R_L r_o s^3 + C_5 C_L R_2 R_L r_o s^$$

10.209 INVALID-ORDER-209 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{s \left(C_2 C_5 C_L L_5 R_2 r_o s^3 + 4 C_2 C_5 C_L R_2 R_L r_o s^2 + 4 C_2 C_5 R_2 r_o s + C_5 C_L L_5 R_2 g_m r_o s^2 + C_5 C_L L_5 r_o s^2 + 2 C_5 C_L R_2 R_L g_m r_o s + 4 C_5 C_L R_2 r_o s + 4 C_$$

10.210 INVALID-ORDER-210 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o\right)}{s \left(C_2 C_5 C_L L_5 R_2 r_o s^3 + 4 C_2 C_5 C_L L_L R_2 r_o s^3 + 4 C_2 C_5 R_2 r_o s + C_5 C_L L_5 R_2 g_m r_o s^2 + C_5 C_L L_5 R_2 s^2 + C_5 C_L L_L R_2 g_m r_o s^2 + 4 C_5 C_L L_L R_2 s^2 + 4 C_5 C_L L_L R_2 r_o s^3 + 4 C_5 C_L L_L R_2 r_$$

10.211 INVALID-ORDER-211 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.212 INVALID-ORDER-212 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.213 INVALID-ORDER-213 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $L_L R_L s \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 R_2 r_o s \right)$

 $H(s) = \frac{L_L n_L s \left(\cup_2 \cup_5 L_2 n_2 r_o s \right. + \cup_2 n_2 r_o s}{C_2 C_5 C_L L_5 L_L R_2 R_L r_o s^5 + C_2 C_5 L_5 L_L R_2 r_o s^4 + C_5 C_L L_5 L_L R_2 R_L r_o s^3 + C_2 L_L R_2 R_L r_o s^3 + C_2 L_L R_2 R_L r_o s^4 + C_5 C_L L_5 L_L R_2 R_L$

10.214 INVALID-ORDER-214 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $(C_L L_L R_L s^2 + L_L s + R_L) (C_2 C_5 L_5 R_2 r_o s^3 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^3)$ $H(s) = \frac{(C_L L_L R_L s + L_L s + R_L) (C_2 C_5 L_5 R_2 r_o s + C_2 R_2 r_o s + C_5 L_5 L_4 R_2 r_o s + C_5 L_5 L_5 L_4 R_2 r_o s + C_5 L_5 L_5 L_5 R_2 r_o s + C_5 L_5 L_5 R_2 r_o s + C_5 L_5 L_5 R_2 r_o s + C_5 R_2 r_o s + C_5$

10.215 INVALID-ORDER-215 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.216 INVALID-ORDER-216 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s - R_2 r_o \right)}{4 C_2 C_5 L_5 R_2 R_L r_o s^3 + C_2 L_5 R_2 r_o s^2 + 4 C_2 R_2 R_L r_o s^2 + 4 C_5 L_5 R_2 R_L s^2 + C_5 L_5 R_2 r_o s^2 + 4 C_5 L_5 R_2 r_o s^2 + 4 C_5 L_5 R_2 r_o s^2 + 4 C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s + 2 R_2 R_L g_m r_o + 4 R_2 R_L + R_2 r_o + 4 R_L r_o + 4 R_2 R_L r_o s^2 + 2 R_2 R_L r_o$

10.217 INVALID-ORDER-217 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{1}{C_{Ls}}\right)$

 $H(s) = \frac{C_2L_5R_2r_os^2 - C_5L_5R_2r_os^2 + L_5R_2g_mr_os + L_5R_2s + L_5r_os - R_2r_o}{4C_2C_5L_5R_2r_os^3 + C_2C_LL_5R_2r_os^3 + 4C_2R_2r_os + C_5C_LL_5R_2r_os^3 + 2C_5L_5R_2g_mr_os^2 + 4C_5L_5R_2s^2 + 4C_5L_5r_os^2 + C_LL_5R_2g_mr_os^2 + C_LL_5r_os^2 + C_$

10.218 INVALID-ORDER-218 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s - R_2 r_o \right)}{4 C_2 C_5 L_5 R_2 R_L r_o s^3 + C_2 C_L L_5 R_2 R_L r_o s^2 + 4 C_5 L_5 R_2 R_L r_o s^3 + 2 C_5 L_5 R_2 R_L r_o s^3 + 2 C_5 L_5 R_2 R_L r_o s^2 + 4 C_5 L_5 R_2 R_L r_o s^2 + 4 C_5 L_5 R_2 R_L r_o s^2 + C_L L_5 R_$

10.219 INVALID-ORDER-219 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s - R_2 r_o\right)}{4 C_2 C_5 C_L L_5 R_2 R_L r_o s^4 + 4 C_2 C_5 L_5 R_2 r_o s^3 + 4 C_2 C_L L_5 R_2 r_o s^3 + 4 C_5 C_L L_5 R_2 R_L g_m r_o s^3 + 4 C_5 C_L L_5 R_2 r_o s^$

10.220 INVALID-ORDER-220 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

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10.221 INVALID-ORDER-221 Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)
```

$$H(s) = \frac{L_L s \left(C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 s + L_5 r_o s - R_2 r_o\right)}{4 C_2 C_5 L_5 L_L R_2 r_o s^4 + C_2 C_L L_5 L_L R_2 r_o s^2 + 4 C_2 L_L R_2 r_o s^2 + 2 C_5 L_5 L_L R_2 g_m r_o s^3 + 4 C_5 L_5 L_L R_2 s^3 + 4 C_5 L_5 L_L R_2 s^3 + C_L L_5 L_L R_2 s^3 + C_L L_5 L_L R_2 r_o s^3 + C_L L_5 L_L R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 r_o s^2 + C_L L_5 L_L R_2 r_o s^3 + C_L L_5 L_L$$

10.222 INVALID-ORDER-222
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.223 INVALID-ORDER-223
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 r_o s^2 + L_5 R_2 g_m r_o s + L_5 R_2 r_o s^2 + L_5 R_2 r_o s$$

10.224 INVALID-ORDER-224
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{4C_2C_5C_LL_5L_LR_2R_Lr_os^5 + 4C_2C_5L_5L_LR_2r_os^4 + 4C_2C_5L_5R_2R_Lr_os^3 + C_2C_LL_5L_LR_2r_os^4 + 4C_2C_LL_RR_2r_os^3 + C_2L_5R_2r_os^4 + 4C_2C_LL_RR_2r_os^3 + C_2L_5R_2r_os^4 + 4C_2C_LL_RR_2r_os^4 +$$

10.225 INVALID-ORDER-225
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{4C_2C_5C_LL_5L_LR_2R_Lr_os^5 + 4C_2C_5L_5R_2R_Lr_os^3 + C_2C_LL_5L_LR_2r_os^4 + C_2C_LL_5R_2R_Lr_os^3 + 4C_2C_LL_5R_2R_Lr_os^3 + 4C_2C_LL_5R_2R_Lr_os^3 + 4C_2C_LL_5R_2R_Lr_os^4 + 4C_5C_LL_5L_LR_2R_Lr_os^4 + 4C_5C_LL_5L_LR_2R_Lr_os^4 + 4C_5C_LL_5L_LR_2R_Lr_os^4 + 4C_5C_LL_5L_LR_2R_Lr_os^4 + 4C_5C_LL_5L_LR_2R_Lr_os^4 + 4C_5C_LL_5L_RR_2R_Lr_os^4 + 4C_5C$$

10.226 INVALID-ORDER-226
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_$$

10.227 INVALID-ORDER-227
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_2C_5L_5R_2r_os^3 + C_2C_5R_2R_5r_os^2 + C_2R_2r_os + C_5L_5R_2g_mr_os^2 + C_5L_5R_2s^2 + C_5L_5r_os^2 + C_5R_2R_5g_mr_os + C_5R_2R_5s - C_5R_2r_os + C_5R_2r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_2C_5C_LL_5R_2r_os^3 + C_2C_5C_LR_2r_os^2 + C_5C_LL_5R_2g_mr_os^2 + C_5C_LL_5R_2s^2 + C_5C_LL_5r_os^2 + C_5C_LR_2r_os + C_5C_LR_2r_o$$

10.228 INVALID-ORDER-228
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 r_o s^2 + C_5 L_5 r_o s^2 + C_5 L_5 R_2 r_o s^3 + C_5 C_L L_5 R_2 R_L r_o s^3 + C_5 C_L R_2 R_L r_o s^$$

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 10.229 \quad \text{INVALID-ORDER-229} \ Z(s) = \left( \infty, \frac{R_2}{C_2 R_2 s + 1}, \, \infty, \, \infty, \, L_5 s + R_5 + \frac{1}{C_5 s}, \, R_L + \frac{1}{C_L s} \right) 
 (C_L R_L s + 1) \left( C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 r_o s + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_5 g_m r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_5 g_m r_o s + C_5 R_2 r_o s^2 + C_5 R_2 R_2 g_m r_o s^2 + C_5 R_2 R_2 g_m r_o s^2 + C_5 R_2 R_2 g_m r_o s + C_5 R_2
```

10.232 INVALID-ORDER-232 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.233 INVALID-ORDER-233
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_Lr_os^5 + C_2C_5C_LL_LR_2R_5R_Lr_os^4 + C_2C_5L_5L_LR_2r_os^4 + C_2C_5L_LR_2R_5r_os^3 + 4C_2C_5L_LR_2R_Lr_os^3 + C_2C_5R_2R_Lr_os^3 + C_2C_5L_LR_2R_Lr_os^3 + C_2C_5$$

10.234 INVALID-ORDER-234
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{(C_L L_L R_L s^- + L_L s + R_L)}{C_2 C_5 C_L L_L R_2 r_o s^5 + C_2 C_5 C_L L_L R_2 R_5 r_o s^4 + 4 C_2 C_5 L_L R_2 r_o s^3 + 4 C_2 C_5 L_L R_2 r_o s^3 + 4 C_2 C_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 R_2 R_L r_o s^2 + C_2 C_L L_L R_2 r_o s^3 + C_2 C_$$

10.235 INVALID-ORDER-235
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5R_2R_Lr_os^4 + C_2C_5C_LL_LR_2R_5r_os^4 + 4C_2C_5C_LL_RR_2R_Lr_os^4 + C_2C_5C_LR_2R_5R_Lr_os^3 + C_2C_5R_2R_5r_os^3 + C_2C_5R_5r_os^3 + C_2C_5R_5r_os^3 + C_2C_5R_5r_os^3 + C_2C_5R_5r_os^3$$

10.236 INVALID-ORDER-236
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 L_5 R_2 R_5 r_o s^2 - C_5 L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 g_m r_o s + L_5 R_2 r_o s + L_5 R_2 r_o s + L_5 R_5 r_o s - R_2 R_5 r_o \right)}{4 C_2 C_5 L_5 R_2 R_5 R_L r_o s^3 + C_2 L_5 R_2 R_5 r_o s^2 + 4 C_2 L_5 R_2 R_5 R_L r_o s^2 + 4 C_5 L_5 R_2 R_5 R_L r_o s^2 + 4 C_5 L_5 R_2 R_5 r_o s^2 + 4 C_5 L_5 R_5 r_o s^2 + 4 C_5 L_5$$

10.237 INVALID-ORDER-237 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2L_5R_2R_5r_os^2 - C_5L_5R_2R_5r_os^2 + L_5R_2R_5g_mr_os + L_5R_2R_5s - L_5R_2r_os + L_5R_5r_os - R_2R_5r_os}{4C_2C_5L_5R_2R_5r_os^3 + 4C_2L_5R_2r_os^2 + 4C_2R_2r_os + C_5C_LL_5R_2R_5r_os^3 + 2C_5L_5R_2R_5g_mr_os^2 + 4C_5L_5R_2r_os^2 + 4C_5L_5R_2r$

10.238 INVALID-ORDER-238 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$

 $R_L \left(C_2 L_5 R_2 R_5 r_o s^2 - C_5 L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 s - L_5 R_5 r_o s^2 \right)$

 $H(s) = \frac{R_L \left(C_2 L_5 R_2 R_5 r_o s^2 - C_5 L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 R_L r_o s^3 + C_2 L_$

10.239 INVALID-ORDER-239 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_5 R_2 R_5 r_o s^2 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 R_L r_o s^3 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4$

10.240 INVALID-ORDER-240 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, L_L s + \frac{1}{C_L s}\right)$

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

10.241 INVALID-ORDER-241 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 L_5 R_2 R_5 r_o s^2 - C_5 L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 g_m r_o s + L_5 R_2 R_5 r_o s^2 + L_5 R_2 R_5$

10.242 INVALID-ORDER-242 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.243 INVALID-ORDER-243 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)$

 $H(s) = \frac{1}{4C_2C_5L_5L_LR_2R_5R_Lr_os^4 + C_2C_LL_5L_LR_2R_5R_Lr_os^4 + C_2L_5L_LR_2R_5r_os^3 + 4C_2L_5L_LR_2R_5R_Lr_os^3 + 4C_2L_5L_LR_2R_5R_Lr_os^4 + 2C_5L_5L_LR_2R_5R_Lr_os^4 + 2C_5L_5L_LR_2R_5R_Lr_os^4 + 2C_5L_5L_LR_2R_5R_Lr_os^4 + 4C_5L_5L_LR_2R_5R_Lr_os^4 + 4C_5L_5L_LR_2R_$

10.244 INVALID-ORDER-244 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_r} + \frac{1}{L_r s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $\frac{4C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}R_{5}R_{L}r_{o}s^{5}+4C_{2}C_{5}L_{5}L_{L}R_{2}R_{5}r_{o}s^{4}+4C_{2}C_{L}L_{5}$

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 \begin{aligned} &\mathbf{10.245} \quad \mathbf{INVALID\text{-}ORDER\text{-}245} \ Z(s) = \left( \infty, \frac{R_s}{C_s R_s s + 1}, \, \infty, \, \infty, \, \frac{1}{C_s s + \frac{1}{R_s} + \frac{1}{C_s s}}, \, \frac{R_L(L_s s + \frac{1}{C_s s})}{L_s s + R_s + \frac{1}{C_s s}} \right) \\ &H(s) = \frac{1}{4C_2 C_3 C_L L_3 L_R R_3 R_3 L_T \sigma^3 + 4C_2 C_4 L_3 L_2 R_2 R_3 R_2 \sigma^3 + 4C_2 C_4 L_2 L_2 R_2 R_3 R_2 \sigma^3 + 4C_2 C_4 L_3 R_2 R_3 R_2 \sigma^3 + 4C_2 C_4 L_3 L_2 R_3 R_4 R_2 \sigma^3 + 4C_3 C_4 L_4 R_2 R_3 R_4 \sigma^3 + 4C_3 C_4 L_4 R_2 R_3 R_4 \sigma^3 + 4C_4 C_5 R_3 R_4 R_5 \sigma^3 + 4C_4 C_5 R_5 R_5 R_4 \sigma^3 + 4C_5 C_4 L_5 R_2 R_5 R_5 \sigma^3 + 4C_5 C_4 L_5 R_2 R_5 R_5 \sigma^3 + 4C_5 C_5 L_5 R_5 R_5 \sigma^3 + 4C_5 C_5 R_5 R_5 \sigma^3 + 4C_5 R_5 R_5 R_5 \sigma^3
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$$H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 L_5 R_2 r_o s^2 + C_2 R_2 R_5 r_o s + C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 R_5 s^2 - C_5 R_2 R_5 r_o s^4 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^4 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^4 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 C_L R_2 R_5 r_o s^3 + C_2 C_L R_2 R_5 r_o s^3 + C_5 C_L L_5 R_2 R_5 g_m r_o s^3 + C_5 C_L L_5 R_2 R_5 g_m r_o s^3 + C_5 C_L L_5 R_2 R_5 r_o s^3 + C_5 C_L L_5 R_5 r_o s^3 +$$

10.250 INVALID-ORDER-250
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 L_5 R_2 r_o s^2 + C_2 R_2 R_5 r_o s^2 + C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 R_5 s^2 - C_5 R_5 R_5 r_o s^2 + C_5 R_5 R_5 R_5 r_o s^2 + C_5 R_5 R_5 r$

10.251 INVALID-ORDER-251
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.252 INVALID-ORDER-252
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_3 C_L L_5 L_L R_2 r_o s^5 + C_2 C_5 C_L L_5 R_2 R_5 r_o s^4 + 4 C_2 C_5 L_L R_2 r_o s^3 + C_2 C_L L_5 R_2 r_o s^3 + 4 C$

- 10.253 INVALID-ORDER-253 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Lr_os^5 + C_2C_5L_5L_LR_2R_5r_os^4 + 4C_2C_5L_5L_LR_2R_Lr_os^4 + C_2C_LL_5L_LR_2R_Lr_os^4 + C_2C_LL_5L_RR_2R_Lr_os^4 +$
- **10.254** INVALID-ORDER-254 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5L_LL_2R_2R_cr_os^5 + 4C_2C_5L_5L_LR_2r_os^4 + C_2C_5L_5R_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^4 + C_2C_LL_LR_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^3 + 4C_2C_LLR_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^3 + 4C_2C_LL_LR_2R_cr_os^2 + 4C_2C_LL_LR_2R_cr_os^2 + 4C_2C_LL_LR_2R_cr_os^2 + 4C_2C_LL_LR_2R_cr_os^2 + 4C_$
- 10.255 INVALID-ORDER-255 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5C_LL_5L_LR_2R_Lr_os^5 + C_2C_5C_LL_5R_2R_5r_os^4 + C_2C_5L_5R_2R_Lr_os^3 + C_2C_LL_5R_2R_Lr_os^4 +$
- 10.256 INVALID-ORDER-256 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 R_2 R_5 r_o s^3 + C_5 L_5 R_2 R_5 g_m r_o s^2 + C_5 L_5 R_2 r_o s^2 + C_5 L_5 R_$
- 10.257 INVALID-ORDER-257 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_5R_2R_5r_os^3 + C_2R_2R_5r_os^2 + C_5L_5R_2R_5g_mr_os^2 + C_5L_5R_2R_5s^2 C_5L_5R_2r_os^2 + C_5L_5R$
- 10.258 INVALID-ORDER-258 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 R_2 R_5 r_o s^$
- 10.259 INVALID-ORDER-259 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_L R_L s + 1) (C_2 C_5 L_5 R_2 R_5 r_o s^2 + 4 C_2 C_L L_5 R_2 R_5 r_o s^3 + 4 C_2 C_5 L_4 R_2 R_5 r_o s^3 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^3 + 4 C_2 C_5 L_5 R_2 R_5 r_o s^3 + 4 C_2 C_4 R_2 R_5 r_o s^3 + 4 C_4 R_4 R_5 r_o s^3 + 4 C_5 R_5 R_5 R_5 r_o s^3 + 4 C_$
- 10.260 INVALID-ORDER-260 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + \frac{1}{C_L s}\right)$

10.261 INVALID-ORDER-261
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(L_5s+\frac{1}{C_5s}\right)}{L_5s+R_5+\frac{1}{C_5s}}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 R_2 R_5 r_o s^4 + C_3 R_2 R_5 r_o s^4 + C_5 R_2 R_5 r_o s^3 + C_2 R_2 R_5 r_o s^3 + C_2 R_2 R_5 r_o s^4 + C_5 R_2 R_5 r_o s$

10.262 INVALID-ORDER-262
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{4C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5R_2R_5r_os^4 + 4C_2C_5C_LL_5R_2R_Lr_os^4 + 4C_2C_5C_LL_4R_2R_5r_os^4 + 4C_2C_5C_LR_2R_5R_Lr_os^3 + 4C_2C_5L_5R_2r_os^3 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_LR_2R_5r_os^2 + 4$

10.263 INVALID-ORDER-263
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right)$$

10.264 INVALID-ORDER-264
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5C_LL_5L_LR_2R_Lr_os^5 + 4C_2C_5L_LL_Rr_os^4 + 4C_2C_5L_5L_Rr_os^4 + 4C_2C_5L_5R_2R_5r_os^3 + 4C_2C_5L_LR_2R_5r_os^3 + 4C$

10.265 INVALID-ORDER-265
$$Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

10.266 INVALID-ORDER-266
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L\right)$$

10.267 INVALID-ORDER-267
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.268 INVALID-ORDER-268
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

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

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10.269 INVALID-ORDER-269 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)
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$$H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}R_{2}R_{5}g_{m}r_{o}s + C_{2}R_{2}r_{o}s + C_{2}R_{5}r_{o}s + R_{5}g_{m}r_{o} + R_{5} - r_{o}\right)}{2C_{2}C_{L}L_{L}R_{2}g_{m}r_{o}s^{3} + 4C_{2}C_{L}L_{L}r_{o}s^{3} + C_{2}C_{L}R_{2}R_{5}g_{m}r_{o}s^{2} + C_{2}C_{L}R_{2}R_{5}s^{2} + 2C_{2}C_{L}R_{2}r_{o}s^{2} + 4C_{2}C_{L}R_{2}r_{o}s^{2} + 4C_{2}C_{L}R_{2}r_{o}$$

10.270 INVALID-ORDER-270
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$$

$$H(s) = \frac{L_L R_L s \left(C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o R_5 r_o s + C_2 R_2 R_5 r_o$$

10.271 INVALID-ORDER-271
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.272 INVALID-ORDER-272
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 R_2 r_o s + C_2 R_2 R_5 r_o s + C_2 R_$$

10.273 INVALID-ORDER-273
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_2C_5R_2r_os^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LR_2r_os^2 + 2C_2C_5R_2g_mr_os + 4C_2C_5R_2s + 4C_2C_5r_os + C_2C_LR_2g_mr_os + C_2C_LR_2s + C_2C_Lr_os + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L}\right)}$$

10.274 INVALID-ORDER-274
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 C_L R_2 R_L r_o s^3 + 2 C_2 C_5 R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 2 C_2 L_R g_m r_o s^2 + C_2 C_L R_2 R_L g_m r_o s + C_2 R_2 g_m r_o s + C_2 R_2$$

$$-02050L1t21tLr_0s + 202051t21tLymr_0s + 402051t21tLs + 02051t2r_0s + 402051tLr_0s + 020L1t21tLymr_0s + 020L1t21tLs + 020L1t21t$$

10.275 INVALID-ORDER-275
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4C_2 C_5 C_L R_2 r_o s^2 + 4C_2 C_5 C_L R_2 r_o s^2 + 4C_2 C_5 R_2 g_m r_o s + 4C_2 C_5 R_2 s + 4C_2 C_5 R_2 s + 4C_2 C_5 R_2 g_m r_o s + 4C_2 C_L R_2 g_m r_o s + 4C_5 C_L R_2 g_m r_$$

10.276 INVALID-ORDER-276
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L L_L R_2 g_m r_o s^3 + 4C_2 C_5 C_L L_L r_o s^3 + C_2 C_5 C_L R_2 r_o s^2 + 2C_2 C_5 R_2 g_m r_o s + 4C_2 C_5 R_2 s + 4C_2 C_5 r_o s + C_2 C_L R_2 g_m r_o s + C_2 C_L R_2 g_m r_o s + 2C_5 C_L L_L g_m r_o s^2 + 4C_5 C_L L_L s^2 + C_5 C_L r_o s + 2C_5 G_L r_o s + 2C_5 G_L$$

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H(s) = \frac{\left(C_{L}L_{L}s^{2} + C_{L}R_{L}s + 1\right)\left(-C_{2}C_{5}R_{2}r_{o}s^{2} + C_{2}R_{2}g_{m}r_{o}s + C_{2}R_{2}s + C_{2}r_{o}s - C_{5}r_{o}s + g_{m}r_{o} + 1\right)}{s\left(2C_{2}C_{5}C_{L}L_{L}R_{2}g_{m}r_{o}s^{3} + 4C_{2}C_{5}C_{L}L_{L}r_{o}s^{3} + 2C_{2}C_{5}C_{L}R_{2}R_{L}g_{m}r_{o}s^{2} + 4C_{2}C_{5}C_{L}R_{2}r_{o}s^{2} + 2C_{2}C_{5}R_{2}g_{m}r_{o}s + 4C_{2}C_{5}R_{2}s + 4C_{2}C_{5}r_{o}s + C_{2}C_{L}R_{2}s + C
10.279 INVALID-ORDER-279 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_L R_2 R_L r_o s^4 + 2 C_2 C_5 L_L R_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_L R_2 r_o s^3 + C_2 C_L R_2 r_o s^3 + C
10.280 INVALID-ORDER-280 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (C_L L_L R_L s^2 + L_L s + R_L) (-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s)
H(s) = \frac{(C_L L_L L_C + 
10.281 INVALID-ORDER-281 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R_L \left( C_L L_L s^2 + 1 \right) \left( -C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o \right)
H(s) = \frac{16L\left(C_L L_L s + 1\right)\left(C_2 C_5 L_L R_2 R_L g_m r_o s^4 + 4C_2 C_5 C_L L_L R_2 R_L s^4 + C_2 C_5 L_L R_2 r_o s^4 + 4C_2 C_5 L_L R_2 r_o s^4 + 4C_2 C_5 L_L R_2 r_o s^4 + 4C_2 C_5 R_L R_2 r_o s^4 + 4C_2 
10.282 INVALID-ORDER-282 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
H(s) = \frac{-C_2C_5R_2R_5r_os^2 + C_2R_2R_5g_mr_os + C_2R_2R_5s - C_2R_2r_os + C_2R_5r_os - C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_2C_5C_LR_2R_5r_os^3 + 2C_2C_5R_2R_5g_mr_os^2 + 4C_2C_5R_2r_os^2 + C_2C_LR_2r_os^2 + C_2C_LR_2r_os^2
10.283 INVALID-ORDER-283 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_L \left( -C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s - C_5 R_5 r_o s + R_
H(s) = \frac{R(s)}{C_2C_5C_LR_2R_5R_Lr_os^3 + 2C_2C_5R_2R_5R_Lg_mr_os^2 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_5R_2R_5r_os^2 + 4C_2C_5R_5R_Lr_os^2 + C_2C_LR_2R_5R_Lr_os^2 + C_2C_LR_2R_5R_Lr_os^2 + C_2R_2R_5r_os^2 + 4C_2R_2R_5r_os^2 + 4C_2R_3R_5r_os^2 + 4C_2R_5R_5r_os^2 + 4C_2R_5R_5r_os^2 + 4C_2R_5R_5r_os^2 + 4C_2R_5R_
10.284 INVALID-ORDER-284 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (C_L R_L s + 1) \left( -C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s^2 \right)
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 $H(s) = \frac{L_L s \left(-C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_L R_2 r_o s^4 + 2 C_2 C_5 L_L R_2 g_m r_o s^3 + 4 C_2 C_5 L_L R_2 s^3 + 4 C_2 C_5 L_L r_o s^3 + C_2 C_L L_L R_2 g_m r_o s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + 4 C_5 L_L s^2 + C_5 r_o s + C_L L_L g_m r_o s^2 + C_L g_m r_o$

10.277 INVALID-ORDER-277 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.278 INVALID-ORDER-278 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.285 INVALID-ORDER-285 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

 $(C_L L_L s^2 + 1) (-C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_$ $H(s) = \frac{(C_L L_L S + 1) \left(-C_2 C_5 L_L L_R S_5 g_m r_o s^4 + 4 C_2 C_5 L_L R_5 g_m r_o s^4 + 4 C_2 C_5 L_L R_5 g_m r_o s^4$

10.286 INVALID-ORDER-286 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_2 C_5 R_2 R_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 r_o s + C_2 R_2 r_o s + C_2 R_5 r_o s - C_5 R_5 r_o s -$

10.287 INVALID-ORDER-287 $Z(s) = \left(\infty, R_2 + \frac{1}{C_{7s}}, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_{Ls}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_LR_2R_5g_mr_os^4 + 4C_2C_5C_LL_LR_2R_5s^4 + 4C_2C_5C_LL_RS_ros^4 + 2C_2C_5C_LR_2R_5R_Lg_mr_os^3 + 4C_2C_5C_LR_2R_5R_Ls^3 + C_2C_5C_LR_2R_5r_os^3 + 4C_2C_5C_LR_2R_5r_os^3 + 4C_2C_5C_LR_2R_5r_os^3$

10.288 INVALID-ORDER-288 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.289 INVALID-ORDER-289 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_LR_2R_5r_os^4 + 4C_2C_5C_LL_Rg_5r_os^4 + 4C_2C_5L_LR_2R_5g_mr_os^3 + 4C_2C_5L_LR_2R_5r_os^3 + 4C_2C_5L_LR_2r_os^3 + 4C_2C_5L_LR_2r_os^3 + 4C_2C_5L_LR_2r_os^3 + 4C_2C_5R_2r_os^3 + 4C$

10.290 INVALID-ORDER-290 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_LR_2R_5R_Ls^4 + C_2C_5C_LL_LR_2R_5r_os^4 + 4C_2C_5C_LL_Rs_Rr_os^4 + C_2C_5C_LR_2R_5R_Lr_os^3 + 2C_2C_5R_2R_5R_Lg_mr_os^2 + 4C_2C_5R_2R_5R_Ls^2 + C_2C_5R_2R_5R_Lr_os^2 + 4C_2C_5R_2R_5R_Lr_os^3 + 2C_2C_5R_2R_5R_Lr_os^3 + 2C_2C_5R_2R_5R_Ls^2 + C_2C_5R_2R_5R_Ls^2 + C_2C_5R_2R_5R_Lr_os^3 + 2C_2C_5R_2R_5R_Ls^2 + C_2C_5R_2R_5R_Ls^2 + C_2C_5R_2R_5R_Ls^2$

10.291 INVALID-ORDER-291 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5R_2R_5g_mr_os^2 + C_2C_5R_2R_5s^2 - C_2C_5R_2r_os^2 + C_2C_5R_2r_os^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LR_2R_5g_mr_os^2 + C_2C_5C_LR_2r_os^2 + C_2C_5C_LR_2r_os^2 + C_2C_5C_LR_2r_os^2 + C_2C_5R_2g_mr_os + 4C_2C_5r_os + C_2C_LR_2g_mr_os + C_2C_LR_2s +$

10.292 INVALID-ORDER-292 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{\kappa_L \left(C_2 C_5 \kappa_2 \kappa_5 g_m r_o s^2 + C_2 C_5 \kappa_2 \kappa_5 g_m r_o s^2 + C_2 C_5 \kappa_2 r_o s^2 + C_2 C_5 \kappa_5 r_o s^2 + C_2 C_5 \kappa_$

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10.293 INVALID-ORDER-293 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_5 s}\right)
H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 R_5 g_m r_o s
10.294 INVALID-ORDER-294 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 g_m r_o s + C_5 R_5 g_m r_o s +
10.295 INVALID-ORDER-295 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L_L s \left(C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 s^2 - C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_5 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 R_2 r_o s^2 + 
H(s) = \frac{L_L s \left( C_2 C_5 R_2 R_5 g_m r_o s + C_2 C_5 R_2 r_o s + C_2 C_5 R_2 r_o s + C_2 C_5 R_2 r_o s + C_2 R_2 g_m r_o s 
10.296 INVALID-ORDER-296 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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}Ls^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}C_{5}R_{2}R_{5}g_{m}r_{o}s^{2} + C_{2}C_{5}R_{2}R_{5}s^{2} - C_{2}C_{5}R_{2}r_{o}s^{2} + C_{2}C_{5}R_{2}r_{o}s^{2} + C_{2}R_{2}g_{m}r_{o}s + C_{2}R_{2}g_{m}r_{o}s + C_{2}R_{2}g_{m}r_{o}s + C_{2}R_{2}g_{m}r_{o}s + C_{2}R_{2}g_{m}r_{o}s^{2} + C_{2}C_{5}C_{L}R_{2}R_{2}g_{m}r_{o}s^{2} + C_{2}C_{5}C_{L}R_{2}R_{2}s^{2} + C_{2}C_{5}C_{L}R_{2}R_{2}s^{2} + C_{2}C_{5}C_{L}R_{2}R_{2}s^{2} + C_{2}C_{5}C_{L}R_{2}r_{o}s^{2} + C_{2}C_{5}C_{L}R_{2}r_{o}s^{
10.297 INVALID-ORDER-297 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}}\right)
H(s) = \frac{1}{C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_LR_2R_5R_Ls^4 + C_2C_5C_LL_LR_2R_Lr_os^4 + C_2C_5L_LR_2R_5g_mr_os^3 + C
10.298 INVALID-ORDER-298 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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{(C_L L_L R_2)}{C_2 C_5 C_L L_L R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_L R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_L R_2 R_L g_m r_o s^4 + C_2 C_5 C_L L_L R_2 r_o s^4 + C_2 C_5 C_L L_L 
10.299 INVALID-ORDER-299 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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_2C_5C_LL_LR_2R_5g_mr_os^4 + C_2C_5C_LL_LR_2R_5s^4 + 2C_2C_5C_LL_LR_2R_Lg_mr_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_Rr_os^4 + 4C_2C_5C_LR_os^4 + 4C_2C
10.300 INVALID-ORDER-300 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)
                              H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 r_o s^3 + 2 C_2 C_5 R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 R_2 g_m r_o s + C_5 R_2 g_m r_o s^2 + C_5 R_2 g_m r_o s^2
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10.302 INVALID-ORDER-302 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_L \left( C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s^2 \right)
H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 g_m r_o s + C_2 R_2 g_m r_o s^2 + C_2 R_2 g_m r_o s^3 + C_2 C_5 R_2 R_2 g_m r_o s^3 + C_
10.303 INVALID-ORDER-303 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \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_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 s^3 + C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 g_m r_o s + 4 C_2 C_5 R_2 g_m r_o s + C_2 C_L R_2 g_m r_o s + C_2 C_L R_2 g_m r_o s^2 + C_2 C_L 
10.304 INVALID-ORDER-304 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \infty, L_5 s + \frac{1}{C_{5s}}, L_L s + \frac{1}{C_{Ls}}\right)
H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_5 R_2 g_m r_o s + 4 C_2 C_5 R_2 s + 4 C_2 C_5 R_2 s + 4 C_2 C_5 R_2 s + C_2 C_L R_2 s + C_2 C_
10.305 INVALID-ORDER-305 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    L_{LS}\left(C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}s^{3}+C_{2}C_{5}L_{5}r_{o}s^{3}-C_{2}C_{5}R_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s^{2}+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s^{2}+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{2}s+C_{2}R_{
H(s) = \frac{L_L s \left( C_2 C_5 L_5 R_2 g_m r_o s^5 + C_2 C_5 L_5 R_2 s^5 + C_2 C_5 L_5 r_o s^5 + C_2 C_5 L_5 r_o s^5 + C_2 C_5 L_5 r_o s^5 + C_2 R_2 g_m r_o s + C_2 R_2 
10.306 INVALID-ORDER-306 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}s^{3}+C_{2}C_{5}L_{5}r_{o}s^{3}-C_{2}C_{5}R_{2}r_{o}s^{2}+C_{2}R_{2}g_{m}r_{o}s+C_{2}R_{2}s+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}R_{2}s^{2}+C_{2}
H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 r_o s^5 - C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2
10.307 INVALID-ORDER-307 Z(s) = \left( \infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}} \right)
                                                     \overline{C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5L_LR_2R_Lr_os^4 + C_2C_5L_5L_LR_2g_mr_os^4 + C_2C_5L_5L_RR_2g_mr_os^4 + C_2C_5L_
10.308 INVALID-ORDER-308 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
```

 $H(s) = \frac{C_2C_5L_5R_2g_mr_os^3 + C_2C_5L_5R_2s^3 + C_2C_5L_5r_os^3 - C_2C_5R_2r_os^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os + C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_5R_2g_mr_os^3 + C_2C_5C_LL_5r_os^3 + C_2C_5C_LR_2r_os^2 + 2C_2C_5R_2g_mr_os + 4C_2C_5r_os + 4C_2C_5r_os + C_2C_LR_2g_mr_os + C_2C_LR_2s + C_2C_Lr_os + C_5C_LL_5s^2 + C_5C_LL_5s^2 + C_5C_Lr_os + 2C_5g_mr_o + 4C_5C_LR_2r_os + C_5C_LR_2r_os +$

10.301 INVALID-ORDER-301 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right)$

 $H(s) = \frac{}{C_2C_5C_LL_5L_LR_2q_mr_os^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_Lr_os^5 + 2C_2C_5C_LL_LR_2R_Lg_mr_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_Rr_os^4 + 4C$

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10.309 INVALID-ORDER-309 Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)
```

$$H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2g_mr_os^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5R_2R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_2R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_Lr_os^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_2R_Ls^4$$

10.310 INVALID-ORDER-310
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{2 C_2 C_5 L_5 R_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 + 2 C_2 R_2 R_L g_m r_o s + 4 C_2 R_L r_o s + 2 C_5 L_5 R_L g_m r_o s^2 + 4 C_5 L_5 R_L s^2 + C_5 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s + 2 R_L g_m r_o s^2 + 2 C_5 R_2 r_o s^2 + 2 C_5 R_2$$

10.311 INVALID-ORDER-311
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_2C_5L_5R_2r_os^3 + C_2L_5R_2g_mr_os^2 + C_2L_5R_2s^2 + C_2L_5r_os^2 - C_2R_2r_os - C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o}{C_2C_5C_LL_5R_2r_os^4 + 2C_2C_5L_5R_2g_mr_os^3 + 4C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_2g_mr_os^3 + C_2C_LL_5R_2s^3 + C_2C_LL_5r_os^3 + C_2C_LL_5r_os^3$$

10.312 INVALID-ORDER-312
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C$$

10.313 INVALID-ORDER-313
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(-C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 - C_2 L_5 R_2 r_o s^2 + C_2 L_5 R_2 r_o s^3 + C_2 C_L L_5 R_2 r_o s^3$$

10.314 INVALID-ORDER-314
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

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

10.315 INVALID-ORDER-315
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(-C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_2 R_2 r_o s - C_5 L_5 r_o s^2 - C_5 R_2 r_o s - C_5 L_5 r_o s^2 - C_5 R_2 r_o s -$$

10.316 INVALID-ORDER-316
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5L_Lr_os^5 + 2C_2C_5C_LL_5R_2g_mr_os^4 + 4C_2C_5C_LL_5R_2r_os^4 + 4C_2C_5C_LL_5R_2r_os^4 + 4C_2C_5L_Ls_Rr_os^4 + 4C_$$

- 10.317 INVALID-ORDER-317 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_Lr_os^5 + 2C_2C_5L_5L_LR_2R_Lg_mr_os^4 + 4C_2C_5L_5L_LR_2r_os^4 + 4C_2C_5L_5L_RR_2r_os^4 + 4C_2C_5L_5L_RR_2r_os^$
- **10.318** INVALID-ORDER-318 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5L_LL_RL_Rs^5 + 2C_2C_5L_5L_LR_2g_mr_os^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_Rs^3 + 4C_2C_5L_Rs^3 + 4C_2C_5L_Rs^3 + 4C_2C_5L_Rs^3 + 4C_2C_5L_Rs^3 + 4C_2C_5L_$
- 10.319 INVALID-ORDER-319 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_L$
- **10.320** INVALID-ORDER-320 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + C_5 R_5 g_m r_o s + C_5 R_5 s C_5 r_o s + C_5 R_5 g_m r_o s^2 + C_5 R_5 g_$
- 10.321 INVALID-ORDER-321 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_5R_2g_mr_os^3 + C_2C_5L_5r_os^3 + C_2C_5L_5r_os^3 + C_2C_5R_2g_mr_os^2 + C_2C_5R_2r_os^2 + C_2C_5R_2r_os^2 + C_2C_5R_2r_os^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os + C_5L_5g_mr_os^2 + C_5L_5s^2 + C_5R_5g_mr_os + C_5R_5g_mr_os^2 +$
- 10.322 INVALID-ORDER-322 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 g_m r_o s^$
- 10.323 INVALID-ORDER-323 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 r_o s^2$
- 10.324 INVALID-ORDER-324 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}s^{3}+C_{2}C_{5}L_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}g_{m}r_{o}s^{2}+C_{2}C_{5}R_{2}R_{5}s^{2}-C_{2}C_{5}R_{2}r_{o}s^{2}+C_{2}C_{5}R_{2}r$

10.325 INVALID-ORDER-325 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 g_m r_o s^5 + C_2 C_5 L_1 R_2 g_m r_o s^5 + C_2 C_5 L_1 L_2 R_2 s^5 + C_2 C_5 L_2 L_2 R_2 s^5 + C_2 L_2 L_2 R_2 s^5 + C_2 L_2 L_2 R_2 s^5 + C_2 L_2 L_2 R_2 s^5 + C_2$

10.326 INVALID-ORDER-326 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.327 INVALID-ORDER-327 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5L_LR_2r_os^4 + C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4$

10.328 INVALID-ORDER-328 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2g_mr_os^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_Lr_os^5 + C_2C_5C_LL_LR_2R_5g_mr_os^4 + C_2C_5C_LL_LR_2R_2g_mr_os^4 + C_2C_5C_LL_LR_2R_2g_mr_os^4 + C_2C_5C_LL_LR_2R_2g_mr_os^4 + C_2C_5C_LL_LR_2r_os^4 + C_2C_5C_LL$

10.329 INVALID-ORDER-329 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2g_mr_os^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_Lr_os^5 + C_2C_5C_LL_5R_2R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_Lr_os^4 + C_2C_5C_LL_LR_2R_5g_mr_os^4 + C_2C_5C_LLR_2R_5g_mr_os^4 + C_2C_5C_LL$

10.330 INVALID-ORDER-330 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_5 R_2 R_5 r_o s^3 + C_2 L_5 R_2 R_5 g_m r_o s^2 + C_2 L_5 R_2 r_o s^2 + C_2 L_5 R_2 r_o s^2 + C_2 L_5 R_5 r_o s^2 - C_2 R_2 R_5 r_o s - C_5 L_5 R_5 r_o s^2 - C_2 R_2 R_5 r_o s^2 + C_2 L_5 R_5 r_o s^2 + C_2 L_5$

10.331 INVALID-ORDER-331 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_5R_2R_5r_os^3 + C_2L_5R_2R_5g_mr_os^2 + C_2L_5R_2r_os^2 + C_2L_5R_2r_os^2 + C_2L_5R_5r_os^2 - C_2R_2R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^3 + C_2C_LL_5R_2r_os^3 + C_2$

10.332 INVALID-ORDER-332 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E s}}, \frac{R_L}{C_L R_L s + 1}\right)$

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

- 10.333 INVALID-ORDER-333 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_5r_os^4 + 4C_2C_5L_Ls_Rs_Lr_os^4 + 2C_2C_5L_5R_2R_5g_mr_os^3 + 4C_2C_5L_5R_2R_5g_mr_os^3 + 4C_2C_5L_5R_5g_mr_os^3 + 4C_2C_5L_5R_5g_mr_os$
- **10.334** INVALID-ORDER-334 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$
- 10.335 INVALID-ORDER-335 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{I}{C_2C_5C_LL_5L_LR_2R_5r_os^5 + 2C_2C_5L_5L_LR_2R_5g_mr_os^4 + 4C_2C_5L_5L_LR_2r_os^4 + 4C_2C_5L_5L_LR_2r_os^4 + C_2C_LL_5L_LR_2r_os^4 + C_2C_LL_5L_Rr_os^4 + C_2C$
- 10.336 INVALID-ORDER-336 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_5r_os^5 + 2C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R$
- 10.337 INVALID-ORDER-337 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Lr_os^5 + 2C_2C_5L_5L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_5L_LR_2R_5R_Ls^4 + C_2C_5L_5L_LR_2R_5R_Lr_os^4 + 4C_2C_5L_5L_LR_2R_5R_Lr_os^4 + 4C_2C_5L_5L_LR_2$
- 10.338 INVALID-ORDER-338 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5L_LL_5L_LR_2R_5r_os^5 + 4C_2C_5L_5L_LR_2R_5g_mr_os^4 + 4C_2C_5L_5L_LR_2R_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_LR_5r_os^4 + 4C_2C_5L_5L_Rr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4 + 4C_2C_5L_Tr_os^4$
- 10.339 INVALID-ORDER-339 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5C_LL_5L_LR_5R_Lr_os^5 + C_2C_5C_LL_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_2R_5R_Lg_mr_os^3 + 4C_2C_5L_5R_2R_5R_Ls^3 + C_2C_5L_5R_2R_5R_Lr_os^3 + 4C_2C_5L_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_2R_5R_Lg_mr_os^3 + 4C_2C_5L_5R_2R_5R_Ls^3 + C_2C_5L_5R_2R_5R_Lr_os^3 + C_2C_5L_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_2R_5R_Ls^3 + C_2C_5L_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_2R_5R_Lr_os^4 + 2C_2C_5L_5R_Lr_os^4 + 2C_2C_5L_5R_Lr_os^4 + 2C_2C_5L_5R_Lr_$
- **10.340** INVALID-ORDER-340 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_5 R_2 g_m r_o s^2 + C_2 L_5 R_2 s^2 + C_2 L_5 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 r_o s^2 + C_2 R_2 r_o s^$

- 10.341 INVALID-ORDER-341 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_5R_2r_os^3 + C_2L_5R_2g_mr_os^2 + C_2L_5R_2s^2 + C_2L_5r_os^2 + C_2R_2R_5g_mr_os + C_2R_2R_5g_mr_os + C_2R_2R_5g_mr_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_$
- **10.342** INVALID-ORDER-342 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_Lr_os^4 + C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2R_2g_mr_os^3 + C_2C_5L_5R_2R_Lg_mr_os^3 + C$
- **10.343** INVALID-ORDER-343 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_5 R_2 r_o s^4 + C_2 C_5 C_L L_5 R_2 r_o s^4 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_L L_5 R_2 g_m r_o s^3 + C$
- 10.344 INVALID-ORDER-344 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_5 R_2$
- 10.345 INVALID-ORDER-345 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5L_5L_LR_2g_mr_os^4 + C_2C_5L_5L_LR_2s^4 + C_2C_5L_5L_LR_2s^4 + C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2R_5s^3 + C_2C_5L_5R_2r_os^3 + C_2C_5R_2r_os^3 + C_2C$
- **10.346** INVALID-ORDER-346 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2q_mr_os^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5R_2R_5q_mr_os^4 + C_2C_5C_LL_5R_2R_2q_mr_os^4 + 4C_2C_5C_LL_5R_2R_Lq_mr_os^4 + 4C_2C_5C_LL_5R_Lq_mr_os^4 + 4C_2C_5C_LL_5R_2R_Lq_mr_os^$
- 10.347 INVALID-ORDER-347 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + C_2C_5C_LL_5L_LR_2R_Lr_os^5 + C_2C_5L_LL_Rr_os^5 + C_2C_5L_5L_LR_2R_5g_mr_os^4 + C_2C_5L_5L_RR_2R_5g_mr_os^4 + C_2C_5L_5L_RR_2g_mr_os^4 + C_2C_5L_RR_2g_mr$
- 10.348 INVALID-ORDER-348 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_Rr_os^5 + 4C_2C_5C_$

- 10.349 INVALID-ORDER-349 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_RR_2r_os^5 + 4C_2C_$
- 10.350 INVALID-ORDER-350 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 s^3 - C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 R_2 r_o s^3 +$

10.351 INVALID-ORDER-351 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5L_5R_2r_os^3 + C_2C_5R_2R_5r_os^3 + C_2C_5R_2R_5r$

10.352 INVALID-ORDER-352 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_5R_Lr_os^4 + C_2C_5C_LL_5R_2R_Lr_os^4 + C_2C_5C_LL_5R_2R_Lr_os^4 + C_2C_5C_LR_2R_5R_Lr_os^4 + C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2R_Lg_mr_os^3 + C_2C_5L_5R_2R_Lg_mr_os^3$

10.353 INVALID-ORDER-353 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5R_2R_5g_mr_os^4 + C_2C_5C_LL_5R_2R_5s^4 + 2C_2C_5C_LL_5R_2R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2r_os^4 + 4C_2C_5C_LL_5R_2r_os^2$

- **10.354** INVALID-ORDER-354 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5R_2R_5g_mr_os^4 + C_2C_5C_LL_5R_2R_5s^4 + C_2C_5C_LL_5R_2r_os^4 + C$
- 10.355 INVALID-ORDER-355 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_Rr_os^5 + C_2C$
- **10.356** INVALID-ORDER-356 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_5L_LR_2g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5R_2R_5g_mr_os^4 + C_2C_5C_LL_5R_2R_5s^4 + 2C_2C_5C_LL_5R_2R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2R_Lg_mr_os^4 +$

10.357 INVALID-ORDER-357 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.358 INVALID-ORDER-358 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_Rr_os^5 + 4C_2C_5C_LL_5$

10.359 INVALID-ORDER-359 $Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_RR_2r_os^5 + 4C_2C_$

10.360 INVALID-ORDER-360 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2L_2R_5g_mr_os^2 + C_2L_2R_5s^2 - C_2L_2r_os^2 + C_2R_5r_os + R_5g_mr_o + R_5 - r_o}{C_2C_LL_2R_5g_mr_os^3 + C_2C_LL_2r_os^3 + C_2C_LR_5r_os^2 + 2C_2L_2g_mr_os^2 + 4C_2L_2s^2 + 4C_2r_os + C_LR_5g_mr_os + C_LR_5s + C_Lr_os + 2g_mr_o + 4C_2L_2s^2 + 4C_2L$

10.361 INVALID-ORDER-361 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{C_2 C_L L_2 R_5 R_L g_m r_o s^3 + C_2 C_L L_2 R_L r_o s^3 + C_2 C_L L_2 R_5 r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_L g_m r_o s^2 + C_2 L_2 R_L g_m r_o s^2 + C_2 L_2 R_L g_m r_o s^2 + C_2 L_2 r_o s^2 + C_2 R_5 r_o s + 4 C_2 R_L r_o s + C_L R_5 R_L g_m r_o s +$

10.362 INVALID-ORDER-362 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_L L_2 R_5 g_m r_o s^3 + C_2 C_L L_2 R_L g_m r_o s^3 + 4 C_2 C_L L_2 R_L g_a^3 + C_2 C_L L_2 r_o s^3 + C_2 C_L R_5 r_o s^2 + 4 C_2 C_L R_L r_o s^2 + 2 C_2 L_2 g_m r_o s^2 + 4 C_2 L_2 s^2 + 4 C_2 r_o s + C_L R_5 g_m r_o s + C_L R_5 g_m r_o s + 4 C_L R_L g_$

10.363 INVALID-ORDER-363 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.364 INVALID-ORDER-364 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - r_o\right)}{C_2 C_L L_2 L_L R_5 g_m r_o s^4 + C_2 C_L L_2 L_L r_o s^4 + C_2 C_L L_L R_5 r_o s^3 + 2 C_2 L_2 L_L g_m r_o s^3 + 4 C_2 L_2 L_L s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 R_5 g_m$

10.365 INVALID-ORDER-365 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.366 INVALID-ORDER-366 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $L_L R_L s \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_5 r_o s + R_5 g_m r_o + R_5 - C_2 R_5 r_o s + R_5 r_o s$

10.367 INVALID-ORDER-367 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.368 INVALID-ORDER-368 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $R_L (C_L L_L s^2 + 1) (C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2$ $H(s) = \frac{1}{C_2C_LL_2L_LR_5g_mr_os^4 + C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2R_5s^3 + 2C_2C_LL_$

10.369 INVALID-ORDER-369 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1 \right)}{2C_2 C_5 L_2 R_L g_m r_o s^3 + 4C_2 C_5 L_2 r_o s^3 + 4C_2 C_5 R_L r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + 2C_5 R_L g_m r_o s + 4C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.370 INVALID-ORDER-370 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_2r_os^3 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2r_os - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_2r_os^3 + 2C_2C_5L_2g_mr_os^2 + 4C_2C_5L_2s^2 + 4C_2C_5r_os + C_2C_LL_2g_mr_os^2 + C_2C_LL_2s^2 + C_2C_Lr_os + C_5C_Lr_os + 2C_5g_mr_o + 4C_5 + C_Lg_mr_o + C_L\right)}$

10.371 INVALID-ORDER-371 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 C_L L_2 R_L r_o s^4 + 2 C_2 C_5 L_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 r_o s^3 + 4 C_2 C_5 L_2 r_o s^3 + 4 C_2 C_5 R_L r_o s^2 + C_2 L_2 R_L g_m r_o s^3 + C_2 C_L L_2 R_L r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L$

10.372 INVALID-ORDER-372 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 r_o s^3 + 4C_2 C_5 C_L L_2 r_o s^3 + 4C_2 C_5 L_2 g_m r_o s^2 + 4C_2 C_5 L_2 s^2 + 4C_2 C_5 L_2 g_m r_o s^2 + C_2 C_L L$

10.373 INVALID-ORDER-373 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L L_2 L_L g_m r_o s^4 + 4C_2 C_5 C_L L_2 r_o s^3 + 4C_2 C_5 C_L L_2 r_o s^3 + 2C_2 C_5 L_2 g_m r_o s^2 + 4C_2 C_5 L_2 s^2 + 4C_2 C_5 r_o s + C_2 C_L L_2 g_m r_o s^2 + C_2 C_L L_2 g_m r_o s^2 + 4C_5 C_L L_L g_m r_o s^2 + 4C_5 C$ 10.374 INVALID-ORDER-374 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_2 L_L r_o s^5 + 2 C_2 C_5 L_2 L_L g_m r_o s^4 + 4 C_2 C_5 L_2 r_o s^3 + 4 C_2 C_5 L_L r_o s^3 + C_2 C_L L_L L_L g_m r_o s^4 + C_2 C_L L_L L_L r_o s^3 + C_2 L_L g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 C_L L_L r_o s^3 + 2 C_5 L_L g_m r_o s^2 + C_L L_L g_m r_o s^2 + C_L L_L g_m r_o s^2 + C_L L_L r_o s^3 + C_L r$ 10.375 INVALID-ORDER-375 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L L_2 L_L g_m r_o s^4 + 4C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 r_o s^3 + 4C_2$ 10.376 INVALID-ORDER-376 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$ $H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{C_2 C_5 C_L L_2 L_L R_L r_o s^5 + 2 C_2 C_5 L_2 L_L R_L g_m r_o s^4 + 4 C_2 C_5 L_2 L_L R_L s^4 + C_2 C_5 L_2 L_L R_L r_o s^3 + C_2 L_2 R_L r_o s^3 + C$ 10.377 INVALID-ORDER-377 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 R_L r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 R_L r_o s^3 + C_2 C_5 L_2 L_L R_L r_o s^4 + C_2 C_5 L_2 L_L r_o s^4 + C_2 C_5 L_2 L_L r_o s^3 + C_2 C_5 L_2 L_L r_o s^3 + C_2 C_5 L_2 L_L r_o s^4 + C_2 C_5 L_L r_o$

10.378 INVALID-ORDER-378 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(-C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^3 + C_2 L_2 g_m r_o s^3 + C_2 L_2 g_m r_o s^3 + C_2 C_5 L_2 L_2 L_2 R_2 r_o s^3 + C_2 C_5 R_2 r_o s^3 + C_2 R_2 r_o$

10.379 INVALID-ORDER-379 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_5 r_o s - C_5 R_5 r_o s + R_5 g_m r_o + R_5 - r_o \right)}{2 C_2 C_5 L_2 R_5 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 R_5 r_o s^3 + 4 C_2 C_5 L_2 R_5 r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + 4 C_2 L_2 R_5 s^2 + C_2 L_2 R_5 r_o s + 4 C_2 R_L r_o s^2 + C_2 R_5 r_o s + 4 C_5 R_5 R_L g_m r_o s^2 + 4 C_5 R_5 R_L g_m r_o s^2 + C_5 R_5 R_L g_m r$

10.380 INVALID-ORDER-380 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_2R_5r_os^3 + C_2L_2R_5g_mr_os^2 + C_2L_2R_5s^2 - C_2L_2r_os^2 + C_2R_5r_os - C_5R_5r_os + R_5g_mr_o + R_5 - r_o}{C_2C_5C_LL_2R_5r_os^4 + 2C_2C_5L_2R_5g_mr_os^3 + 4C_2C_5L_2R_5s^3 + 4C_2C_5R_5r_os^2 + C_2C_LL_2R_5s^3 + C_2C_LL_2R_5s^3 + C_2C_LL_2r_os^3 + C_2C_LL_$

- **10.381** INVALID-ORDER-381 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 C_2 L_2 r_o s^2 + C_2 R_5 r_o s C_5 R_5 r_o s + C_2 R_5 r_o s C_5 R_5 r_o s + C_2 R_5 R_L r_o s^3 + C_2 R$
- **10.382** INVALID-ORDER-382 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_L R_L s + 1) \left(-C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 C_2 L_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^3 + C_2 C_L L_2$
- 10.383 INVALID-ORDER-383 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(-C_{2}C_{5}L_{2}R_{5}r_{o}s^{3}+C_{2}L_{2}R_{5}g_{m}r_{o}s^{2}+C_{2}L_{2}R_{5}s^{2}-C_{2}L_{2}r_{o}s^{2}+C_{2}L_{2}r_{o}s^{2}+C_{2}L_{2}R_{5}g_{m}r_{o}s$
- **10.384** INVALID-ORDER-384 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 C_2 L_2 r_o s^2 + C_2 R_5 r_o s C_5 R_5 r_o s C_$
- 10.385 INVALID-ORDER-385 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_5s^5 + 2C_2C_5C_LL_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_5r_os^4 + 4C_2C_5C_LL_2R_5r_os$
- 10.386 INVALID-ORDER-386 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5R_Lr_os^5 + 2C_2C_5L_2L_LR_5R_Lg_mr_os^4 + 4C_2C_5L_2L_LR_5R_Ls^4 + C_2C_5L_2L_LR_5r_os^4 + C_2C_5L_2R_5R_Lr_os^3 + 4C_2C_5L_LR_5R_Lr_os^3 + C_2C_LL_2L_LR_5R_Lg_mr_os^4 + C_2C_LL_2L_LR_5R_Ls^4 + C_2C_LL_2L_LR_5R_Lr_os^3 + C_2C_LL_2L_LR_5R_Lr_os^3 + C_2C_LL_2L_LR_5R_Lr_os^4 + C_2C_LL_2L_LR_5R_Lr_os^4 + C_2C_LL_2L_Rr_os^4 + C_2C_LL_2L$
- 10.387 INVALID-ORDER-387 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_5R_Ls^5 + C_2C_5C_LL_2L_Rs_ros^5 + 4C_2C_5C_LL_2L_Rs_ros^4 + 2C_2C_5L_2L_Rs_gmr_os^4 + 4C_2C_5L_2L_Rs_s^4 + 2C_2C_5L_2L_Rs_gmr_os^3 + 4C_2C_5L_2R_5R_Ls^3 + C_2C_5L_2R_5r_os^3 + 4C_2C_5L_2R_5r_os^3 + 4C_2C_5R_5R_5r_os^3 + 4C_2C_5R_5R_5R_5r_os^3 + 4C_2C_5R_5R_5r_os^3 + 4C_2C_5R_5R_5r_os^$
- 10.388 INVALID-ORDER-388 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_5R_Lg_mr_os^5 + 4C_2C_5L_LL_LR_5R_Ls^5 + C_2C_5C_LL_2L_LR_5r_os^5 + C_2C_5C_LL_2R_5R_Lr_os^4 + 4C_2C_5C_LL_LR_5R_Lr_os^4 + 4C_2C_5L_2R_5R_Lg_mr_os^3 + 4C_2C_5L_2R_5R_Ls^3 + C_2C_5L_2R_5R_Lr_os^4 + 4C_2C_5L_2L_LR_5R_Lr_os^4 + 4C_2C_5L_2L_Rs_Rr_os^4 + 4C_2C_5L_2R_5R_Lr_os^4 + 4C_2C_5R_Lr_os^4 + 4C_2C_5R_$

 $\textbf{10.389} \quad \textbf{INVALID-ORDER-389} \ Z(s) = \left(\infty, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ R_L \right)$ $R_L \left(C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2R_5s^3 - C_2C_5L_2r_os^3 + C_2C_5R_5r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2r_os + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1 \right)$ $H(s) = \frac{R_L \left(C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2R_5s^3 - C_2C_5L_2r_os^3 + C_2C_5R_5r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2r_os + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1 \right)$

10.390 INVALID-ORDER-390 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2R_5s^3 - C_2C_5L_2r_os^3 + C_2C_5R_5r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2r_os + C_5R_5g_mr_os + C_5R_5s - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_2R_5g_mr_os^3 + C_2C_5C_LL_2r_os^3 + C_2C_5C_LR_5r_os^2 + 2C_2C_5L_2g_mr_os^2 + 4C_2C_5L_2s^2 + 4C_2C_5r_os + C_2C_LL_2g_mr_os^2 + C_2C_LL_2s^2 +$

10.391 INVALID-ORDER-391 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 g_m r_o s^2 + C_2 L_2 g_m r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 R_5 g_m r_o s^3$

10.392 INVALID-ORDER-392 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 R_5 g_m r_o s + C_5 R_5 s - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L L_2 R_5 g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_$

10.393 INVALID-ORDER-393 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.394 INVALID-ORDER-394 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 C_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^3 + C_2 C_5 L_2 R_5 r_o s^3 +$

10.395 INVALID-ORDER-395 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.396 INVALID-ORDER-396 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_5R_Ls^5 + C_2C_5C_LL_2L_Rr_os^5 + C_2C_5C_LL_2L_Rr_os^4 + C_2C_5L_2L_Rr_os^4 + C_2C_5L_2L_Rr$

10.397 INVALID-ORDER-397 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{(C_L L_L R_L s)}{C_2 C_5 C_L L_2 L_L R_5 g_m r_o s^5 + C_2 C_5 C_L L_2 L_L R_5 g_m r_o s^5 + C_2 C_5 C_L L_2 L_L R_L g_m r_o s^5 + C_2 C_5 C_L L_2 L_L R_L s^5 + C_2 C_5 C_L L_$

10.398 INVALID-ORDER-398 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5g_mr_os^5 + C_2C_5C_LL_2L_LR_5s^5 + 2C_2C_5C_LL_2L_LR_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2R_cs^5 + C_$

10.399 INVALID-ORDER-399 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_5 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1 \right)}{C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 R_L s^3 + C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2 r_o s^3 + 4 C_2 C_5 R_L r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 + 2 C_5 R_L g_m r_o s + 4 C_5 R_L s + C_5 r_o s + g_m r_o + 1}$

10.400 INVALID-ORDER-400 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2L_5g_mr_os^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2r_os^3 + C_2C_5L_2r_os^3 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2r_os + C_5L_5g_mr_os^2 + C_5L_5s^2 - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_2L_5g_mr_os^4 + C_2C_5C_LL_2r_os^3 + C_2C_5L_2r_os^3 + C_2C_5L_2g_mr_os^2 + 4C_2C_5L_2s^2 + 4C_2C_5L_2g_mr_os^2 + C_2C_LL_2g_mr_os^2 + C_5C_LL_2s^2 + C_2C_LL_2s^2 + C_2C_L$

10.401 INVALID-ORDER-401 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 r_o s^3 + C_2 L_5 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s^3 + C_2 C_5 L_2 L_5 r_o s^3 + C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2$

10.402 INVALID-ORDER-402 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1\right)}{s \left(C_2 C_5 C_L L_2 L_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4 C_2 C_5 C_L L_2 R_L g_m r_o$

10.403 INVALID-ORDER-403 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_7 s}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s + C_5 L_5 g_m r_o s^2 + C_5 L_5 s^2 - C_5 r_o s + g_m r_o + 1}{s \left(C_2 C_5 C_L L_2 L_5 g_m r_o s^4 + C_2 C_5 C_L L_2 L_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_2 g_m r_o s^4 + C_2 C_5 C_L L_2 r_o s^3 + C_2 C_5 L_2 L_2 g_m r_o s^2 + C_2 C_L L_2 g_m r_o s^2 +$

10.404 INVALID-ORDER-404 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 r_o s^3 + C_2 L_5 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s^3 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 r_o s^3 + C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_5 L_5 g_m r_o s^4 + C_3 C_5 L_5 g_m r_o s^4 + C$

10.405 INVALID-ORDER-405 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.406 INVALID-ORDER-406 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_LR_Lr_os^5 + C_2C_5L_2L_5L_Lg_mr_os^5 + C_2C_5L_2L_5L_2L_2g_mr_os^5 + C_2C_5L_2L_2L_2g_mr_os^5 + C_2C_5L_2L_2L_2g_mr_os^5 + C_2C_5L_2L_2L_2g_mr_os^5 + C_2C_5L_2L_2g_mr_os^5 + C_2C_5L_2L_2g_mr_os^5 + C_2C_5L_2L_2g_mr_os^5 + C_2C_5L_2L_2g_mr_os^5 + C_2C_5L_2L_2g_mr_os^5 + C_2C_5L_2g_mr_os^5 + C_2C_5L_2g$

10.407 INVALID-ORDER-407 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

10.408 INVALID-ORDER-408 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

10.409 INVALID-ORDER-409 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 r_o s^2 + C_2 L_5 r_o s^2 + L_5 g_m r_o s + L_5 s - r_o \right)}{2C_2 C_5 L_2 L_5 R_L g_m r_o s^4 + 4C_2 C_5 L_2 L_5 r_o s^4 + 4C_2 C_5 L_2 L_5 r_o s^3 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 g_m r_o s^3 + 2C_2 L_2 R_L g_m r_o s^2 + 4C_2 L_2 R_L g_m r_o s^2 + 4C_2 L_5 R_L g_m r_o s^2 + 4C_5 L_5 R_L g_m r_o$

10.410 INVALID-ORDER-410 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_2L_5r_os^4 + C_2L_2L_5g_mr_os^3 + C_2L_2L_5s^3 - C_2L_2r_os^2 + C_2L_5r_os^2 + C_5L_5r_os^2 + L_5g_mr_os + L_5s - r_o}{C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5L_2L_5g_mr_os^4 + 4C_2C_5L_2s^4 + 4C_2C_5L_5r_os^3 + C_2C_LL_2s^4 + C_2C_LL_2r_os^3 + C_2C_LL_2r_os^3 + C_2C_LL_2r_os^3 + 2C_2L_2g_mr_os^2 + 4C_2L_2s^2 + 4C_2r_os + C_5C_LL_5r_os^3 + 2C_5L_5g_mr_os^2 + 4C_5L_5s^2 + C_LL_5g_mr_os^2 + C_LL_$

10.411 INVALID-ORDER-411 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 r_o s^2 + C_2 L_5 r_o s^2 - C_5 L_5 r_o s^2 + C_5 L_5 r_o s^3 + C_5 L_5 r_o s$

10.412 INVALID-ORDER-412 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_L R_L s + 1) \left(-C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 r_o s^2 + C_2 L_2 L_5 r_o s^4 + C_2 C_2 L$

10.413 INVALID-ORDER-413 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.414 INVALID-ORDER-414 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 r_o s^2 + C_2 L_5 r_o s^2 - C_5 L_5 r_o s^2 - C_5 L_5 r_o s^2 - C_5 L_5 r_o s^4 + C_2 C_4 L_2 L_5 L_4 r_o s^6 + 2 C_2 C_5 L_2 L_5 L_4 r_o s^4 + C_2 C_4 L_5 L_4 r_o s^4 + C_4 L_5 L_5 r_o s^4 + C_4 L_5 L_5 r_o s^4 + C_5 L_$

10.415 INVALID-ORDER-415 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5r_os^5 + 4C_2C_5C_LL_5L_Lr_os^5 + 4C_2C_5C_LL_5L_Lr_os^5 + 4C_2C_5C_LL_5L_Lr_os^5 + 4C_2C_5C_LL_5R_Lr_os^4 + 4C_2C_5L_2L_5g_mr_os^4 + 4C_2C_5L_2L_5r_os^3 + C_2C_LL_2L_5g_mr_os^4 + 4C_2C_5L_2L_5r_os^4 + 4C_2C_5L_2L$

10.416 INVALID-ORDER-416 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

10.417 INVALID-ORDER-417 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + 4C_2C_5C_LL_5L_LR_Lr_os^5 + 2C_2C_5L_2L_5L_Lg_mr_os^5 + 4C_2C_5L_2L_5L_Lg_mr_os^5 + 4C_2C_5L_2L_5L_Lg_mr_os^4 + 4C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5L_Lr_os^4 + 4C_2C_5L_5L_Lr_os^4 + 4C_2C_5L_Lr_os^4 + 4C_2C_5L_Lr_os^4$

10.418 INVALID-ORDER-418 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_Lr_os^5 + 4C_2C_5L_LL_5L_LR_Lr_os^5 + 2C_2C_5L_2L_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Lr_os^5 + 2C_2C_5L_2L_5L_Lg_mr_os^5 + 4C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5L_Lg_mr_os^5 + C_2C_LL_2L_5L_Lg_mr_os^5 + C_2C_LL_2L_2L_2L_2L_2L_2L_2$

10.419 INVALID-ORDER-419 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 r_o s^3 + C_$

10.420 INVALID-ORDER-420 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2L_5g_mr_os^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2r_os^3 + C$

10.421 INVALID-ORDER-421 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{RL\left(C_2C_5L_2L_5g_mr_os^5 + C_2C_5L_2L_5g_mr_os^4 + C_2C_5L_2L_5g_m$

- 10.422 INVALID-ORDER-422 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 R_5 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 g_m r_o s^3 + C_2 C_5 L_4 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_4 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_4 R_5 g_m r_o s^3 + C_4 L_5 R_5 g_m r_o s^3 + C_4 R_5 R_5 g_m r_o s^3 + C_4 R_5 R_5 g_m r_o s^3 + C_4 R_5 R_5 R_5 g_m r_o s^3 + C_4 R_5 R_5 g_m r_o s^3 + C_4 R_5 R_5 g_m r_o s$
- 10.423 INVALID-ORDER-423 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_5 r_o s^3 + C_2 C_5 L_2 r_o s$
- 10.424 INVALID-ORDER-424 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.425 INVALID-ORDER-425 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_{L}L_{S}^{2} + C_{L}R_{L}s + 1\right)\left(C_{2}C_{5}L_{2}L_{5}g_{m}r_{o}s^{4} + C_{2}C_{5}L_{2}L_{5}s^{4} + C_{2}C_{5}L_{2}R_{5}g_{m}r_{o}s^{3} + C_{2}C_{5}L_{2}R_{5}s^{3} C_{2}C_{5}L_{2}R_{5}s^{3} C_{2}C_{5}L_{2}R_{5}s^{3} + C_{2}C_{5}C_{L}L_{2}L_{5}s^{4} + C_{2}C_{5}C_{L}L_{2}L_{5}s^{4} + C_{2}C_{5}C_{L}L_{2}R_{5}s^{3} + C_{2}C_{5}C_{L}L_{2}R_{5}s^$
- 10.426 INVALID-ORDER-426 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_L s}}\right)$
- 10.427 INVALID-ORDER-427 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $\overline{C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}g_{m}r_{o}s^{6}+C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}g_{m}r_{o}s^{5}+C_{2}C_{5}C_{L}L_{$
- 10.428 INVALID-ORDER-428 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $\overline{C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}g_{m}r_{o}s^{6}+C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}s^{6}+C_{2}C_{5}C_{L}L_{2}L_{5}R_{L}g_{m}r_{o}s^{5}+C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}g_{m}r_{o}s^{5}+C_{2}C_{5}C_{L}L_{2}L_{L}R_{$

- **10.429** INVALID-ORDER-429 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_5 r_o s^4 + C_2 L_2 L_5 R_5 g_m r_o s^3 + C_2 L_2 L_5 R_5 s^3 C_2 L_2 L_5 r_o s^3 C_2 L_2 R_5 r_o s^2 + C_2 L_5 R_5 r_o s^2 C_5 L_5 R$
- 10.430 INVALID-ORDER-430 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{1}{C_L s}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_5r_os^4 + C_2L_2L_5R_5g_mr_os^3 + C_2L_2L_5R_5s^3 C_2L_2L_5r_os^3 C_2L_2R_5r_os^2 + C_2L_5R_5r_os^2 C_5L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^2 + C_2L_5R_5r_os^3 + C_2C_4L_5R_5r_os^3 + C_2C_4L_5R_5r_o$
- 10.431 INVALID-ORDER-431 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L}{C_2C_5C_LL_2L_5R_5R_Lr_os^5 + 2C_2C_5L_2L_5R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_5R_Ls^4 + C_2C_LL_2L_5R_5R_Lg_mr_os^4 + C_2C_LL_2L_5R_5R_Lr_os^3 + C_2C_LL_2L_5R_Lr_os^3 + C_2C_LL_2L_2R_Lr_os^3 + C_2C_LL_2L_2R_Lr_os^3 + C_2C_LL_2R_Lr_os^3 + C_2C_LL_2R_Lr_os^3 + C_2C_LL_2R_Lr_os^3 + C_2C_LL_2R_Lr_os^3 + C_2C_LL_2R_Lr_os^3 + C_2C_L$
- 10.432 INVALID-ORDER-432 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5L_LL_5R_5g_mr_os^4 + 4C_2C_5L_2L_5R_5g_mr_os^4 + 4C_2C_5L_$
- 10.433 INVALID-ORDER-433 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5L_LL_5R_5g_mr_os^4 + 4C_2C_5L_2L_5R_5g_mr_os^4 + 4C_2C_5L_2L_5R_5g_mr_os^4 + 4C_2C_5L_2L_5L_5R_5s^4 + 4C_2C_5L_2L_5L_5R_5s^4 + 4C_2C_5L_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_2C_5L_5R_5s^4 + 4C_$
- 10.434 INVALID-ORDER-434 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.435 INVALID-ORDER-435 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5C_LL_5R_5r_os^5 + 4C_2$
- **10.436** INVALID-ORDER-436 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lr_os^6 + 2C_2C_5L_2L_5L_LR_5R_Lg_mr_os^5 + 4C_2C_5L_2L_5L_LR_5R_Ls^5 + C_2C_5L_2L_5L_LR_5R_Lr_os^4 + 4C_2C_5L_5L_LR_5R_Lr_os^4 + 4C_2C_5L_LR_5R_Lr_os^4 + 4C_2C_5L_LR_5R_Lr_os^4 + 4C_2C_5L_LR_5R_Lr_os^4 + 4C_2C_5L_LR_$

- 10.437 INVALID-ORDER-437 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + 4C_2C_5L_LL_5L_LR_5r_os^6 +$
- 10.438 INVALID-ORDER-438 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5C_LL_2L_5R_5R_Lr_os^5 + 4C_2C_5C_LL_2L_5R_5R_Lr_os^5 + 4C_2C_5C_LL_2L_5R_Lr_os^5 + 4C_2C_5C_LL_2L_5R_Lr_$
- 10.439 INVALID-ORDER-439 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 s^4 C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 R_5 g_m r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 C_2 L_2 r_o s^2 + C_2 L_5 r_o s^2 + C_2 L_5 r_o s^2 + C_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 R_5 r_o s^3 + C_2 L_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^3 + C_2 L_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 R_5 r_o s^4 + C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2$
- 10.440 INVALID-ORDER-440 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5g_mr_os^3 + C_2L_2L_5g_mr_os^3 + C_2L_2L_5g$
- 10.441 INVALID-ORDER-441 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_5R_5R_Lr_os^4 + C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 + 2C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_cs^4 +$
- 10.442 INVALID-ORDER-442 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 s^4 C_2 C_2 L_2 L_5 R_5 r_o s^4 + C_2 C_5 L_5 R_5 r_o s$
- 10.443 INVALID-ORDER-443 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 g^4 C_2 C_5 R_5 g^4 + C_2 C_5 L_2 L_5 R_5 g^4 + C_2 C_5 L_4 L_5 R_5 g^4 + C_2 C_5 L_4 L_5 R_5 g^4 + C_2 C_5 L_4 L_5 R_5 g^4 + C_2 C_5 L_5 L_5 R_5 g^4 + C_5 L_5 R_5 g^4 + C_5 L_5 L_5 R_5 g^4$
- 10.444 INVALID-ORDER-444 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_5L_LR_5r_os^5 + 2C_2C_5L_2L_5L_Lg_mr_os^5 + 4C_2C_5L_2L_5L_Ls^5 + C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 + C_2C_5L_2L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_5L_Lr_os^4 + C_2C_5L_Lr_os^4 + C_2C_5L_Lr_os^$

- 10.445 INVALID-ORDER-445 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2$
- 10.446 INVALID-ORDER-446 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5L_2L_5L_LR_5g_mr_os^5 + C_2C_5L_2L_5L_RR_5g_mr_os^5 + C_2C_5L_2L_5L_RR$
- 10.447 INVALID-ORDER-447 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_cs^6 + C_2C_5C_LL_5L_LR_cs^6 + C_2C_5C_LL_5L_$
- 10.448 INVALID-ORDER-448 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_cs^6 + C_2C_5C_LL_2L_5L_LR_cs^6 + C_2C_5C_LL_2L_5L_LR_$
- 10.449 INVALID-ORDER-449 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 C_2 C_5 L_2 L_5 r_o s^4 C_2 C_5 L_2 R_5 r_o s^3 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 r_o s^3 + C_2 C_5 L_2 L_5 R_5 r_o s^3 + C_2 C_5 L_2 R_5 r_o s^3 + C_2 C_5 L_$
- 10.450 INVALID-ORDER-450 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 C_2C_5L_2L_5r_os^4 C_2C_5L_2R_5r_os^3 + C_2C_5L_2R_5r_os^3 + C_2L_2R_5g_mr_os^2 + C_2L_2R_5g_mr_os^2 + C_2L_2R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 + C_2C_5L_2L_5R_5s^3 + C_2C_5L_2R_5s^3 + C_2C_5L$
- 10.451 INVALID-ORDER-451 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2R_5R_Lr_os^4 + C_2C_5L_2L_5R_5g_mr_os^4 + C$
- 10.452 INVALID-ORDER-452 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_5s^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2L_5R_Ls^5 + 2C_2C_5C_LL_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + C_2C_5C_LL_2R_5R_Ls^4 + C_2C_5C_LL_2R_5R_L$

- 10.453 INVALID-ORDER-453 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_5s^5 + C_2C_5C_LL_2L_LR_5s^5 + C_2C_5C_LL_2L_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2R_5s^5 + C_2C_5C_LL_2R_5s^5$
- 10.454 INVALID-ORDER-454 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_5r_os^5 + C_2C_5C_LL_5L_LR_5r_os^5 + C_2C_5L_2L_5L_Lg_mr_os^5 + C_2C_5L_2L_2L_2Lg_mr_os^5 + C_2C_5L_2Lg_mr_os^5 + C_2C_5L_2Lg_mr_os^5 + C_2C_5L_2Lg_mr_os^5 + C_2C_5L_2Lg_$
- **10.455** INVALID-ORDER-455 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_$
- 10.456 INVALID-ORDER-456 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s + \frac{1}{L_L s}}\right)$
- 10.457 INVALID-ORDER-457 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_RS_5s^6 + 2C_2C_5C_LL_2L_5L_TS_5s^6 + 2C_2C_5C_LL_2L_5C_TS_5s^6 + 2C_2C_5C_LL_2L_5C_TS_5s^6 + 2C_2C_5C_LL_2L_5C_TS_5s^6 + 2C_2C_$
- 10.458 INVALID-ORDER-458 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_cs^6 + C_2C_5C_LL_2L_5L_LR_cs^6 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Lg_mr_$
- **10.459** INVALID-ORDER-459 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s}\right)$
 - $H(s) = \frac{C_2L_2R_5g_mr_os^2 + C_2L_2R_5s^2 C_2L_2r_os^2 + C_2R_2R_5g_mr_os + C_2R_2R_5s C_2R_2r_os + C_2R_5r_os + R_5g_mr_o + R_5 r_o}{C_2C_LL_2R_5g_mr_os^3 + C_2C_LL_2r_os^3 + C_2C_LR_2R_5g_mr_os^2 + C_2C_LR_2r_os^2 + C$
- 10.460 INVALID-ORDER-460 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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10.461 INVALID-ORDER-461 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, R_L + \frac{1}{C_L s}\right)
```

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

10.462 INVALID-ORDER-462
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + \frac{1}{C_L s}\right)$$

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

10.463 INVALID-ORDER-463
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_5 r_o s + R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 L_2 R_5 g_m r_o s^4 + C_2 L_2 R_5 g_m r_o$$

10.464 INVALID-ORDER-464
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 s^2 - C_2 L_2 r_o s^2 + C_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^3 + 4 C_2 C_L L_2 R_2 g_m r_o s^3 + 4 C_2 C_L L_2 R_2 g_m r_o s^3 + 4 C_2 C_L L_2 R_2 g_m r_o s^3 + 4 C_2 C_L L_2 R_5 g_m r_o s^2 + C_2 C_L R_2 R_5 g_m r_o s^2 + C$$

10.465 INVALID-ORDER-465
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$$

10.466 INVALID-ORDER-466
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_2C_LL_2L_LR_5g_mr_os^4 + C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_2g_mr_os^4 + 4C_2C_LL_2L_LR_2s^4 + C_2C_LL_2L_LR_2s^4 + C_2C_LL_LR_2R_5g_mr_os^3 + 4C_2C_LL_LR_2R_2s^3 + 2C_2C_LL_LR_2R_2s^3 + 2C_2C_LL_LR_2R_2s^3 + 4C_2C_LL_LR_2r_os^3 + 4C_2C_LL_LR_2r_o$$

10.467 INVALID-ORDER-467
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$$

$$H(s) = \frac{1}{C_2C_LL_2L_LR_5g_mr_os^4 + C_2C_LL_2L_LR_5s^4 + 2C_2C_LL_2L_LR_2g_mr_os^4 + 4C_2C_LL_2L_LR_2s^4 + C_2C_LL_2R_5R_Lg_mr_os^3 + C_2C_LL_2R_5R_Lg_mr_os^3 + C_2C_LL_2R_2R_5g_mr_os^3 + C_2C_LL_2R_2R_5g_mr_os^3 + C_2C_LL_2R_2R_5g_mr_os^3 + C_2C_LL_2R_2R_5g_mr_os^3 + C_2C_LL_2R_2R_2g_mr_os^3 + C_2C_LL_2R_2g_mr_os^3 + C_2C_LL_2R_2g_$$

10.468 INVALID-ORDER-468
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1 \right)}{2 C_2 C_5 L_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 r_o s^3 + 2 C_2 C_5 R_2 R_L g_m r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + 4 C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + 2 C_5 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + 2 C_5 R_2 r_o s + 2$$

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10.469 INVALID-ORDER-469 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)
```

$$H(s) = \frac{-C_2C_5L_2r_os^3 - C_2C_5R_2r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os - C_5r_os + g_mr_o + 1}{s\left(C_2C_5C_LL_2r_os^3 + C_2C_5C_LR_2r_os^2 + 2C_2C_5L_2g_mr_os^2 + 4C_2C_5R_2g_mr_os + 4C_2C_5R_2s + 4C_2C_5r_os + C_2C_LL_2g_mr_os^2 + C_2C_LL_2g_mr_os^2 + C_2C_LR_2g_mr_os + C_2C_LR_2s + C_2C_$$

10.470 INVALID-ORDER-470
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o s^2 + C_2 C_5 R_2 r_o s^2 + C_2 C_5$$

10.471 INVALID-ORDER-471
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L L_2 R_L g_m r_o s^3 + 4C_2 C_5 C_L R_2 R_L g_m r_o s^2 + 4C_2 C_5 R_L g_$$

10.472 INVALID-ORDER-472
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_m r_o + 1\right)}{s \left(2 C_2 C_5 C_L L_2 L_2 g_m r_o s^4 + 4 C_2 C_5 C_L L_2 L_2 s^4 + C_2 C_5 C_L L_2 R_2 g_m r_o s^3 + 2 C_2 C_5 L_2 L_2 r_o s^3 + 2 C_2 C_5 L_2 r$$

10.473 INVALID-ORDER-473
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s - C_5 r_o s + g_n r_o s^2 + C_2 r_o s^2 +$$

10.474 INVALID-ORDER-474
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(-C_2 C_5 L_2 r_o s^3 - C_2 C_5 R_2 r_o s^2 + 2C_2 C_5 L_2 L_2 R_L s^4 + 2C_2 C_5 C_L L_2 R_L s^4 + 2C_2 C_5 C_L L_2 R_L s^3 + 4C_2 C_5 C_L L_2 R_2 r_o s^3 +$$

10.475 INVALID-ORDER-475
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}} \right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_LR_Lr_os^5 + C_2C_5C_LL_LR_2R_Lr_os^4 + 2C_2C_5L_2L_LR_Lg_mr_os^4 + 4C_2C_5L_2L_LR_us^4 + C_2C_5L_2L_Lr_os^4 + C_2C_5L_2R_Lr_os^3 + 2C_2C_5L_LR_2R_us^3 + 4C_2C_5L_LR_2r_os^3 + 4C_2C_5L_LR_us^3 + 4C_2C_5L_us^3 + 4C_2$$

10.476 INVALID-ORDER-476
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_Ls^5 + C_2C_5C_LL_2L_Lr_os^5 + 2C_2C_5C_LL_LR_2R_Lg_mr_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_LR_2r_os^4 + 4C_2C_5C_LL_LR_Lr_os^4 + 4C_2C_5C_LL_Lr_os^4 + 4C_2C_5C_LL_Lr_os^4 + 4C_2C_5C_LL_Lr_os^4 + 4C_2C_5C_LL_Lr_os^4 + 4C_2C_5C_LL_Lr_os^4 + 4C_2C_5C_LL$$

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10.477 INVALID-ORDER-477 Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \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)
```

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

10.478 INVALID-ORDER-478
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_5 r_o s^3 - C_2 C_5 R_2 R_5 r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s^2 + C_2 L_2 R_5 g_m r_o s + C_2 R_2 R_5 g_m r_o s + C_2 R_2 R_5 s - C_2 R_2 r_o s + C_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 L_2 R_5 g_m r_o s^2$$

10.479 INVALID-ORDER-479
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_2C_5L_2R_5r_os^3 - C_2C_5R_2R_5r_os^2 + C_2L_2R_5g_mr_os^2 + C_2L_2R_5g_mr_os^2 + C_2L_2R_5g_mr_os + C_2R_2R_5g_mr_os + C_2R_2R_5s - C_2R_2r_os + C$$

10.480 INVALID-ORDER-480
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{R_L \left(-C_{C_1} + C_{C_2} + C_{C_3} + C_{C_4} + C_{C_5} + C_{C_5} + C_{C_4} + C_{C_5} + C_{C_5}$$

10.481 INVALID-ORDER-481
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_2C_5C_LL_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + C_2C_5C_LL_2R_5r_os^4 + 2C_2C_5C_LR_2R_5R_Lg_mr_os^3 + 4C_2C_5C_LR_2R_5R_Ls^3 + C_2C_5C_LR_2R_5R_Ls^3 + 4C_2C_5C_LR_2R_5R_Ls^3 + 4C_2C_5C_LR_2R_5R_Ls^3$$

10.482 INVALID-ORDER-482
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_R_5s^5 + C_2C_5C_LL_2R_5r_os^4 + 2C_2C_5C_LL_R^2R_5g_mr_os^4 + 4C_2C_5C_LL_R^2R_5s^4 + 4C_2C_5C_LL_R^2R_5r_os^4 + 4C_2C_5C_$$

10.483 INVALID-ORDER-483
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{L_L s}{C_2 C_5 C_L L_2 L_L R_5 r_o s^5 + C_2 C_5 C_L L_L R_2 R_5 r_o s^4 + 2 C_2 C_5 L_2 L_L R_5 g_m r_o s^4 + 4 C_2 C_5 L_2 R_5 r_o s^3 + 2 C_2 C_5 L_L R_2 R_5 g_m r_o s^3 + 4 C_2 C_5 L_L R_5 r_o s^3 + C_2 C_5 R_2 R_5 r_o s^2 + C_2 C_L L_2 L_L R_5 g_m r_o s^4 + C_2 C_L R_5 g_m r_o s^4 + C_2$$

10.484 INVALID-ORDER-484
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_R_5s^5 + 2C_2C_5C_LL_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_5r_os^4 + 2C_2C_5C_LL_2R_5r_os^4 + 4C_2C_5C_LL_2R_5r_os^4 + 4C_2C_5C_LL_2R_5r_os^$$

- 10.485 INVALID-ORDER-485 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5R_Lr_os^5 + C_2C_5L_LL_Rs_RL_rs^4 + 2C_2C_5L_2L_Rs_Rl_sr_os^4 + 4C_2C_5L_2L_Rs_Rs_Ls^4 + C_2C_5L_2L_Rs_Rs_Lr_os^4 + 2C_2C_5L_LR_2R_5R_Lr_os^4 + 2C_2C_5L_LR_2R_5R_Lr_o$
- **10.486** INVALID-ORDER-486 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}s^{5} + C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}s^{4} + C_{2}C_{5}C_{L}L_{L}R_{5}R_{L}s^{4} + C_{2}C_{5}C_{$
- 10.487 INVALID-ORDER-487 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}r_{o}s^{4} + 2C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}g_{m}r_{o}s^{4} + 4C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}s^{4} + C_{2}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + 4C_{2}C_{5}C_{L}L_{L}R_{5}R_{L}r_{o}s^{4} + 4C_{2}C_{5}C_{L}L_{L}R_{5}R_{L}r_{$
- **10.488** INVALID-ORDER-488 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 C_2 C_5 L_2 r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 s^2 + C_2 R_2 g_m r_o s + C_2 R_2 s + C_2 r_o s + C_5 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5$
- 10.489 INVALID-ORDER-489 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_2R_5g_mr_os^3 + C_2C_5L_2R_5s^3 C_2C_5L_2r_os^3 + C_2C_5R_2R_5g_mr_os^2 + C_2C_5R_2r_os^2 + C_2C_5R_2r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os + C_2r_os + C_2r_os + C_2r_os^2 + C_2r_os^3 + C_2r_os^2 + C_2r_os^3 + C_2r_os^2 + C_2r_$
- 10.490 INVALID-ORDER-490 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{RL\left(C_{2}C_{5}L_{2}R_{5}R_{L}g_{m}r_{o}s^{4} + C_{2}C_{5}L_{L}R_{5}R_{L}g_{m}r_{o}s^{3} + C_{2}C_{5}$
- **10.491** INVALID-ORDER-491 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 C_2 C_5 L_2 r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 R_5 s^3 + C_2 C_5 C_L L_2 R_5 g_m r_o s^3 + C_2 C_5 C_L R_2 R_5 g_m r_o s^3 + C_2 C_5 C_L R_2 R_5 g_m$
- 10.492 INVALID-ORDER-492 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 C_2 C_5 L_2 r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^2 + C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 R_5 s^2 C_2 C_5 R_2 R_5 s^2 + C_2 C_5 R_2 R_5 s$

10.493 INVALID-ORDER-493 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_1 R_5 g_m r_o s^5 + C_2 C_5 L_L L_L R_5 s^5 + C_2 C_5 L_L L_L R_5 g_m r_o s^5 + C_2 C_5 L_L L_L R_5 g_m r_o s^5 + C_2 C_5 L_L L_L R_5 g_m r_o s^4 + C_2 C_5 L_L L_R R_5 g_m r_o s^4 + C_2 C_5 L_L R_5 g_m r_o s$

10.494 INVALID-ORDER-494 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(\bigcirc_{L} \square_{L} s \ + \ \bigcirc_{L} \square_{L} s \ + \ \bigcirc_{L} \square_{L} s \ + \ \square_{L} n \ + \ \square_{L} n$

10.495 INVALID-ORDER-495 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_5g_Lr_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5C_LL_LR_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_LR_2R_5R_Lg_mr_os$

10.496 INVALID-ORDER-496 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5q_mr_os^5 + C_2C_5C_LL_2L_LR_5s^5 + 2C_2C_5C_LL_2L_LR_Lq_mr_os^5 + 4C_2C_5C_LL_2L_LR_0s^5 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_LR_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5 +$

10.497 INVALID-ORDER-497 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s} \right)}{L_L s + R_L + \frac{1}{C_5 s}} \right)$

 $\overline{C_2C_5C_LL_2L_LR_5g_mr_os^5 + C_2C_5C_LL_2L_LR_5s^5 + 2C_2C_5C_LL_2L_LR_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2L_LR_cs^5 + C_2C_5C_LL_2R_cs^5 + C_2C_5C_LL_2$

10.498 INVALID-ORDER-498 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 r_o s^3 - C_2 C_5 R_2 r_o s^2 + C_2 L_2 g_m r_o s^2 + C_2 L_2 g_$

10.499 INVALID-ORDER-499 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_4 s}\right)$

 $H(s) = \frac{C_2C_5L_2L_5g_mr_os^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2r_os^3 + C_2C_5L_5r_os^3 + C_2C_5L_5r_os^3 + C_2C_5L_5r_os^3 - C_2C_5R_2r_os^2 + C_2L_2g_mr_os^2 + C_2L_2s^2 + C_2R_2g_mr_os + C_2R_2s + C_2r_os + C_2R_2s + C_2r_os + C_2r_os + C_2r_os^3 + C_2r_os$

10.500 INVALID-ORDER-500 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{\frac{16L_1(\sqrt{2}\sqrt{5}L_2L_5}R_Lg_mr_os^5 + C_2C_5C_LL_2F_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5L_Lg_mr_os^4 + C_2C_5L_$

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H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C_L L_5 R_2 g_m r_o s^3 + C_2 C_5 C
10.502 INVALID-ORDER-502 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_{2}C_{5}L_{2}L_{5}g_{m}r_{o}s^{4}+C_{2}C_{5}L_{2}L_{5}s^{4}-C_{2}C_{5}L_{2}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{2}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_{5}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{5}L_
10.503 INVALID-ORDER-503 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_4 L_5 L_4 r_o s^5 + C_4 C_5 L_4 L_5 L_5 r_o s^5 + C_4 C_5 L_5 L_5 r_o s^5 + C_4 C_5 L_5 L_5 L_5 r_o s^5 + C_4 L_5 L_5 L_5 r_o s^5 + C_4 L_5 L_5 r_o s^5 + C_4 L_5 L_5 r_o s^5 + C_4 L_5
10.504 INVALID-ORDER-504 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_2 C_5 L_L L_5 g_m r_o s^4 + C_2 C_5 C_L L_2 L_5 g_m r_o s^4 + C_2 C_5 C_L L_2 L_5 g_m r_o s^4 + C_2 C_5 C_L L_2 L_2 g_m r_o s^4 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 + C_2 C_5 C_L L_2 R_L g_m r_o s^3 +
10.505 INVALID-ORDER-505 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{1}{C_L s + \frac{1}{R_I} + \frac{1}{L_I s}}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_LR_Lr_os^5 + C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5L
10.506 INVALID-ORDER-506 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \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_2C_5C_LL_2L_5L_Lg_mr_os^6 + C_2C_5C_LL_2L_Lg_mr_os^6 + C_2C_5C_LL_2L_Lg_mr_os^5 + C_2C_5C_LL_2L_Lg_mr_os^5 + C_2C_5C_LL_2L_Lg_mr_os^5 + C_2C_5C_LL_2L_Lg_mr_os^5 + C_2C_5C_LL_5L_Lg_mr_os^5 + C_2C_5C_LLg_mr_os^5 + C_2C_5C_LLg_mr_os
10.507 INVALID-ORDER-507 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_5 s}}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_Lg_mr_os^5 + C_2C_5C_LL_2L_Lg_mr_os^5 + C_2C_5C_LL_2L_2Lg_mr_os^5 + C_2C_5C_LL_2Lg_mr_os^5 + C_2C_5C_LL_2Lg_mr_os^5 + C_2C_5C_LL_2Lg_mr_os^5 + C_2C_5C_LLg_mr_os^5 + C_2C_5C_LLg_mr_os^5 + C_2C_5C_LLg_mr_os^5 + C_2C_5C_LLg_
10.508 INVALID-ORDER-508 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)
                                                R_L \left( -C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_5 R_2 r_o s^3 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_2 F_2 g_m r_o s^2 + C_2 L_5 R_2 g_m r_o s^3 + C_2 L_2 L_5 g_m r_o s^3 + C_2 L_
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10.501 INVALID-ORDER-501 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

- **10.509** INVALID-ORDER-509 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5r_os^4 C_2C_5L_5R_2r_os^3 + C_2L_2L_5g_mr_os^3 + C_2L_2L_5s^3 C_2L_2r_os^2 + C_2L_5R_2g_mr_os^2 + C_2L_5R_2s^2 + C_2L_5r_os^2 C_2R_2r_os^2 + C_2L_5r_os^3 + C_2C_4L_5r_os^3 + C_2C_4$
- 10.510 INVALID-ORDER-510 $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{R_L\left(-C_{C_1}C_{C_2}C_{C_3}C_{C_4}C_{C_5}C_{C_4}C_{C_5}C_{C_4}C_{C_5}C_{C_4}C_{C_5}C_{C_4}C_{C_5}C_{C_5}C_{C_4}C_{C_5$
- 10.511 INVALID-ORDER-511 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5C_LL_5R_2R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2r_os^4 + 4C_2C_5C_LL_5R_Lr_os^4 + 4C_2C_5L_Lt_5R_Lr_os^4 + 4C_2C_5L_Lt_5R_Lr_os^$
- 10.512 INVALID-ORDER-512 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5C_LL_5L_LR_2g_mr_os^5 + 4C_2C_5C_LL_5L_Lr_os^5 + 4C_2C_5C_LL_5L_Lr_os^$
- **10.513** INVALID-ORDER-513 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{L_L s \left(-\frac{L_L s}{C_2 C_5 C_L L_2 L_5 L_L r_o s^6 + C_2 C_5 L_L L_5 L_L R_2 r_o s^5 + 2 C_2 C_5 L_2 L_5 L_L s^5 + C_2 C_5 L_5 L_L R_2 g_m r_o s^4 + 4 C_2 C_5 L_5 L_L R_2 g_m r_o s^4 + 4 C_2 C_5 L_5 L_L R_2 g_m r_o s^4 + 4 C_2 C_5 L_5 L_L r_o s^4 + C_2 C_5 L_5 L_L r_o$
- 10.514 INVALID-ORDER-514 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2g_mr_os^5 + 4C_2C_5C_LL_5L_RR_2g_mr_os^5 + 4C_2C_5C_LL_5L_RR_2g_mr$
- 10.515 INVALID-ORDER-515 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- **10.516** INVALID-ORDER-516 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + 2C_2C_5C_LL_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_RR_2r_os^5 + 4C_2C$

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10.517 INVALID-ORDER-517 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \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)
```

$$H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{L}g_{m}r_{o}s^{6} + 4C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{c}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}r_{o}s^{6} + C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}r_{o}s^{5} +$$

10.518 INVALID-ORDER-518
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 R_2 R_5 g_m r_o s^$$

10.519 INVALID-ORDER-519
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_2C_5L_2L_5g_mr_os^4 + C_2C_5L_2E_5s^4 + C_2C_5L_2F_5g_mr_os^3 + C_2C_5L_2F_5s^3 - C_2C_5L_2F_0s^3 + C_2C_5L_5F_0s^3 + C_2C_5L_5F_0s^3 + C_2C_5E_5F_0s^3 + C_2C_5E$$

10.520 INVALID-ORDER-520
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_2R_5R_Ls^4 + C_2C_5C_LL_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_Lg_mr_os^4$$

10.521 INVALID-ORDER-521
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_5 g_m r_o s^3 + C_2 C_5 C_L L_2 R_5 g_m r$$

10.522 INVALID-ORDER-522
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_5 s^3 - C_2 C_5 L_2 r_o s^3 + C_2 C_5 L_2 R_5 g_m r_o s^4 + C_2 C_5 L_4 R_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_5 g_m r_o s^3 + C_2 C_5 C_L L_2 R_5 g_m r$$

10.523 INVALID-ORDER-523
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_mr_os^6 + C_2C_5C_LL_2L_Lg_5s^6 + C_2C_5C_LL_2L_Lg_5g_mr_os^5 + C_2C_5C_LL_2L_Lg_5s^5 + C_2C_5C_LL_2L_2g_5s^5 + C_2C$$

10.524 INVALID-ORDER-524
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

- 10.525 INVALID-ORDER-525 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- 10.526 INVALID-ORDER-526 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_mr_os^6 + C_2C_5C_LL_2L_Lg_s^6 + C$
- 10.527 INVALID-ORDER-527 $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_5g_mr_os^5 + C_2C_5C_LL_2L_LR_5s^5 + C_2C_5C_LL_2L_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2L_2R_5s^5 + C_2C_5C_LL_2R_5s^5 + C_2C_5C_LL$
- **10.528** INVALID-ORDER-528 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_5 r_o s^4 C_2 C_5 L_5 R_2 R_5 r_o s^4 + C_2 C_5 L_5 R_2 R_5 r_o s^4 + C_2 C_5 L_5 R_2 R_5 r_o s^4 + C_2 C_5 L_5 R_2 R_5 R_L s^3 + C_2 C_5 L_5 R_5 R_L s^3 +$
- 10.529 INVALID-ORDER-529 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_5r_os^4 C_2C_5L_2L_5R_5r_os^4 C_2C_5L_2L_5R_5r_os^3 + C_2L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_5R_5g_mr_os^4 + C_2C_5R_5g_mr_os^4 + C_2C_5$
- **10.530** INVALID-ORDER-530 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lr_os^5 + C_2C_5L_LL_5R_2R_5R_Lr_os^4 + 2C_2C_5L_2L_5R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_5R_Ls^4 + C_2C_5L_2L_5R_5R_Lg_mr_os^4 + 4C_2C_5L_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5L_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5L_5R_5R_Lg_mr_os^4 + 4C_2$
- 10.531 INVALID-ORDER-531 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2L_5R_5r_os^5 + 2C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_5R_Lr_os^4 + 4C_2C_5C_LL_5R_5R_Lr_os^4 + 4C_2C_5$
- 10.532 INVALID-ORDER-532 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5R_5r_os^5 + 2C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2$

- 10.533 INVALID-ORDER-533 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5L_LL_2L_5L_LR_5r_os^5 + 2C_2C_5L_2L_5L_LR_5g_mr_os^5 + 4C_2C_5L_2L_5L_LR_5s^5 + C_2C_5L_2L_5L_LR_5s^5 + C_2C_5L_5L_LR_5s^6 + 4C_2C_5L_5L_LR_5s^6 + 4$
- 10.534 INVALID-ORDER-534 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 2C_2C_5C_LL_2L_5R_5r_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_5L_RR_5r_os^5 + 4C_2C_5C_LL_5L_RR_5r_os$
- 10.535 INVALID-ORDER-535 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lr_os^6 + C_2C_5C_LL_5L_LR_2R_5R_Lr_os^5 + 2C_2C_5L_2L_5L_LR_5R_Lg_mr_os^5 + 4C_2C_5L_2L_5L_LR_5r_os^5 + C_2C_5L_2L_5L_LR_5r_os^4 + 2C_2C_5L_5L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_5L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_LR_2$
- **10.536** INVALID-ORDER-536 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + 2C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5r_os^5 + 4C_2C_5C_LL_5L_RR_5r_os^5 + 4C_2C_5C_LL_5L_RR_5r_$
- 10.537 INVALID-ORDER-537 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_5} + \frac{1}{L_5 s}}, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_5L_Rg_mr_os^5 +$
- 10.538 INVALID-ORDER-538 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 s^4 C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_5 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_5 R_2 R_5 s^3 C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 L_$
- 10.539 INVALID-ORDER-539 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 C_2C_5L_2L_5r_os^4 + C_2C_5L_2E_5r_os^4 + C_2C_5L_5R_2R_5g_mr_os^3 + C_2C_5L_5R_2R_5s^3 C_2C_5C_5R_5R_5r_os^4 + C_2C_5C_5R_5R_5r_os^4 + C_2C_5C_5R_5R_5r_os^4 + C_2C_5C_5R_5R_5r_os^4 + C_2C_5C_5R_5r_os^4 + C_2C_5R_5r_os^4 + C_2C_5R_5r_os^4$
- 10.540 INVALID-ORDER-540 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_5R_Lr_os^4 + C_2C_5C_LL_5R_5R_Lr_os^4 + C_2C_5L_4L_5R_5R_Lr_os^4 + C_2C_5L_4R_5R_Lr_os^4 + C_2C_5L_4R$

- 10.541 INVALID-ORDER-541 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_5s^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2L_5R_2s^5 + C_2C_5C_LL_5R_2R_5g_mr_os^4 + C_2C_5C_LL_5R_2R_5g_mr_os^4 + 4C_2C_5C_LL_5R_2R_Lg_mr_os^4 + 4C_2C_5C_$
- 10.542 INVALID-ORDER-542 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}g_{m}r_{o}s^{6} + 4C_{2}C_{5}C_{L}L_{2}L_{5}L_{c}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{5}g_{m}r_{o}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{5}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{5}s^{5} + C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}g_{m}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L$
- **10.543** INVALID-ORDER-543 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_5L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_2r_os$
- 10.544 INVALID-ORDER-544 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_$
- 10.545 INVALID-ORDER-545 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{1}{C_L s + \frac{1}{R_T} + \frac{1}{L_T s}} \right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + C_2C_5C_LL_5L_LR_2r_os^6 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_LR_5r_os^5 + C_2C_5C_LL_5L_Rr_os^5 + C_2C_5C_LL$
- 10.546 INVALID-ORDER-546 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5g^6 + 2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2g^6 + C_2C_5C_LL_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_5L_RR_2g_mr_os^6 + 4C_2C_5C_LL_5L_RR_2g$
- 10.547 INVALID-ORDER-547 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(L_L s + \frac{1}{C_L s}\right)}{L_L s + R_L + \frac{1}{C_L s}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_5L_LR_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_2L_5L_LR_ss^6 + C_2C_5C_LL_2L_5L_2L_$
- 10.548 INVALID-ORDER-548 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, R_L\right)$
- $R_L \left(C_2 C_5 L_2 L_5 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_5 s^4 C_2 C_5 L_2 L_5 r_o s^4 \right)$

10.549 INVALID-ORDER-549 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2L_5R_5g_mr_os^4 + C_2C_5L_2L_5R_5s^4 - C_2C_5L_2L_5}{C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5L_LL_5R_5s^5 + C_2C_5L_LL_5R_5s^4 + C_2C_5L_LL_$

10.550 INVALID-ORDER-550
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2R_5R_Lr_os^4 + C_2C_5C_LL_5R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_5R_2R_5R_Lr_os^4 + C_2C_5C_LL_5R_5R_Lr_os^4 + C_2C_5C_LL_5R_5R_Lr$

10.551 INVALID-ORDER-551
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_5s^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5C_LL_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_5R_Lg_mr_os^4 +$

10.552 INVALID-ORDER-552
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + C_2C_5C_LL_2L_5r_os^5 + 2C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_5g_mr_os^5 + 4C_2C_5C_LL_2L_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_2R_5g_mr_os^5 + 4C_2C_5C_LL_2R_5g_mr_os^5 + 4C_2C_5C_LR_5g_mr_os^5 + 4C_2$

10.553 INVALID-ORDER-553
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_Rr_os^5 + C_2C_5C_LL_5L_LR_2r_os^5 + C_2C_5C_LL_5L_Rr_os^5 + C_2C_5C_LL$

10.554 INVALID-ORDER-554
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5g_mr_os^5 + 2C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_Lg_mr_$

10.555 INVALID-ORDER-555
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_5r_Lr_os^6 + C_2C_5C_LL_5L_LR_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_5L_Rg_mr_os^5 + C_2C_5C_LL_5L_Rg_mr_os^5$

10.556 INVALID-ORDER-556
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(L_5 s + \frac{1}{C_5 s}\right)}{L_5 s + R_5 + \frac{1}{C_5 s}}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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 \begin{aligned} & \textbf{10.557} \quad \textbf{INVALID-ORDER-557} \ Z(s) = \left( \infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_2s}\right)}{L_5s + R_5 + \frac{1}{C_2s}}, \ \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_2C_5C_LL_2L_5L_LR_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_5g^6 + 2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2g^6 + C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 2C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_5C_LL_2R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os^5 + C_2C_LL_2R_5R_5R_Lg_mr_os
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10.559 INVALID-ORDER-559 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{R_L \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + L_2 R_5 g_m r_o s + L_2 R_5 r_o s^2 + L_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^2 +$

10.560 INVALID-ORDER-560 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_2 r_o s^2 + L_2 R_5 g_m r_o s^2 + L_2 R$

10.561 INVALID-ORDER-561 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5, \ L_L s + \frac{1}{C_L s}\right)$

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

10.562 INVALID-ORDER-562 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_L s \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_2 r_o s^2 + L_2 R_5 g_m r_o s^2 + L_2 R_2 r_o$

10.563 INVALID-ORDER-563 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 R_2 g_m r_o s^3 + C_2 C_L L_2 R_2$

10.564 INVALID-ORDER-564 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_LL_2L_LR_2R_5R_Lg_mr_os^4 + C_2C_LL_2L_LR_2R_5R_Ls^4 + C_2C_LL_2L_LR_2R_Lr_os^4 + C_2L_2L_LR_2R_5g_mr_os^3 + C_2L_2L_LR_2R_5s^3 + 2C_2L_2L_LR_2R_Lg_mr_os^3 + 4C_2L_2L_LR_2R_Ls^3 + C_2L_2L_LR_2r_os^3 + 4C_2L_2L_LR_2r_os^3 + 4C_2L_2L_Rr_os^3 + 4C_2L_2L_R$

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10.565 INVALID-ORDER-565 Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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$$H(s) = \frac{1}{C_2C_LL_2L_LR_2R_5g_mr_os^4 + C_2C_LL_2L_LR_2R_5s^4 + 2C_2C_LL_2L_LR_2R_Lg_mr_os^4 + 4C_2C_LL_2L_LR_2r_os^4 + 4C_2C_LL_2L_2R_2r_os^4 + 4C_2C_LL_2R_2r_os^4 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4$$

10.566 INVALID-ORDER-566
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_2 C_L L_2 L_L R_2 R_5 g_m r_o s^4 + C_2 C_L L_2 L_L R_2 R_5 s^4 + 2 C_2 C_L L_2 L_L R_2 R_L g_m r_o s^4 + 4 C_2 C_L L_2 L_L R_2 r_o s^4 + 4 C_2 C_L L_2 R_$$

10.567 INVALID-ORDER-567
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 - C_5 R_2 r_o s + L_2 g_m r_o s + L_2 s + R_2 g_m r_o + R_2 + r_o \right)}{2 C_2 C_5 L_2 R_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 R_L r_o s^3 + 4 C_2 C_5 L_2 R_L r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 r_o s^2 + 2 C_5 L_2 R_L g_m r_o s^2 + 4 C_5 R_L g_m r$$

10.568 INVALID-ORDER-568
$$Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{-C_2C_5L_2R_2r_os^3 + C_2L_2R_2g_mr_os^2 + C_2L_2R_2s^2 + C_2L_2r_os^2 - C_5R_2r_os + L_2g_mr_os + L_2s + R_2g_mr_o + R_2 + r_o}{s\left(C_2C_5C_LL_2R_2r_os^3 + 2C_2C_5L_2R_2g_mr_os^2 + 4C_2C_5L_2R_2s^2 + 4C_2C_5L_2R_2g_mr_os^2 + C_2C_LL_2R_2s^2 + C_2C_LL_2r_os^2 + C_5C_LL_2r_os^2 + C_5C_LR_2r_os + 2C_5L_2g_mr_os + 4C_5R_2 + 4C_5r_o + C_LL_2g_mr_os + C_LL_2s + C_LR_2g_mr_os + C_LL_2s + C_LR_2g_mr_os + C_LL_2s + C_LR_2g_mr_os + C_LR_2g_m$$

10.569 INVALID-ORDER-569
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 - C_5 L_2 r_o s^2 + C_2 L_2 r_o s^3 + C_2 C_2 r_o s^3 + C_2 C_2 L_2 r_o s^3 + C_2 C_2 L_2 r_o s^3 + C_2 C_2 r_o s^3 + C_2 r_o$$

10.570 INVALID-ORDER-570
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 - C_5 L_2 r_o s^2 - C_5 R_2 r_o s + C_2 C_2 R_2 r_o s^2 + C_2 R_2 r_o s^2$$

10.571 INVALID-ORDER-571
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 - C_5 L_2 r_o s^2 - C_5 R_2 r_o s^2 + C_2 C_L L_2 R_2 g_m r_o s^4 + 4 C_2 C_5 C_L L_2 L_L R_2 s^4 + 4 C_2 C_5 C_L L_2 L_L r_o s^4 + C_2 C_5 L_2 R_2 g_m r_o s^2 + 4 C_2 C_5 L_2 R_2 g_m r_o s^2 + C_2 C_L L_2 R_2 g_m r_o s^2 + C_2 C_L L_2 R_2 g_m r_o s^3 + 4 C_5 C_L L_2 L_L r_o s^3 + C_5 C_$$

10.572 INVALID-ORDER-572
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_L s \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 - C_5 L_2 r_o s^2 + C_2 L_2 r_o$$

10.573 INVALID-ORDER-573 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_L L_L s^2 + C_L R_L s^3 + C_C C_L L_L L_L R_2 q_m r_o s^4 + 4 C_2 C_5 C_L L_2 L_L R_2 s^4 + 4 C_2 C_5 C_L L_2 R_L q_m r_o s^3 + 4 C_2 C_5 C_L L_2 R_L q_m r_o s^$

10.574 INVALID-ORDER-574 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_Lr_os^5 + 2C_2C_5L_2L_LR_2R_Lg_mr_os^4 + 4C_2C_5L_2L_LR_2r_os^4 + 4C_2C_5L_2L_RR_2r_os^4 + 4C_2C_5L_2L_RR_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C$

10.575 INVALID-ORDER-575 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

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

10.576 INVALID-ORDER-576 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_Ls^5 + C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5L_2R_2R_Lg_mr_os^3 + 4C_2C_5L_2R_2R_Lg_mr_os^3 + 4C_2C_5L_2R_2R_Ls^3 + C_2C_5L_2R_Lr_os^3 + 4C_2C_5L_2R_Lr_os^3 + 4C_2C_$

10.577 INVALID-ORDER-577 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L\right)$

 $R_L \left(-C_2C_5L_2R_2R_5r_os^3 + C_2L_2R_2R_5g_mr_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_5r_os^2 - C_5L_2R_5r_os^2 - C_5L_2R_5r_os^2 - C_5L_2R_5r_os^2 - C_5L_2R_5r_os^2 - C_5L_2R_5r_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_$

10.578 INVALID-ORDER-578 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2R_2R_5r_os^3 + C_2L_2R_2R_5g_mr_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_5r_os^2 - C_5L_2R_5r_os^2 - C_5R_2R_5r_os^2 - C_5R_2R_5r_os^2 + C_2L_2R_2r_os^3 + C_2C_4R_2r_os^3 + C_2C_4$

10.579 INVALID-ORDER-579 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$

10.580 INVALID-ORDER-580 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$

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

- 10.581 INVALID-ORDER-581 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5L_2R_2R_5g_mr_os^3 + 4C_2C_5R_3R_5g_mr_os^3 + 4C_2C_5R_5R_5g_mr_os^3 + 4C_2C_5R_$
- 10.582 INVALID-ORDER-582 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5r_os^5 + 2C_2C_5L_2L_LR_2R_5g_mr_os^4 + 4C_2C_5L_2L_LR_2r_os^4 + 4C_2C_5L_2L_2R_2r_os^4 + 4C_2C_5L_2L_2R_2r_os^4 + 4C_2C_5L_2L_2R_2r_os^4 + 4C_2C_5L_2R_2r_os^4 + 4C_2C_5L_2R_2r_o$
- **10.583** INVALID-ORDER-583 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_Rs_r_os^5 + 4C_2C_5C_LL_2R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5$
- 10.584 INVALID-ORDER-584 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls + \frac{1}{L_Ls}}\right)$
- 10.585 INVALID-ORDER-585 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_5R_Ls^5 + C_2C_5C_LL_2L_LR_2R_5r_os^5 + 4C_2C_5L_2L_LR_2R_5g_mr_os^4 + 4C_2C_5L_2L_LR_2R_5s^4 + 4C_2C_5L_2L_LR_3r_os^4 + 4C_2C_5L_2L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2L_2R_3r_os^4 + 4C_2C_5L_2R_3r_os^4 + 4C_2C_5L_2R_3r_os^2 + 4C_2C_5L_2R_3r_os^2 + 4C_2C_5L_2R_3r_os^2 + 4C_2C_5L_2R_3r_os^2 + 4C_2C$
- 10.586 INVALID-ORDER-586 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}g_{m}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}r_{o}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}r_{o}s^{5} + 4C_{2}C_{5}L_{2}R_{2}R_{5}R_{L}r_{o}s^{5} + 4C_{2}C_{5}L_$
- 10.587 INVALID-ORDER-587 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 r_o s^2 + C_5 L_2 R_5 g_m r_o s^2 +$
- 10.588 INVALID-ORDER-588 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2R_2R_5g_mr_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2L_2R_2s^2 + C_2L_2r_os^2 + C_5L_2R_5g_mr_os^2 + C_5L_2R_5s^2 C_5L_2r_os^2 + C_5L_2R_5s^2 C_5L_2r_os^2 + C_5L_2R_5s^2 C_5L_2R_5s^2 C_5L_2R_5s^2 + C_5L$

- 10.589 INVALID-ORDER-589 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_Lr_os^4 + C_2C_5L_2R_2R_5g_mr_os^3 + C_2C_5L_2R_2R_5g_mr_os^3 + C_2C_5L_2R_2R_2R_2R_2r_os^3 + C_2C_5L_2R_2R_2r_os^3 + C_2C_5L_2R_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L$
- 10.590 INVALID-ORDER-590 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 s^3 C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_2 R_2 r_o s^3 +$
- 10.591 INVALID-ORDER-591 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 s^3 C_2 C_5 L_2 R_2 r_o s^3 + C_2$
- 10.592 INVALID-ORDER-592 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5L_2L_LR_2g_mr_os^4 + 4C_2C_5L_2L_LR_2s^4 + 4C_2C_5L_2L_2L_2s^4 + 4C_2C_5L_2L_2L_2s^4 + 4C_2C_5L_2L_2L_2s^4 + 4C_2C_5L_2L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2L_2s^4 + 4C_2C_5L_2s^4 + 4C_2$
- 10.593 INVALID-ORDER-593 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{(C_L L_L s_s)}{s \left(2 C_2 C_5 C_L L_2 L_L R_2 g_m r_o s^4 + 4 C_2 C_5 C_L L_2 L_L R_2 s^4 + 4 C_2 C_5 C_L L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 C_L L_2 R_2 R_5 s^3 + 2 C_2 C_5 C_L L_2 R_2 R_2 g_m r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + C_2 C_5 C_L L_2 R_2 r_o s^3 + 2 C_2 C_5 C_$
- 10.594 INVALID-ORDER-594 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s + \frac{1}{R_L} + \frac{1}{L_L s}} \right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5R_Ls^5 + C_2C_5C_LL_2L_LR_2R_Lr_os^5 + C_2C_5L_2L_LR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2g_mr_os^4 + C_2C_5L_2L_RR$
- 10.595 INVALID-ORDER-595 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C$
- 10.596 INVALID-ORDER-596 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_2R_2r_os^5 + 4C_2C_5C_LL_2L_2R_2r_os^5 + 4C_2C_5C_LL_2R_2r_os^5 + 4C_2C_5C_LL_2R_2r_os^$

10.597 INVALID-ORDER-597 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 r_o s^2 + C_2 L_2 r_o s^2 + C_5 L_2 L_5 g_m r_o s^3 + C_5 L_2 L_5 s^3 - C_5 L_2 r_o s^2 + C_5 L_2 R_2 g_m r_o s^2 + C_5 L_2 R_2 g_m r_o s^3 + C_5 L_2 R_2 g_m r_o s^3$

10.598 INVALID-ORDER-598 $Z(s) = \left(\infty, \ \frac{L_{2}s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5r_os^4 - C_2C_5L_2R_2r_os^3 + C_2L_2R_2g_mr_os^2 + C_2L_2R_2s^2 + C_2L_2r_os^2 + C_5L_2L_5g_mr_os^3 + C_5L_2L_5s^3 - C_5L_2r_os^2 + C_5L_2R_2r_os^3 + C_5R_2r_os^3 + C$

10.599 INVALID-ORDER-599 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2R_2R_Lr_os^4 + C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2R_2R_Lg_mr_os^3 + 4C_2C_5L_2R_2R_Ls^3 + C_2C_5L_2R_2R_Ls^3 + C_2C_5L_2R_2R_L$

10.600 INVALID-ORDER-600 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 R_2 r_o s^4 + C_2 C_5 L_2 L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 L_2 R_2$

10.601 INVALID-ORDER-601 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$

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

10.602 INVALID-ORDER-602 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5L_LL_2L_2R_2r_os^5 + C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5R_2s^4 + C$

10.603 INVALID-ORDER-603 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{(C_L L_L S_S)}{s \cdot (C_2 C_5 C_L L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_5 R_2 s^4 + C_2 C_5 C_L L_2 L_1 R_2 g_m r_o s^4 + 4 C_2 C_5 C_L L_2 L_1 R_2 s^4 + 4 C_2 C_5 C_L L_2 L_1 R_2 s^4 + 4 C_2 C_5 C_L L_2 L_2 R_2 R_2 g_m r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_2$

10.604 INVALID-ORDER-604 $Z(s) = \left(\infty, \ \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5L_2L_5L_LR_2g_mr_os^5 + C_2C_5L_2L_5L_LR_2s^6 + C_2C_5L_2L_5L_2s^6 + C_2C_5L_2L_2s^6 + C_2C_5L_2L_2s^6 + C_2C_5L_2L_2s^6 + C_2C_5L_2L_2s^6 + C_2C_5L_2s^6 + C$

- **10.605** INVALID-ORDER-605 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_$
- 10.606 INVALID-ORDER-606 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os$
- 10.607 INVALID-ORDER-607 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ R_L\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 r_o s^4 + C_2 L_2 L_5 R_2 g_m r_o s^3 + C_2 L_2 L_5 r_o s^3 C_2 L_2 R_2 r_o s^2 C_5 L_2 L_5 r_o s^3 + C_5 L_5 r_o s^3 + C$
- **10.608** INVALID-ORDER-608 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_2r_os^4 + C_2L_2L_5R_2g_mr_os^3 + C_2L_2L_5r_os^3 C_2L_2R_2r_os^2 C_5L_2L_5r_os^3 C_5L_5R_2g_mr_os^3 + C_2L_2L_5r_os^3 C_5L_2L_5r_os^3 C_5L_5R_2g_mr_os^3 + C_5L_5R_2g_mr_os^4 + C_5L_4L_5R_2g_mr_os^4 + C_5L_5R_2g_mr_os^4 +$
- 10.609 INVALID-ORDER-609 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_Lr_os^5 + 2C_2C_5L_2L_5R_2R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_2r_os^4 + 4C_2C_5L_2L_5R_Lr_os^4 + C_2C_LL_2L_5R_2R_Lg_mr_os^4 + C_2C_LL_2R_2R_Lg_mr_os^4 + C_2C_LL_2R_2R_Lg_mr_os$
- **10.610** INVALID-ORDER-610 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L_5R_2g$
- 10.611 INVALID-ORDER-611 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2r_os^5 + 2C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L$
- 10.612 INVALID-ORDER-612 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2r_os^6 + 2C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_LR_2s^5 + 4C_2C_5L_2L_5L_Lr_os^5 + C_2C_LL_2L_5L_LR_2s^5 + C_2C_LL_2L_2L_2L_2s^5 + C_2C_LL_2L_2L_2s^5 + C_2C_LL_2L_2L_2s^5 + C_2C_LL_2L_2s^5 + C_2C_LL_2L_2s^5 + C_2C_LL_2L_2s^5 + C_2C_LL_2s^5 + C$

10.613 INVALID-ORDER-613 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + 2C_2C_5C_LL_2L_5R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5$

10.614 INVALID-ORDER-614 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lr_os^6 + 2C_2C_5L_2L_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_LR_Lr_os^5 + C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_RR_2r_os^5 + 4C_2C_5L_2R_2r_os^5 + 4C_2C_5L_2R_2r_os^5 + 4C_2C_5L_2R_2r_os^$

10.615 INVALID-ORDER-615 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5L_LL_5L_LR_2r_os^6 + 4C_2C_5L_LR_2r_os^6 + 4C_2C$

10.616 INVALID-ORDER-616 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^$

10.617 INVALID-ORDER-617 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2$

10.618 INVALID-ORDER-618 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2R_2g_mr_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R$

10.619 INVALID-ORDER-619 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L}{C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_Lr_os^4 + C_2C_5C_LL_2R_5R_Lr_os^4 + C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5R_2g_mr_os^4$

10.620 INVALID-ORDER-620 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_4 R_2 R_5 g_m r_o s^4 + C_2 C_5 C_L L_2 R_2 R_2 g_m r_o s^4 + C_2 C_5 C$

10.621 INVALID-ORDER-621 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$

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

- 10.622 INVALID-ORDER-622 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5C_LL_2L_2r_os^5 + C_2C_5C_LL_2r_os^5 + C_2C_5C_LL_2r_os$
- 10.623 INVALID-ORDER-623 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{s\left(C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}g_{m}r_{o}s^{4} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{4} + C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}g_{m}r_{o}s^{4} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}s^{4} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}s^{4} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}s^{4} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}s^{4} + 4C_{2}C_{5}C_{L}L_{2}R_{2}R_{5}g_{m}r_{o}s^{3} + 4C_{2}C_{5}C_{L}L_{2}R_{$
- **10.624** INVALID-ORDER-624 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- 10.625 INVALID-ORDER-625 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_2R_2s^5 + 2C_2C_5C_LL_2L_LR_2R_2R_2s^5 + 2C_2C_5C_LL_2L_LR_2R_2s^5 + 2C_2C_5C_LL_2L_2R_2R_2s^5 + 2C_2C_5C_LL_2R_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_LL_2R_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_LL_2R_2s^5 + 2C_2C_5C_$
- 10.626 INVALID-ORDER-626 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_5s}} \right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_4R_2R_5g_mr_os^5 + C_2C_5C_LL_4R_2R_5g_mr_os^5 + C_2C_5C_LL_4R_5R_5g_mr_os^5 + C_2C_5C_LR_4R_5g_mr_os^5 + C_2C_5C_LR_5g_mr_os^5 + C_2C_5C_LR_5g_mr_os^5 + C_2C_5C_LR_5g_mr_os^5$
- 10.627 INVALID-ORDER-627 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s + \frac{1}{R_E} + \frac{1}{L_E} s}, \ R_L \right)$
- $H(s) = \frac{10L \left(-\frac{1}{2}C_2C_5L_2L_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_2R_5r_os^4 + 4C_2C_5L_2L_5R_2R_5r_os^4 + 4C_2C_5L_2L_5R_2R_5g_mr_os^3 + C_2L_2L_5R_2R_5g_mr_os^3 + C_2L_2L_5R_2R_2g_mr_os^3 + 4C_2L_2L_5R_2R_2g_mr_os^3 + 4C_2L_2L_5R_2g_mr_os^3 + 4C_2L_2L_2g_mr_os^3 + 4C_2L_2L_2g_mr_os^3 + 4C_2L_2L_2g_mr_os^3 + 4C_2L_2L_2g_mr_os^3 + 4C_2L_2L_2g_mr_os^3 + 4C_2L_2L_$
- 10.628 INVALID-ORDER-628 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_2R_5r_os^5 + 2C_2C_5L_2L_5R_2R_5r_os^5 + 2C_2C_5L_2L_5R_2R_5r_os^4 + 4C_2C_5L_2L_5R_2R_5r_os^4 + C_2C_LL_2L_5R_2R_5r_os^4 + C_2C_LL_2L_5R_2r_os^4 + C_2C_LL_2L_2r_os^2 + C_2C_LL_2L_2r_os^2 + C_2C_LL_2L_2r_os^2 + C_2C_LL_2r_os^2 + C_2C_LL_2r_os^2$

- 10.629 INVALID-ORDER-629 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lr_os^5 + 2C_2C_5L_2L_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2L_5R_2R_5R_Lr_$
- **10.630** INVALID-ORDER-630 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_5r_os^5 + 4C_2C_5C_LL_2L_5R_2R_5r_os^5 + 4C_2C_5L_2L_5R_2R_5g_mr_os^4 + 4C_2C_5L_2L_5R_5g_mr_os^4 + 4C_2C_5L_2L_5R_5g$
- 10.631 INVALID-ORDER-631 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + C_2C_5C_LL_2L_5R_2r_os^5 + 2C_2C_5L_2L_5R_2r_os^4 + 4C_2C_5L_2L_5R_2r_os^4 + 4C_2C_5L_2L_5R_2r_os^4 + 4C_2C_5L_2L_5L_Rr_os^6 + 4C_2C_5L_Lr_os^6 +$
- 10.632 INVALID-ORDER-632 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 2C_2C_5L_2L_5L_LR_2R_5g_mr_os^5 + 4C_2C_5L_2L_5L_LR_2R_5s^5 + 4C_2C_5L_2L_5L_LR_2r_os^5 + C_2C_LL_2L_5L_LR_2r_os^5 + C_2C_LL_2L_2r_os^5 + C_2C_LL_2r_os^5 + C_2C_LL$
- 10.633 INVALID-ORDER-633 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + 2C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_5r_os^5 + 4C_2C_5C_LL_2L_5R_5r_os^5 + 4C$
- 10.634 INVALID-ORDER-634 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls + \frac{1}{L_Ls} + \frac{1}{L_Ls}}\right)$
- **10.635** INVALID-ORDER-635 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_LL_5L_LR_2R_5g_mr_os^5 + 4C_2C_5L_2L_5L_LR_2R_5s^6 + 4C_2C_5L_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_2L_5L_LR_2R_5r_os^6 + 4C_2C_5L_2L_5L_Rr_os^6 + 4C_2C_5$
- 10.636 INVALID-ORDER-636 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 4C_2C_5C_LL_2L_5L_LR_5R_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_5R_Lr_os^6 + C_2C_5L_2L_5R_2R_5R_Lr_os^6 + C_2C_5L_2L_5R_2R_5R_Lr_os^6$

10.637 INVALID-ORDER-637 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L\right)$

- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g^4 C_2 C_5 L_2 L_5 R_2 r_o s^4 + C_2 C_5 L_2 L_5 R_5 r_o s^4 + C_2 L_2 L_5 R_2 g_m r_o s^3 C_2 L_2 L_5 R_2 r_o s^4 + C_2 L_2 L_5 R_2 r_o s^4$
- 10.638 INVALID-ORDER-638 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_2R_5g_mr_os^4 + C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R_5r_os^4 + C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R$
- 10.639 INVALID-ORDER-639 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5R_Ls^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5L_2L_5R_2R_5g_mr_os^4 + C_2C_5L_2L_5R_2R_2g_mr_os^4 + C_2C_5L_2L_5R_2R_2g_mr_os^4 + C_2C_5L_2L_5R_2R_Lg_mr_os^4 + C_2C_5L_2L_5R_2R$
- 10.640 INVALID-ORDER-640 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5s^5 + 2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_$
- 10.641 INVALID-ORDER-641 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2L_5R_2r_os$
- 10.642 INVALID-ORDER-642 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5q_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5L_2L_5L_LR_2r_os^6 + C_2C_5L_2L_5L_RR_2r_os^6 + C_2C_5L_2L_2r_os^6 + C_2C_5L_2L_2r_os^6 + C_2C_5L_2L_2r_os^6 + C_2C_5L$
- 10.643 INVALID-ORDER-643 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr_os^5 + 4C_2$
- 10.644 INVALID-ORDER-644 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}R_{5}R_{L}g_{m}r_{o}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}R_{5}R_{L}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}R_{L}r_{o}s^{6} + C_{2}C_{5}L_{L}L_{5}L_{L}R_{2}R_{5}g_{m}r_{o}s^{5} + C_{2}C_{5}L_{2}L_{5}L_{L}R_{2}R_{L}g_{m}r_{o}s^{5} + C_{2}C_{5}L_{L}R_{2}R_{L}g_{m}r_{o}s^{5} + C_$

10.645 INVALID-ORDER-645 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_Rr_os^6 + 4C_2C_5C$

10.646 INVALID-ORDER-646 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_RR_2r_os^6 + 4C_2C_5$

10.647 INVALID-ORDER-647 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 r_o s^4 + C_2 C_5 L_2 R_5 R_2 r_o s^4 + C_2 C_5 L_2 R_5$

10.648 INVALID-ORDER-648 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_2C_5L_2L_5R_2R_5g_mr_os^5 + C_2C_5L_2L_5R_2R_5g_mr_os^5 + C_2C_5L_2L_5R_2r_os^5 + C_2C_5L_2L_5R_2r_os^5 + C_2C_5L_2L_5R_2r_os^5 + C_2C_5L_2L_5R_2r_os^5 + C_2C_5L_2L_5R_2r_os^4 + 2C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5r_os^4 + 2C_2C_5L_2L_5R_2s^3 + 4C_2C_5L_2R_2r_os^3 + 4C_2C_5$

10.649 INVALID-ORDER-649 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5L_2L_5R_2R_Lr_os^4 + C_2C_5L_2L_5R_Lr_os^4 + C_2C_5L_2L_5R_2R_Lr_os^4 + C_2C_5L_2L_5R$

10.650 INVALID-ORDER-650 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5s^5 + 2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_$

10.651 INVALID-ORDER-651 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2L_5R_5r_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2L_5R_2r_os$

10.652 INVALID-ORDER-652 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} \right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5q_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5L_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_Rr_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_Rr_os^6 + C_2C_5C_LL$

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10.653 INVALID-ORDER-653 Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \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)
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$$H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr_os^5$$

10.654 INVALID-ORDER-654
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5L_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR$$

10.655 INVALID-ORDER-655
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_Rr_os^6 + 4C_2C_5C_LL_2L_5L_Rr$$

10.656 INVALID-ORDER-656
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_Rr_os^6 + 4C_2C_$$

10.657 INVALID-ORDER-657
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_2L_2R_2R_5g_mr_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_5r_os^2 + C_2R_2R_5r_os + R_2R_5g_mr_o + R_2R_5 - R_2r_o + R_5r_o}{C_2C_LL_2R_2r_os^3 + C_2C_LL_2R_2r_os^3 + C_2C_LL_2R_5r_os^3 + C_2C_LR_2R_5r_os^2 + 2C_2L_2R_2g_mr_os^2 + 4C_2L_2r_os^2 + 4C_2R_2r_os + C_LR_2R_5g_mr_os + C_LR_2R_5s + C_LR_2r_os + C_L$$

10.658 INVALID-ORDER-658
$$Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5, \frac{R_L}{C_LR_Ls + 1}\right)$$

10.659 INVALID-ORDER-659
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2 R_2 R_5 r_o s + R_2 R_5 g_m r_o + R_2 R_5 - R_2 r_o + R_5 r_o\right)}{C_2 C_L L_2 R_2 R_5 g_m r_o s^3 + C_2 C_L L_2 R_2 R_5 g_m r_o s^3 + C_2 C_L L_2 R_2 R_5 r_o s^3 + C_2 C_L L_2 R_2 r_o s^3 + C_2 C_L L_$$

10.660 INVALID-ORDER-660
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ L_Ls + \frac{1}{C_Ls}\right)$$

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

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 \textbf{10.661} \quad \textbf{INVALID-ORDER-661} \ \ Z(s) = \left( \infty, \ \frac{R_2\left( L_{2}s + \frac{1}{C_{2}s} \right)}{L_{2}s + R_2 + \frac{1}{C_{2}s}}, \ \infty, \ \infty, \ R_5, \ \frac{L_{L}s}{C_L L_L s^2 + 1} \right)   \qquad \qquad L_{L}s \left( C_2 L_2 R_2 R_5 g_m r_o s^2 + C_2 L_2 R_2 r_o s^2 + C_2 L_2 R_5 r_o s^2 + C_2
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10.662 INVALID-ORDER-662 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.663 INVALID-ORDER-663 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_LL_2L_LR_2R_5R_Lg_mr_os^4 + C_2C_LL_2L_LR_2R_5R_Ls^4 + C_2C_LL_2L_LR_2R_Lr_os^4 + C_2C_LL_2L_Rs_Rr_os^4 + C_2C_LL_LR_2R_5R_Lr_os^3 + C_2L_2L_LR_2R_5g_mr_os^3 + C_2L_2L_LR_2R_5g_mr_os^3 + C_2L_2L_LR_2R_Lg_mr_os^3 + C_2L$

10.664 INVALID-ORDER-664 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_LL_2L_LR_2R_5g_mr_os^4 + C_2C_LL_2L_LR_2R_5s^4 + 2C_2C_LL_2L_LR_2R_Lg_mr_os^4 + 4C_2C_LL_2L_LR_2r_os^4 + C_2C_LL_2L_LR_2r_os^4 + 4C_2C_LL_2L_LR_2r_os^4 + 4C_2C_LL_2L_Rr_os^4 + 4C_2C_LL_2L_Rr_$

10.665 INVALID-ORDER-665 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_LL_2L_LR_2R_5g_mr_os^4 + C_2C_LL_2L_LR_2R_5s^4 + 2C_2C_LL_2L_LR_2R_Lg_mr_os^4 + 4C_2C_LL_2L_LR_2r_os^4 + C_2C_LL_2L_LR_2r_os^4 + 4C_2C_LL_2L_LR_2r_os^4 + 4C_2C_LL_2L_2R_2r_os^4 + 4C_2C_LL_2R_2r_os^4 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^2 + 4C_2C_LL_2R_2r_os^$

10.666 INVALID-ORDER-666 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 + C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 + r_o \right)}{2 C_2 C_5 L_2 R_2 R_L g_m r_o s^3 + 4 C_2 C_5 L_2 R_2 r_o s^3 + 4 C_2 C_5 L_2 R_L r_o s^3 + 4 C_2 C_5 L_2 R_L r_o s^3 + 4 C_2 C_5 L_2 R_L r_o s^2 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s$

10.667 INVALID-ORDER-667 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2R_2r_os^3 + C_2L_2R_2g_mr_os^2 + C_2L_2R_2s^2 + C_2L_2r_os^2 + C_2R_2r_os - C_5R_2r_os + R_2g_mr_o + R_2 + r_o}{s\left(C_2C_5C_LL_2R_2r_os^3 + 2C_2C_5L_2R_2g_mr_os^2 + 4C_2C_5L_2r_os^2 + 4C_2C_5L_2r_os + C_2C_LL_2R_2g_mr_os^2 + C_2C_LL_2R_2s^2 + C_2C_LL_2r_os^2 + C_2C_LL_2r_os + C_5C_LR_2r_os + C_5C_$

10.668 INVALID-ORDER-668 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$

 10.669 INVALID-ORDER-669 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$

10.670 INVALID-ORDER-670 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$

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

10.671 INVALID-ORDER-671 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 + C_2 R_2 r_o s - C_5 R_2 r_o s + R_2 g_m r_o + R_2 - C_2 R_2 r_o s^2 + C_2 R_2 r_o s^$

10.672 INVALID-ORDER-672 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(-C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 C_L L_2 L_L R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 L_L R_2 r_o s^3 + 4 C_2 C_5 C_L L_2 R_2 r_o s^3 + 4 C_2 C_5 C_L L_$

10.673 INVALID-ORDER-673 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_Lr_os^5 + 2C_2C_5L_2L_LR_2R_Lg_mr_os^4 + 4C_2C_5L_2L_LR_2r_os^4 + 4C_2C_5L_2L_RR_2r_os^4 + 4C_2C_5L_2L_RR_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R_2r_os^2 + 4C_2C_5L_2R$

10.674 INVALID-ORDER-674 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_Rg_mr_os^4 + 4C_2C_5L_2L_LR_2g_mr_os^4 + 4C_2C_5L_2L_LR_2s^4 + 4C_2C_5L_2L_Lr_os^4 + 4C_2C_5L_2Lr_os^4 + 4C_2C_5L_2L_Lr_os^$

10.675 INVALID-ORDER-675 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_cs^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2R_LR_cs^5 + 4C_2C_5C_LR_cR_cs^5 + 4C_$

10.676 INVALID-ORDER-676 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ R_L\right)$

10.677 INVALID-ORDER-677 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2R_2R_5r_os^3 + C_2L_2R_2R_5g_mr_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_2r_os^2 + C_2L_2R_5r_os^2 + C_2R_2R_5r_os - C_5R_2R_5r_os + R_2R_5g_mr_os^2 + C_2L_2R_2r_os^3 + C_2L_2R_2r$

10.678 INVALID-ORDER-678 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 I_3 + C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_2 R_5 R_L r_o s^3 + 4 C_2 C_5 L_2 R_5 R_L r$

10.679 INVALID-ORDER-679 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5r_os^4 + 4C_2C_5C_LL_2R_2R_5R_Lr_os^3 + 2C_2C_5L_2R_2R_5g_mr_os^3 + 4C_2C_5L_2R_2R_5r_os^3 + 4C_2C_5L_2R_5r_os^3 + 4C_$

10.680 INVALID-ORDER-680 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_5s^5 + 4C_2C_5C_LL_2L_LR_5r_os^5 + C_2C_5C_LL_2R_2R_5r_os^4 + 4C_2C_5C_LL_2R_2R_5r_os^4 + 2C_2C_5L_2R_2R_5g_mr_os^3 + 4C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_5r_os^3 + 4C_2C_5R_2R_5r_os^4 + 4C_2C_5L_2R_2R_5r_os^4 + 4C_2C_5L_2R_5r_os^4 + 4C_2C_5L_2R_5r_os^4 + 4C_2C_5L_2R_5r_os^4 + 4C$

10.681 INVALID-ORDER-681 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(-C_1 + C_2 + C_3 + C_4 + C_4$

10.682 INVALID-ORDER-682 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2R_2R_5R_Lg_mr_os^4 + 4C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5$

10.683 INVALID-ORDER-683 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5R_Lr_os^5 + 2C_2C_5L_2L_LR_2R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_LR_2R_5R_Lr_os^4 + 4C_2C_5L_2R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_$

10.684 INVALID-ORDER-684 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s + 1}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $\frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}q_{m}r_{o}s^{5}+4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}s^{5}+C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}r_{o}s^{5}+4C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}r_{o}s^{4}+2C_{2}C_{5}L_{2}L_{L}R_{2}R_{5}q_{m}r_{o}s^{4}+4C_{2}C_{5}L_{2}L_{L}R_{2}R_{5}r_{o}s^{4}+4C_{2}C_{5}L_{2}L_{L}R_{2}$

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10.686 INVALID-ORDER-686 Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_5s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L\right)
H(s) = \frac{R_L \left( C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 r_
 10.687 INVALID-ORDER-687 Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_5L_2R_2R_5g_mr_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r_os^3 + C_2C_5R_2R_5r_os^3 + C_2C_5R_5R_5r_os^3 + C_2C_5R_5R_5r_os^3 + C_2C_5R_5R_5r_os^3 + C_2C_5R_5R_5r_os^3 + C_2C_5R_5R_5r_os^3 + C_2C_5R_5R_5r
 10.688 INVALID-ORDER-688 Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_5s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)
 H(s) = \frac{n_L \left( \cup_2 \cup_5 L_2 R_1 s_3 + C_2 C_5 L_2 R_2 R_5 R_L g_m r_o s^4 + C_2 C_5 C_L L_2 R_2 R_5 R_L r_o s^4 + C_2 C_5 C_L L_2 R_2 R_5 R_L r_o s^4 + C_2 C_5 C_L L_2 R_2 R_5 R_L r_o s^4 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_
 10.689 INVALID-ORDER-689 Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)
 H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 s^3 - C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \left(C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}R_{2}R_{5}g_{m}r_{o}s^{3}+C_{2}C_{5}L_{2}R_{2}R_{5}s^{3}-C_{2}C_{5}L_{2}R_{2}r_{o}s^{3}+C_{2}C_{5}L_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{2}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+C_{2}C_{5}R_{5}R_{5}r_{o}s^{3}+
 10.690 INVALID-ORDER-690 Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)
 H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^3 + C_2 C_5 L_2 R_2 R_5 s^3 - C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_2 R_5 r_o s^3 + C_2 C_5 L_2 R_5 r_o s^3 + C_2 C_5 L_2 R_2 r_o s^3 + C_2
 10.691 INVALID-ORDER-691 Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)
 H(s) = \frac{L_L s \left(C_2 C_5 L_2 R_2 R_5 g_m r_o s^5 + C_2 C_5 L_4 L_4 R_2 R_5 s^5 + C_2 C_5 L_4 L_4 R_2 R_5 r_o s^5 + C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 L_4 R_2 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 L_4 R_4 R_5 r_o s^4 + 2 C_2 C_5 R_4 R_5 r_o s^4 + 2 C_2 C_5 R_4 R_5 r_o s^4 + 2 C_2 C_5 R_5 R_5 r_o s^4 + 2 C
 10.692 INVALID-ORDER-692 Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_5s}}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
 H(s) = \frac{(CL_2C_3C_1L_2L_1R_2g_mr_os^4 + 4C_2C_5C_1L_2L_1R_2s^4 + 4C_2C_5C_1L_2L_1r_os^4 + C_2C_5C_1L_2R_2R_5g_mr_os^3 + C_2C_5C_1L_2R_2R_2R_3s^3 + 2C_2C_5C_1L_2R_2R_2R_2r_os^3 + 4C_2C_5C_1L_2R_2R_2r_os^3 + 4C_2C_5C_1L_2R_2r_os^3 + 4C_2C_5C_1L_
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 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_5R_Ls^5 + C_2C_5C_LL_2L_LR_2R_5r_os^5 + 4C_2C_5C_LL_2L_LR_5R_Lr_os^5 + C_2C_5C_LL_2R_2R_5R_Lr_os^4 + 4C_2C_5C_LL_2R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_2R_5R_Lg_mr_os^3 + 4C_2C_5L_2R_2R_5R_Ls^3 + C_2C_5L_2R_2R_5R_Lr_os^4 + 4C_2C_5C_LL_2R_2R_5R_Lr_os^4 + 4C_2C_5C_LR_2R_5R_Lr_os^4 + 4$

10.685 INVALID-ORDER-685 $Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s + 1}, \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$

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10.693 INVALID-ORDER-693 Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)
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$$H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5R_Ls^5 + C_2C_5C_LL_2L_LR_2R_Lr_os^5 + C_2C_5C_LL_2L_LR_2R_5R_Lr_os^4 + C_2C_5L_2L_LR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2R_5g_mr_os^4 + C_2C_5L_2L_RR_2g_mr_os^4 + C_2C$$

10.694 INVALID-ORDER-694
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_Rr_os^5 + 4C_2C_5C_LL_2L_2Rr_os^5 + 4C_2C_5C_LL_2L_2Rr_os^5 + 4C_2C_5C_LL_2L_2Rr_os^5 + 4C_2C_5C_LL_2L_2Rr_os^5 + 4C_2C_5C_LL_2L_2Rr_os^5 + 4C_2C$$

10.695 INVALID-ORDER-695
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_Rr_os^5 + 4C_2C_5C_LL_2L_R$$

10.696 INVALID-ORDER-696
$$Z(s) = \left(\infty, \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_5s}}, \infty, \infty, L_5s + \frac{1}{C_5s}, R_L\right)$$

$$H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_2 R_2 r_o s^3 + C_2 L_2 R_2 g_m r_o s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 r_o s^2 + C_2 L_2 r_o s^2 + C_2 L_2 r_o s^2 + C_5 L_5 R_2 g_m r_o s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_2 r_o s^3 + C_5 L_5 R_2 r_$$

10.697 INVALID-ORDER-697
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2R_2g_mr_os^2 + C_2L_2R_2s^2 + C_2L_2R_2s^2 + C_2L_2r_os^2 + C_2L_2r_os^2 + C_5L_5R_2g_mr_os^2 + C_5L_5R_2g_mr$$

10.698 INVALID-ORDER-698
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$$

$$H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^2 + C_2 C_5 L_L L_2 L_5 R_2 R_L r_o s^4 + C_2 C_5 L_L L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_5 R_$$

10.699 INVALID-ORDER-699
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_5 R_2 r_o s^3 + C_2 C_5 L_4 R_2 r_o s^3 + C_4 C_5 C_4 L_4 R_4 r$$

10.700 INVALID-ORDER-700
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 - C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_5 R_2 r_o s^4 + C_2 C_5 L_4 L_5 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_2 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_2 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_2 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 L_4 R_4 g_m r_o s^4 + C_4 C_5 C_L L_4 R_4 g_m r_o s^4 + C_4 C_5$$

10.701 INVALID-ORDER-701
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^6 + C_2 C_5 L_2 L_5 L_L R_2 s^6 + C_2 C_5 L_L L_L L_L R_2 r_o s^5 + C_2 C_5 L_L L_L L_L R_2 r_o s^5 + C_2 C_5 L_L L_L L_L R_2 r_o s^5 + C_2 C_5 L_L L_L L_L R_2 r_o s^5 + C_2 C_5 L$

10.702 INVALID-ORDER-702
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

10.703 INVALID-ORDER-703
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2R_Lr_os^5 + C_2C_5L_LL_5L_LR_2R_Lr_os^5 + C_2C_5L_2L_5L_LR_2g_mr_os^5 + C_2C_5L_2L_5L_LR_2s^5 + C_2C_5L_2L_5L_RR_2s^5 + C_2C_5L_2L_5L_2s^5 + C_2C_5L_2L_5L_2s^5 + C_2C_5L_2L_5L_2s^5 + C_2C_5L_2L_2s^5 + C_2C_5L_2L_2s^5 + C_2C_5L_2s^5 + C_2C_5L_2L_2s^5 + C_2C_5L_2s^5 + C_2C_5L_2s^5 + C$

10.704 INVALID-ORDER-704
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + 2C_2C_5C_LL_2L_LR_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_LR_2r_os^5 + 4C_2C_5C_LL_2L_RR_2r_os^5 + 4C_2C_5C_LL_2L_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^5 + 4C_2C_5C_LL_2r_os^$

10.705 INVALID-ORDER-705
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os$

10.706 INVALID-ORDER-706
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ R_L\right)$$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 g_m r_o s^3 + C_2 L_2 L_5 R_2 g_m r_o s^3 + C_2 L_2 L_5 r_o s^3 - C_2 L_2 R_2 r_o s^2 + C_2 L_5 R_2 r_o s^2 - C_5 L_5 R_2 r_o s^2 + L_5 R_2 r_o s^2 + C_2 L_5 R_2 r_o s^3 + C_2 L_2 R_2 r_o s^3 + C_2 L_2$

10.707 INVALID-ORDER-707
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{-C_2C_5L_2L_5R_2r_os^4 + C_2L_2L_5R_2g_mr_os^3 + C_2L_2L_5R_2s^3 + C_2L_2L_5r_os^3 - C_2L_2R_2r_os^2 + C_2L_5R_2r_os^2 - C_5L_5R_2r_os^2 + L_5R_2g_mr_os^2 + C_2L_5R_2r_os^3 + C_2L_4L_5R_2r_os^3 + C_2L_4R_2r_os^3 + C_4L_4R_2r_os^3 + C_4R_4r_os^3 + C_4R_4$

10.708 INVALID-ORDER-708
$$Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{R_L}{C_LR_Ls + 1}\right)$$

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

- 10.709 INVALID-ORDER-709 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^4 + 4C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_2r_os^4 + 4C_2C_5L_2L_5R_$
- 10.710 INVALID-ORDER-710 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 2C_2C_5L_2L_5R_2g_mr_os^4 + 4C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_2r_os^3 + C_2C_LL_2L_5R_2r_os^5 + 4C_2C_5L_2L_5R_2r_os^5 + 4C_2C_5L_2L_5$
- 10.711 INVALID-ORDER-711 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{L_L s \left(-C_2 C_5 C_5 C_1 L_2 L_5 L_L R_2 r_o s^6 + 2 C_2 C_5 L_2 L_5 L_L R_2 g_m r_o s^5 + 4 C_2 C_5 L_2 L_5 L_L R_2 s^5 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_2 L_5 L_L R_2 r_o s^4 + 4 C_2 C_5 L_5 L_L R_2 r_o s^$
- 10.712 INVALID-ORDER-712 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + 2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C$
- 10.713 INVALID-ORDER-713 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lr_os^6 + 2C_2C_5L_2L_5L_LR_2R_Lg_mr_os^5 + 4C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_Rr_os^5 + 4C_2C_5L_2L_2L_5L_Rr_os^5 + 4C_2C_5L_2$
- 10.714 INVALID-ORDER-714 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_5L_LR_2r_os^6 + 4C_2C_5C_LL_5L_LR_2r_os^6$
- 10.715 INVALID-ORDER-715 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_RR_2r_os^6 + 4C_2C_5C_LL_2L_5L_2R_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L_2r_os^6 + 4C_2C_5C_LL_2L_5L$
- 10.716 INVALID-ORDER-716 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 r_o s^4 + C_2 C_5 L_2 R_2 r_o s^3 + C_2 C_5 L_2 R_2 r_$

10.717 INVALID-ORDER-717 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2L_5r_os^4 + C_2C_5L_2R_2r_os^3 + C_2C_5L_2R_2r$

10.718 INVALID-ORDER-718 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2R_2R_5R_Lg_mr_os^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_Lr_os^4 + C_2C_5C_LL_2R_2R_Lr_os$

10.719 INVALID-ORDER-719 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$

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

10.720 INVALID-ORDER-720 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$

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

10.721 INVALID-ORDER-721 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2r_os^5 + C_2C_5C_LL_2L_2r_os^5 + C_2C_5C_LL_2r_os^5 + C_2C_5C_LL_2r_os$

10.722 INVALID-ORDER-722 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

10.723 INVALID-ORDER-723 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$

10.724 INVALID-ORDER-724 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5C_LL_2L_LR_2R_5g_mr_os^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 2C_2C_5C_LL_2L_LR_2R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_LR_2R_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2R_$

- 10.725 INVALID-ORDER-725 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_Lr_os$
- 10.726 INVALID-ORDER-726 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 R_5 r_o s^4 + C_2 L_2 L_5 R$

10.727 INVALID-ORDER-727 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2L_5R_2R_5r_os^4 + C_2L_2L_5R_2R_5g_mr_os^3 + C_2C_2L_2L_5R_2R_5g_mr_os^3 + C_2C_2L_2L_5R_2R_5g_mr_os^3 + C_2C_2L_2L_5R_2R_5g_mr_os^4 + C_2C_2L_2L_5R_2R_5g_mr_os^4 + C_2C_2L_2L_5R_2R_5g_mr_os^4 + C_2C_2L_2L_5R_2R_5r_os^4 + C_2C_2L_2R_5R_5r_os^4 + C_2C_2R_5R_5r_os^4 +$

10.728 INVALID-ORDER-728 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L}{C_LR_Ls + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lr_os^5 + 2C_2C_5L_2L_5R_2R_5R_Lg_mr_os^4 + 4C_2C_5L_2L_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_5R_2R_5R_Lr_os^4 + 4C_2C_5L_2R_$

10.729 INVALID-ORDER-729 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_5r_os^5 + 4C_2C_5C_LL_2L_5R_5R_5r_os^5 + 4C_2C_5C_LL$

10.730 INVALID-ORDER-730 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_5r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^5 + 4C_2C_5C_LL_5L_LR_2r_os^5 + 4C_2C_5L_LL_5L_LR_2r_os^5 + 4C_2C_5L_LR_2r_os^5 + 4C_2C_5L_LR_2r_os^$

10.731 INVALID-ORDER-731 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 2C_2C_5L_2L_5L_LR_2R_5g_mr_os^5 + 4C_2C_5L_2L_5L_LR_2r_os^5 + 4C_2C_5L_2L_5L_Rr_os^5 + 4C_2C_5L$

10.732 INVALID-ORDER-732 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + 4C_2C_5C_LL_2L_5L_RR_2R_5s^6 + 4C_2C_5C_LL_2L_5L_RR_5r_os^6 + 2C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_5r_os^5 + 4C_2C_5C_LL_2L_5R_2R_5R_2R_5r_os^5 + 4C_2C_5C_LL_2L_5R_2R_5R_5r_os^5 + 4C_2C_5C_LL_2L_5R_2R_5$

- 10.733 INVALID-ORDER-733 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- 10.734 INVALID-ORDER-734 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + 4C_2C_5C_LL_5L_LR_2R_5R_Lr_os^6 + 4C_2C_5C_LL_5L_LR$
- 10.735 INVALID-ORDER-735 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{1}{C_5s + \frac{1}{R_5} + \frac{1}{L_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- 10.736 INVALID-ORDER-736 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g^4 C_2 C_5 L_2 L_5 R_2 r_o s^4 + C_2 C_5 L_$
- 10.737 INVALID-ORDER-737 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_2R_5g_mr_os^4 + C_2C_5L_2L_5R_2R_5s^4 C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R_5r_os^4 + C_2C_5L_2L_5R_5r_os^4 + C_2C_5L_2L_5R_2r_os^4 + C_2C_5L_2L_5R$
- 10.738 INVALID-ORDER-738 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5R_Lr_os^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5C_LL_2L$
- 10.739 INVALID-ORDER-739 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5s^5 + 2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_$
- 10.740 INVALID-ORDER-740 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2R_2r_os^5 + C_2C_5C_LL_2R_2r_os^5 + C_2C_5C_LL_2R_2r_os^5 + C_2C$

- 10.741 INVALID-ORDER-741 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_Rr_os^6 + C_2C_5C_LL_2L$
- 10.742 INVALID-ORDER-742 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr_os^5 + 4$
- 10.743 INVALID-ORDER-743 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_Lr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_5R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LL_5L_LR_2R_Lr_os^6 + C_2C_5L_LR_2R_Lr_os^6 + C_2C_5L_LR$
- 10.744 INVALID-ORDER-744 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_RR_2r_os^6 + 4C_2C_5C$
- 10.745 INVALID-ORDER-745 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1} + R_5, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_Rr_os^6 + 4C_2C$
- 10.746 INVALID-ORDER-746 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m r_o s^4 + C_2 C_5 L_2 R_5 R_2 g_m r_o s^4 + C_2 C_$
- 10.747 INVALID-ORDER-747 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_2R_5g_mr_os^4 + C_2C_5L_2L_5R_2g_mr_os^4 + C_2C_5L$
- 10.748 INVALID-ORDER-748 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L}{C_LR_Ls + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_mr_os^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_2R_Lr_os^5 + C_2C_5C_LL_2R_2R_5R_Lr_os^4 + C_2C_5C_LL_2R_2R_5R_Lr_os^4 + C_2C_5L_2L_5R_2R_5g_mr_os^4 + C_2C_5L_2L_5R_5g_mr_os^4 + C$

- 10.749 INVALID-ORDER-749 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5s^5 + 2C_2C_5C_LL_2L_5R_2R_Lg_mr_os^5 + 4C_2C_5C_LL_2L_5R_2r_os^5 + 4C_2C_$
- 10.750 INVALID-ORDER-750 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2g_mr_os^5 + C_2C_5C_LL_2L_5R_2r_os^5 + C_2C_5C_LL_2L_5R_2r_os$
- 10.751 INVALID-ORDER-751 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_Rr_os^6 + C_2C_5C_LL_2L$
- 10.752 INVALID-ORDER-752 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Lr_os^6 + C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + C_2C_5C_LL_2L_5R_2R_5g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr_os^5 + 4C_2C_5C_LL_2L_5R_2g_mr$
- 10.753 INVALID-ORDER-753 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{1}{C_Ls + \frac{1}{R_L} + \frac{1}{L_Ls}}\right)$
- 10.754 INVALID-ORDER-754 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_Rr_os^6 + 4C_2C_5C_LL_$
- 10.755 INVALID-ORDER-755 $Z(s) = \left(\infty, \ \frac{R_2\left(L_2s + \frac{1}{C_2s}\right)}{L_2s + R_2 + \frac{1}{C_2s}}, \ \infty, \ \infty, \ \frac{R_5\left(L_5s + \frac{1}{C_5s}\right)}{L_5s + R_5 + \frac{1}{C_5s}}, \ \frac{R_L\left(L_Ls + \frac{1}{C_Ls}\right)}{L_Ls + R_L + \frac{1}{C_Ls}}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_mr_os^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 2C_2C_5C_LL_2L_5L_LR_2R_Lg_mr_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_LR_2r_os^6 + 4C_2C_5C_LL_2L_5L_RR_2r_os^6 + 4C_2C_5C$