Filter Summary Report: TIA,simple,Z2,Z5,ZL

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Contents

1 Examined H(z) for TIA simple Z2 Z5 ZL: $\frac{Z_L(Z_2Z_5g_m-Z_2+Z_5)}{Z_2Z_5g_m+2Z_2Z_Lg_m+Z_2+Z_5+4Z_L}$

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

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

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

Parameters:

Q:
$$\frac{C_L\sqrt{\frac{1}{C_LL_L}}(R_2R_5g_m+R_2+R_5)}{2(R_2g_m+2)}$$
 wo:
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth:
$$\frac{2(R_2g_m+2)}{C_L(R_2R_5g_m+R_2+R_5)}$$
 K-LP: 0 K-HP: 0 K-BP:
$$\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$$
 Qz: 0 Wz: None

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

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

- 4 LP
- 5 BS

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

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

$$\begin{aligned} &\text{Q: } \frac{2L_L\sqrt{\frac{1}{C_LL_L}}(R_2g_m+2)}{R_2R_5g_m+R_2+R_5} \\ &\text{wo: } \sqrt{\frac{1}{C_LL_L}} \\ &\text{bandwidth: } \frac{R_2R_5g_m+R_2+R_5}{2L_L(R_2g_m+2)} \\ &\text{K-LP: } \frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)} \\ &\text{K-HP: } \frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)} \\ &\text{K-BP: } 0 \\ &\text{Qz: None} \\ &\text{Wz: } \sqrt{\frac{1}{C_LL_L}} \end{aligned}$$

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

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{L_L\sqrt{\frac{1}{C_LL_L}}(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)}{R_L(R_2R_5g_m + R_2 + R_5)} \\ \text{wo:} \ \sqrt{\frac{1}{C_LL_L}} \\ \text{bandwidth:} \ \frac{R_L(R_2R_5g_m + R_2 + R_5)}{L_L(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)} \\ \text{K-LP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ \text{K-HP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ \text{K-BP:} \ 0 \\ \text{Qz:} \ \text{None} \\ \text{Wz:} \ \sqrt{\frac{1}{C_LL_L}} \end{array}$$

6 GE

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

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

Q:
$$\frac{2L_L\sqrt{\frac{1}{C_LL_L}}}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}$$
 wo:
$$\sqrt{\frac{1}{C_LL_L}}$$
 bandwidth:
$$\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{2L_L(R_2g_m+2)}$$
 K-LP:
$$\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$$
 K-HP:
$$\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$$
 K-BP:
$$\frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}$$
 Qz:
$$\frac{L_L\sqrt{\frac{1}{C_LL_L}}}{R_L}$$
 Wz:
$$\sqrt{\frac{1}{C_LL_L}}$$

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

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

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

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

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

Parameters:

$$\begin{aligned} & \text{Q: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_m+1)}{2R_2R_Lg_m+R_2+4R_L} \\ & \text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth: } \frac{2R_2R_Lg_m+R_2+4R_L}{L_5(R_2g_m+1)} \\ & \text{K-LP: } R_L \\ & \text{K-HP: } R_L \\ & \text{K-BP: } -\frac{R_2R_L}{2R_2R_Lg_m+R_2+4R_L} \\ & \text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(-R_2g_m-1)}{R_2} \\ & \text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.4 GE-4
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$H(s) = \frac{R_L \left(-C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2 \right)}{2 C_5 L_5 R_2 R_L g_m s^2 + C_5 L_5 R_2 s^2 + 4 C_5 L_5 R_L s^2 + L_5 R_2 g_m s + L_5 s + 2 R_2 R_L g_m + R_2 + 4 R_L r_2}$

$$Q: \frac{C_5\sqrt{\frac{1}{C_5L_5}}(2R_2R_Lg_m + R_2 + 4R_L)}{R_2g_m + 1}$$
 wo: $\sqrt{\frac{1}{C_5L_5}}$ bandwidth: $\frac{R_2g_m + 1}{C_5(2R_2R_Lg_m + R_2 + 4R_L)}$ K-LP: $-\frac{R_2R_L}{2R_2R_Lg_m + R_2 + 4R_L}$ K-HP: $-\frac{R_2R_L}{2R_2R_Lg_m + R_2 + 4R_L}$ K-BP: R_L Qz: $-\frac{C_5R_2\sqrt{\frac{1}{C_5L_5}}}{R_2g_m + 1}$ Wz: $\sqrt{\frac{1}{C_5L_5}}$

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

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

$$\begin{aligned} & \text{Q: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_m+1)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L} \\ & \text{wo: } \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth: } \frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{L_5(R_2g_m+1)} \\ & \text{K-LP: } R_L \\ & \text{K-HP: } R_L \\ & \text{K-BP: } \frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L} \\ & \text{Qz: } \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2g_m+1)}{R_2R_5g_m-R_2+R_5} \\ & \text{Wz: } \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

6.6 GE-6
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$$

Parameters:

$$\begin{aligned} & \text{Q: } \frac{C_5 R_5 \sqrt{\frac{1}{C_5 L_5}} (2 R_2 R_L g_m + R_2 + 4 R_L)}{R_2 R_5 g_m + 2 R_2 R_L g_m + R_2 + R_5 + 4 R_L} \\ & \text{wo: } \sqrt{\frac{1}{C_5 L_5}} \\ & \text{bandwidth: } \frac{R_2 R_5 g_m + 2 R_2 R_L g_m + R_2 + R_5 + 4 R_L}{C_5 R_5 (2 R_2 R_L g_m + R_2 + 4 R_L)} \\ & \text{K-LP: } -\frac{R_2 R_L}{2 R_2 R_L g_m + R_2 + 4 R_L} \\ & \text{K-HP: } -\frac{R_2 R_L}{2 R_2 R_L g_m + R_2 + 4 R_L} \\ & \text{K-BP: } \frac{R_L (R_2 R_5 g_m - R_2 + R_5)}{R_2 R_5 g_m + 2 R_2 R_L g_m + R_2 + R_5 + 4 R_L} \\ & \text{Qz: } -\frac{C_5 R_2 R_5}{R_2 R_5 g_m - R_2 + R_5} \\ & \text{Wz: } \sqrt{\frac{1}{C_5 L_5}} \end{aligned}$$

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

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

$$\begin{aligned} & \text{Q:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)}{R_2g_m + 1} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth:} \ \frac{R_2g_m + 1}{C_5(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)} \\ & \text{K-LP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-HP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-BP:} \ R_L \\ & \text{Qz:} \ \frac{C_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_m - R_2 + R_5)}{R_2g_m + 1} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

$$\textbf{6.8} \quad \textbf{GE-8} \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L\right)$$

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

$$\begin{aligned} & \text{Q:} \ \frac{L_5\sqrt{\frac{1}{C_5L_5}}(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)}{R_5(2R_2R_Lg_m + R_2 + 4R_L)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_5L_5}} \\ & \text{bandwidth:} \ \frac{R_5(2R_2R_Lg_m + R_2 + 4R_L)}{L_5(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)} \\ & \text{K-LP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-HP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_5R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-BP:} \ -\frac{R_2R_L}{2R_2R_Lg_m + R_2 + 4R_L} \\ & \text{Qz:} \ \frac{L_5\sqrt{\frac{1}{C_5L_5}}(-R_2R_5g_m + R_2 - R_5)}{R_2R_5} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_5L_5}} \end{aligned}$$

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

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

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_m + 2R_Lg_m + 1)}{R_5 + 4R_L} \\ & \text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ & \text{bandwidth:} \ \frac{R_5 + 4R_L}{L_2(R_5g_m + 2R_Lg_m + 1)} \\ & \text{K-LP:} \ \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ & \text{K-HP:} \ \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ & \text{K-BP:} \ \frac{R_5R_L}{R_5+4R_L} \\ & \text{Qz:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_m - 1)}{R_5} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{aligned}$$

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

$$H(s) = \frac{R_L \left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1 \right)}{C_2 L_2 R_5 g_m s^2 + 2 C_2 L_2 R_L g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_5 g_m s + 2 C_2 R_2 R_L g_m s + C_2 R_2 s + C_2 R_5 s + 4 C_2 R_L s + R_5 g_m + 2 R_L g_m + 1}$$

$$\begin{aligned} &\text{Q:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_m + 2R_Lg_m + 1)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ &\text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ &\text{bandwidth:} \ \frac{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L}{L_2(R_5g_m + 2R_Lg_m + 1)} \\ &\text{K-LP:} \ \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ &\text{K-HP:} \ \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ &\text{K-BP:} \ \frac{R_L(R_5g_m - 1)}{R_2R_5g_m + 2R_Lg_m + R_2 + R_5 + 4R_L} \\ &\text{Qz:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_5g_m - 1)}{R_2R_5g_m - R_2 + R_5} \\ &\text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{aligned}$$

6.11 GE-11
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ R_L\right)$$

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

$$\begin{aligned} & \text{Q:} \ \frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m + 2R_Lg_m + R_2 + R_5 + 4R_L)}{R_5g_m + 2R_Lg_m + 1} \\ & \text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ & \text{bandwidth:} \ \frac{R_5g_m + 2R_Lg_m + 1}{C_2(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)} \\ & \text{K-LP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-HP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-BP:} \ \frac{R_L(R_5g_m - 1)}{R_5g_m + 2R_Lg_m + 1} \\ & \text{Qz:} \ \frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m - R_2 + R_5)}{R_5g_m - 1} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{aligned}$$

6.12 GE-12
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, R_5, R_L\right)$$

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)}{R_2(R_5 + 4R_L)} \\ & \text{wo:} \ \sqrt{\frac{1}{C_2L_2}} \\ & \text{bandwidth:} \ \frac{R_2(R_5 + 4R_L)}{L_2(R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L)} \\ & \text{K-LP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-HP:} \ \frac{R_L(R_2R_5g_m - R_2 + R_5)}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{K-BP:} \ \frac{R_5R_L}{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L} \\ & \text{Qz:} \ \frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m - R_2 + R_5)}{R_2R_5} \\ & \text{Wz:} \ \sqrt{\frac{1}{C_2L_2}} \end{aligned}$$

7 AP

8 INVALID-NUMER

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

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

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

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

Parameters:

Q: $\frac{\sqrt{2}C_5C_LR_2R_5\sqrt{\frac{R_2g_m+2}{C_5C_LR_2R_5}}}{2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}$ wo: $\sqrt{2}\sqrt{\frac{R_2g_m+2}{C_5C_LR_2R_5}}$ bandwidth: $\frac{2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}{C_5C_LR_2R_5}$ K-LP: $\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$ K-HP: 0 K-BP: $-\frac{C_5R_2R_5}{2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}$ Qz: 0 Wz: None

8.3 INVALID-NUMER-3 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

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

Parameters:

Q: $\frac{C_5C_LR_2R_5R_L\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_5C_LR_2R_5R_L}}}{\frac{C_5C_LR_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}{C_5C_LR_2R_5R_L}}$ wo: $\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_5C_LR_2R_5R_L}}}$ bandwidth: $\frac{2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}{C_5C_LR_2R_5R_L}}{\frac{C_5C_LR_2R_5R_L}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}}}$ K-LP: $\frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}}$ K-HP: 0 K-BP: $-\frac{C_5R_2R_5R_L}{2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}}{\frac{C_5R_2R_5R_L}{R_2R_5R_L+C_LR_2R_5R_L+C_LR_2R_5R_L+C_LR_5R_L}}}$ Qz: 0 Wz: None

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

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

Parameters:

Q: $\frac{C_5C_LR_L\sqrt{\frac{R_2g_m+1}{C_5C_LR_L(R_2R_5g_m+R_2+R_5)}}(R_2R_5g_m+R_2+R_5)}{C_5R_2R_5g_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L+C_LR_2R_Lg_m+C_LR_L}$ wo: $\sqrt{\frac{R_2g_m+1}{C_5C_LR_L(R_2R_5g_m+R_2+R_5)}}$ bandwidth: $\frac{C_5R_2R_5g_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L+C_LR_2R_Lg_m+C_LR_L}{C_5C_LR_L(R_2R_5g_m+R_2+R_5)}$ K-LP: R_L K-HP: 0
K-BP: $\frac{C_5R_L(R_2R_5g_m-R_2+R_5)}{C_5R_2R_5g_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L+C_LR_2R_Lg_m+C_LR_L}$ Qz: 0
Wz: None

8.5 INVALID-NUMER-5 $Z(s) = \left(\infty, \frac{1}{C_{2s}}, \infty, \infty, R_5, \frac{1}{C_{Ls}}\right)$

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

Parameters:

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

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

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

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_2C_LR_5R_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_LR_5R_L}}}{C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_LR_5R_L}} \\ \text{bandwidth:} \ \frac{C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L}{C_2C_LR_5R_L} \\ \text{K-LP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_5R_L}{C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$

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

$$I(s) = \frac{R_L (C_2 s - C_5 s + g_m)}{4C_2 C_5 R_L s^2 + C_2 s + 2C_5 R_L g_m s + C_5 s + g_m}$$

Parameters:

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

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

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

$$\text{Q: } \frac{R_L \sqrt{\frac{g_m}{R_L \left(4C_2C_5 + C_2C_L + C_5C_L\right)}} \left(4C_2C_5 + C_2C_L + C_5C_L\right)}{C_2 + 2C_5R_Lg_m + C_5 + C_LR_Lg_m}$$

```
wo: \sqrt{\frac{g_m}{R_L(4C_2C_5+C_2C_L+C_5C_L)}} bandwidth: \frac{C_2+2C_5R_Lg_m+C_5+C_LR_Lg_m}{R_L(4C_2C_5+C_2C_L+C_5C_L)} K-LP: R_L K-HP: 0 K-BP: \frac{R_L(C_2-C_5)}{C_2+2C_5R_Lg_m+C_5+C_LR_Lg_m} Qz: 0 Wz: None
```

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

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

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{2C_2C_5R_5R_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_5R_5R_L}}}{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5} \\ \text{wo:} \ \frac{\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_5R_5R_L}}}{2} \\ \text{bandwidth:} \ \frac{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5}{4C_2C_5R_5R_L} \\ \text{K-LP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_5R_L(C_2-C_5)}{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$

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

$$H(s) = \frac{C_2R_5s - C_5R_5s + R_5g_m - 1}{4C_2C_5R_5s^2 + C_2C_LR_5s^2 + 4C_2s + C_5C_LR_5s^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_Ls + 2g_m}$$

Parameters:

$$\begin{array}{l} \text{Q:} \ \frac{\sqrt{2}R_5\sqrt{\frac{g_m}{R_5(4C_2C_5+C_2C_L+C_5C_L)}}(4C_2C_5+C_2C_L+C_5C_L)}{4C_2+2C_5R_5g_m+C_LR_5g_m+C_L} \\ \text{Wo:} \ \sqrt{2}\sqrt{\frac{g_m}{R_5(4C_2C_5+C_2C_L+C_5C_L)}} \\ \text{bandwidth:} \ \frac{4C_2+2C_5R_5g_m+C_LR_5g_m+C_L}{R_5(4C_2C_5+C_2C_L+C_5C_L)} \\ \text{K-LP:} \ \frac{R_5g_m-1}{2g_m} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_5(C_2-C_5)}{4C_2+2C_5R_5g_m+C_LR_5g_m+C_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

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

$$\begin{array}{l} \text{Q:} \ \frac{R_5R_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{R_5R_L(4C_2C_5+C_2C_L+C_5C_L)}}(4C_2C_5+C_2C_L+C_5C_L)}{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L} \\ \text{wo:} \ \sqrt{\frac{R_5g_m+2R_Lg_m+1}{R_5R_L(4C_2C_5+C_2C_L+C_5C_L)}} \\ \text{bandwidth:} \ \frac{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L}{R_5R_L(4C_2C_5+C_2C_L+C_5C_L)} \\ \text{K-LP:} \ \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{R_5R_L(C_2-C_5)}{C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5+C_LR_5R_Lg_m+C_LR_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$$

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

$$H(s) = \frac{C_2R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_LR_2R_5s^2 + 4C_2R_2s + C_LR_2R_5g_ms + C_LR_2s + C_LR_5s + 2R_2g_m + 4}$$

Parameters:

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

8.13 INVALID-NUMER-13 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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

Parameters:

 $\begin{array}{l} \text{Q:} \ \frac{C_2C_LR_2R_5R_L\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_2C_LR_2R_5R_L}}}{C_2R_2R_5+4C_2R_2R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L} \\ \text{wo:} \ \sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_2C_LR_2R_5R_L}} \\ \text{bandwidth:} \ \frac{C_2R_2R_5+4C_2R_2R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}{C_2C_LR_2R_5R_L} \\ \text{K-LP:} \ \frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L} \\ \text{K-HP:} \ 0 \\ \text{K-BP:} \ \frac{C_2R_2R_5+4C_2R_2R_L+C_LR_2R_5R_L}{C_2R_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L} \\ \text{Qz:} \ 0 \\ \text{Wz:} \ \text{None} \end{array}$

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

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

Parameters:

Q: $\frac{2C_2C_5R_2R_L\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_L}}}{C_2R_2+2C_5R_2R_Lg_m+C_5R_2+4C_5R_L}$ wo: $\frac{\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_L}}}{2}$ bandwidth: $\frac{C_2R_2+2C_5R_2R_Lg_m+C_5R_2+4C_5R_L}{4C_2C_5R_2R_L}$ K-LP: R_L K-HP: 0
K-BP: $\frac{R_2R_L(C_2-C_5)}{C_2R_2+2C_5R_2R_Lg_m+C_5R_2+4C_5R_L}$ Qz: 0
Wz: None

8.15 INVALID-NUMER-15 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

Q:
$$\frac{R_2 R_L \sqrt{\frac{R_2 g_m + 1}{R_2 R_L (4C_2 C_5 + C_2 C_L + C_5 C_L)}} (4C_2 C_5 + C_2 C_L + C_5 C_L)}{C_2 R_2 + 2C_5 R_2 R_L g_m + C_5 R_2 + 4C_5 R_L + C_L R_2 R_L g_m + C_L R_L}$$

```
Wo: \sqrt{\frac{R_2 g_m + 1}{R_2 R_L (4C_2 C_5 + C_2 C_L + C_5 C_L)}}
           bandwidth: \frac{C_2R_2 + 2C_5R_2R_Lg_m + C_5R_2 + 4C_5R_L + C_LR_2R_Lg_m + C_LR_L}{R_2R_L(4C_2C_5 + C_2C_L + C_5C_L)}
           K-LP: R_L
           K-HP: 0
          K-BP: \frac{R_2R_L(C_2-C_5)}{C_2R_2+2C_5R_2R_Lg_m+C_5R_2+4C_5R_L+C_LR_2R_Lg_m+C_LR_L}
             Qz: 0
          Wz: None
8.16 INVALID-NUMER-16 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\right)
                                                                                                                                                                                                                                                                                                                                                                                             R_L \left( C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5 \right)
                                                                                                                                                                                                                 H(s) = \frac{1}{4C_2C_5R_2R_5R_Ls^2 + C_2R_2R_5s + 4C_2R_2R_Ls + 2C_5R_2R_5R_Lg_ms + C_5R_2R_5s + 4C_5R_5R_Ls + R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_Lg_ms + R_2R_5g_m + 2R_2R_2g_m + R_2 + R_5 + 4R_Lg_ms + R_2R_5g_m + 2R_2R_2g_m + R_2 + R_5 + 4R_Lg_ms + R_2R_5g_m + 2R_2R_2g_m + R_2 + R_5 + 4R_Lg_ms + R_2R_5g_m + 2R_2R_2g_m + R_2 + R_5 + 4R_Lg_ms + R_2R_5g_m + 2R_2R_2g_m + R_2 + R_2R_2g_m + R_2R_2g_m + R_2 + R_2R_2g_m + R_2R_2g_m
    Parameters:
          Q: \frac{2C_2C_5R_2R_5R_L\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_2C_5R_2R_5R_L}}}{\frac{C_2C_5R_2R_5R_L}{C_2R_2R_5+4C_2R_2R_L+2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L}}{\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{C_2C_5R_2R_5R_L}}}} wo:
       bandwidth: \frac{C_2R_2R_5+4C_2R_2R_L+2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L}{4C_2C_5R_2R_5R_L} K-LP: \frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L} K-HP: 0
           K-BP: \frac{R_2R_5R_L(C_2-C_5)}{C_2R_2R_5+4C_2R_2R_L+2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L}
            Wz: 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)
                                                                                                                                                                                                                                                                                                                                                                                                      C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5
                                                                                                                                                                                                              H(s) = \frac{1}{4C_2C_5R_2R_5s^2 + C_2C_LR_2R_5s^2 + 4C_2R_2s + C_5C_LR_2R_5s^2 + 2C_5R_2R_5g_ms + 4C_5R_5s + C_LR_2R_5g_ms + C_LR_2s + C_LR_2s + 2R_2g_m + 4C_5R_5s + C_LR_2s + C_LR_2s + C_LR_2s + 2R_2g_m + 4C_5R_5s + 2R_2g_ms + 4C_5R_5s + 2R_2g_m + 4C_5R_5s + 2R_5R_5s + 2R_5R_5s
    Parameters:
            \text{Q: } \frac{\sqrt{2}R_2R_5\sqrt{\frac{R_2g_m+2}{R_2R_5\left(4C_2C_5+C_2C_L+C_5C_L\right)}}(4C_2C_5+C_2C_L+C_5C_L)}}{4C_2R_2+2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}
            wo: \sqrt{2}\sqrt{\frac{R_2g_m+2}{R_2R_5(4C_2C_5+C_2C_L+C_5C_L)}}
           bandwidth: \frac{4C_2R_2+2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}{R_2R_5(4C_2C_5+C_2C_L+C_5C_L)}
          K-LP: \frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}
           K-HP: 0
          K-BP: \frac{R_2R_5(C_2-C_5)}{4C_2R_2+2C_5R_2R_5g_m+4C_5R_5+C_LR_2R_5g_m+C_LR_2+C_LR_5}
            Qz: 0
            Wz: None
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)
                                                                                                                                                                                                                                                                                                                                                                                             R_L \left( C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5 \right)
                                                               Parameters:
                                                                  R_2R_5R_L\sqrt{\frac{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}{R_2R_5R_L\left(4C_2C_5+C_2C_L+C_5C_L\right)}}(4C_2C_5+C_2C_L+C_5C_L)
            Q: \frac{\sqrt{\frac{N_2N_5N_L(3C_2C_5+2C_L+C_5C_L)}{C_2R_2R_5+4C_2R_2R_L+2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}}{C_2R_2R_5+4C_2R_2R_2R_L+2C_5R_2R_5+4C_5R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}}
            Wo: \sqrt{\frac{R_2R_5g_m + 2R_2R_Lg_m + R_2 + R_5 + 4R_L}{R_2R_5R_L(4C_2C_5 + C_2C_L + C_5C_L)}}
            bandwidth: \frac{C_2R_2R_5+4C_2R_2R_L+2C_5R_2R_5R_Lg_m+C_5R_2R_5+4C_5R_5R_L+C_LR_2R_5R_Lg_m+C_LR_2R_L+C_LR_5R_L}{R_2R_5R_L(4C_2C_5+C_2C_L+C_5C_L)}
          K-LP: \frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L}
```

 $\begin{array}{lll} \text{K-BP:} & & & & & & & & & & & \\ \text{K-BP:} & & & & & & & & \\ \hline \text{C}_2R_2R_5 + 4C_2R_2R_L + 2C_5R_2R_5R_Lg_m + C_5R_2R_5 + 4C_5R_5R_L + C_LR_2R_5R_Lg_m + C_LR_2R_L + C_LR_5R_L} \end{array}$

Qz: 0 Wz: None

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

$$H(s) = \frac{C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1}{C_2C_LR_2R_5g_ms^2 + C_2C_LR_2s^2 + C_2C_LR_5s^2 + 2C_2R_2g_ms + 4C_2s + C_LR_5g_ms + C_Ls + 2g_m}$$

Parameters:

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

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

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

Parameters:

Q:
$$\frac{C_2C_LR_L\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_LR_L(R_2R_5g_m+R_2+R_5)}}(R_2R_5g_m+R_2+R_5)}{C_2R_2R_5g_m+2C_2R_2R_Lg_m+C_2R_2+C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L}$$
 wo:
$$\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_LR_L(R_2R_5g_m+R_2+R_5)}}$$
 bandwidth:
$$\frac{C_2R_2R_5g_m+2C_2R_2R_Lg_m+C_2R_2+C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L}{C_2C_LR_L(R_2R_5g_m+R_2+R_5)}$$
 K-LP:
$$\frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}$$
 K-HP:
$$0$$
 K-BP:
$$\frac{C_2R_L(R_2R_5g_m-R_2+R_5)}{C_2R_2R_5g_m+2C_2R_2R_Lg_m+C_2R_2+C_2R_5+4C_2R_L+C_LR_5R_Lg_m+C_LR_L}{C_2C_LR_L(R_2R_5g_m-R_2+R_5)}}$$
 Qz:
$$0$$
 Wz: None

9 INVALID-WZ

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

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

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

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

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

Parameters:

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

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

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

Parameters:

$$\begin{aligned} & \text{Q:} \ \frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(R_5+4R_L)}}(R_5+4R_L)}{C_2+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ & \text{wo:} \ \sqrt{\frac{g_m}{C_2C_5(R_5+4R_L)}} \\ & \text{bandwidth:} \ \frac{C_2+C_5R_5g_m+2C_5R_Lg_m+C_5}{C_2C_5(R_5+4R_L)} \\ & \text{K-LP:} \ R_L \\ & \text{K-HP:} \ \frac{R_5R_L}{R_5+4R_L} \\ & \text{K-BP:} \ \frac{R_L(C_2+C_5R_5g_m-C_5)}{C_2+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ & \text{Qz:} \ \frac{C_2C_5R_5\sqrt{\frac{g_m}{C_2C_5(R_5+4R_L)}}}{C_2+C_5R_5g_m-C_5} \\ & \text{Wz:} \ \sqrt{\frac{g_m}{C_2C_5R_5}} \end{aligned}$$

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

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

$$Q \colon \frac{\sqrt{2}C_2C_LR_2\sqrt{\frac{R_2g_m+2}{C_2C_LR_2(R_5+4R_L)}}}{4C_2R_2+C_LR_2R_5g_m+2C_LR_2R_Lg_m+C_LR_2+C_LR_5+4C_LR_L}}$$
 wo: $\sqrt{2}\sqrt{\frac{R_2g_m+2}{C_2C_LR_2(R_5+4R_L)}}$ bandwidth:
$$\frac{4C_2R_2+C_LR_2R_5g_m+2C_LR_2R_Lg_m+C_LR_2+C_LR_2+C_LR_5+4C_LR_L}{C_2C_LR_2(R_5+4R_L)}}$$
 K-LP:
$$\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$$
 K-HP:
$$\frac{R_5R_L}{R_5+4R_L}$$
 K-BP:
$$\frac{C_2R_2R_5+C_LR_2R_5R_Lg_m-C_LR_2R_L+C_LR_5R_L}{4C_2R_2+C_LR_2R_5g_m+2C_LR_2R_Lg_m+C_LR_2+C_LR_5+4C_LR_L}}$$
 Qz:
$$\frac{\sqrt{2}C_2C_LR_2R_5R_L\sqrt{\frac{R_2g_m+2}{C_2C_LR_2(R_5+4R_L)}}}}{C_2R_2R_5+C_LR_2R_5R_Lg_m-C_LR_2R_L+C_LR_5+4C_LR_L}}$$
 Wz:
$$\sqrt{\frac{R_2R_5g_m-R_2+R_5}{C_2C_LR_2R_5R_L}}$$

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

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

Parameters:

$$\begin{array}{c} C_2C_5R_2\sqrt{\frac{R_2g_m+1}{C_2C_5R_2(R_5+4R_L)}}(R_5+4R_L) \\ Q\colon \frac{R_2g_m+1}{C_2R_2+C_5R_2R_5g_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L} \\ \text{wo: } \sqrt{\frac{R_2g_m+1}{C_2C_5R_2(R_5+4R_L)}} \\ \text{bandwidth: } \frac{C_2R_2+C_5R_2R_5g_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L}{C_2C_5R_2(R_5+4R_L)} \\ \text{K-LP: } R_L \\ \text{K-HP: } \frac{R_5R_L}{R_5+4R_L} \\ \text{K-BP: } \frac{R_L(C_2R_2+C_5R_2R_5g_m-C_5R_2+C_5R_5)}{C_2R_2+C_5R_2Sg_m+2C_5R_2R_Lg_m+C_5R_2+C_5R_5+4C_5R_L} \\ \text{Qz: } \frac{C_2C_5R_2R_5\sqrt{\frac{R_2g_m+1}{C_2C_5R_2(R_5+4R_L)}}}{C_2R_2+C_5R_2Sg_m-C_5R_2+C_5R_5} \\ \text{Wz: } \sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_5}} \\ \end{array}$$

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

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

Parameters:

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

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

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

$$\begin{aligned} & \text{Q:} & \frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(2R_2R_Lg_m+R_2+4R_L)}}}{C_2R_2g_m+C_2+2C_5R_Lg_m+C_5} \\ & \text{wo:} & \sqrt{\frac{g_m}{C_2C_5(2R_2R_Lg_m+R_2+4R_L)}} \\ & \text{bandwidth:} & \frac{C_2R_2g_m+C_2+2C_5R_Lg_m+C_5}{C_2C_5(2R_2R_Lg_m+R_2+4R_L)} \\ & \text{K-LP:} & R_L \\ & \text{K-HP:} & -\frac{R_2R_L}{2R_2R_Lg_m+R_2+4R_L} \\ & \text{K-BP:} & \frac{R_L(C_2R_2g_m+C_2-C_5)}{C_2R_2g_m+C_2+2C_5R_Lg_m+C_5} \\ & \text{Qz:} & -\frac{C_2C_5R_2\sqrt{\frac{g_m}{C_2C_5(2R_2R_Lg_m+R_2+4R_L)}}}{C_2R_2g_m+C_2-C_5} \\ & \text{Wz:} & \sqrt{-\frac{g_m}{C_2C_5R_2}} \end{aligned}$$

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

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

$$Q\colon \frac{C_2C_5R_5\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_5R_5(2R_2R_Lg_m+R_2+4R_L)}}}{(2R_2R_Lg_m+R_2+4R_L)}(2R_2R_Lg_m+R_2+4R_L)}$$

$$Q\colon \frac{R_5g_m+2C_2R_2R_Lg_m+C_2R_2+C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5}{C_2C_5R_5(2R_2R_Lg_m+R_2+4R_L)}$$

$$\text{bandwidth:} \frac{C_2R_2R_5g_m+2C_2R_2R_Lg_m+C_2R_2+C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5}{C_2C_5R_5(2R_2R_Lg_m+R_2+4R_L)}$$

$$K\text{-LP:} \frac{R_L(R_5g_m-1)}{R_5g_m+2R_Lg_m+1}$$

$$K\text{-HP:} -\frac{R_2R_L}{2R_2R_2g_m+R_2+4R_L}$$

$$K\text{-BP:} \frac{R_L(C_2R_2R_5g_m-C_2R_2+C_2R_5-C_5R_5)}{C_2R_2R_2g_m+C_2R_2+C_2R_5+4C_2R_L+2C_5R_5R_Lg_m+C_5R_5}$$

$$Qz\colon -\frac{C_2C_5R_2R_5\sqrt{\frac{R_5g_m+2R_Lg_m+1}{C_2C_5R_5(2R_2R_Lg_m+R_2+4R_L)}}}{C_2R_2R_5g_m-C_2R_2+C_2R_5-C_5R_5}$$

$$Wz\colon \sqrt{\frac{-R_5g_m+1}{C_2C_5R_2R_5}}$$

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

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

Parameters:

$$\begin{array}{l} \text{Q:} & \frac{G_2C_5\sqrt{\frac{g_m}{C_2C_5(R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L)}}(R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L)}{C_2R_2g_m+C_2+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \text{wo:} & \sqrt{\frac{g_m}{C_2C_5(R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L)}} \\ \text{bandwidth:} & \frac{C_2R_2g_m+C_2+C_5R_5g_m+2C_5R_Lg_m+C_5}{C_2C_5(R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L)} \\ \text{K-LP:} & R_L \\ \text{K-HP:} & \frac{R_L(R_2R_5g_m-R_2+R_5)}{R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L} \\ \text{K-BP:} & \frac{R_L(C_2R_2g_m+C_2+C_5R_5g_m-C_5)}{C_2R_2g_m+C_2+C_5R_5g_m+2C_5R_Lg_m+C_5} \\ \text{Qz:} & \frac{G_2C_5\sqrt{\frac{g_m}{C_2C_5(R_2R_5g_m+2R_2R_Lg_m+R_2+R_5+4R_L)}}(R_2R_5g_m-R_2+R_5)}{C_2R_2g_m+C_2+C_5R_5g_m-C_5} \\ \text{Wz:} & \sqrt{\frac{g_m}{C_2C_5(R_2R_5g_m-R_2+R_5)}} \end{array}$$

10 INVALID-ORDER

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$H(s) = \frac{\left(-C_5R_2s + R_2g_m + 1\right)\left(C_LL_Ls^2 + C_LR_Ls + 1\right)}{s\left(2C_5C_LL_LR_2g_ms^2 + 4C_5C_LL_Ls^2 + 2C_5C_LR_2R_Lg_ms + C_5C_LR_2s + 4C_5C_LR_Ls + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\right)}$$

10.11 INVALID-ORDER-11 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

$$H(s) = \frac{L_L R_L s \left(-C_5 R_2 s + R_2 g_m + 1\right)}{C_5 C_L L_L R_2 R_L s^3 + 2 C_5 L_L R_2 R_L g_m s^2 + C_5 L_L R_2 s^2 + 4 C_5 L_L R_L s^2 + C_5 R_2 R_L s + C_L L_L R_2 R_L g_m s^2 + C_L L_L R_2 s^2 + L_L R_2 g_m s + L_L s + R_2 R_L g_m + R_L r_2 R_L g_m s^2 + C_L R_2 R_L g_m s^2 + C$$

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

$$H(s) = \frac{\left(-C_5R_2s + R_2g_m + 1\right)\left(C_LL_LR_Ls^2 + L_Ls + R_L\right)}{2C_5C_LL_LR_2R_Lg_ms^3 + C_5C_LL_LR_2s^3 + 4C_5C_LL_LR_2s^3 + 2C_5L_LR_2g_ms^2 + 4C_5L_Ls^2 + 2C_5R_2R_Lg_ms + C_5R_2s + 4C_5R_Ls + C_LL_LR_2g_ms^2 + C_LL_Ls^2 + R_2g_m + 1}{2C_5C_LL_LR_2R_Lg_ms^3 + C_5C_LL_LR_2s^3 + 4C_5C_LL_LR_2s^3 + 2C_5L_LR_2g_ms^2 + 4C_5L_Ls^2 + 2C_5R_2R_Lg_ms + C_5R_2s + 4C_5R_Ls + C_LL_LR_2g_ms^2 + C_LL_Ls^2 + R_2g_m + 1}$$

10.13 INVALID-ORDER-13 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

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

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

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

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

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

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

10.18 INVALID-ORDER-18 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

10.20 INVALID-ORDER-20 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$

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

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

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

10.22 INVALID-ORDER-22 $Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_{5s}}, \frac{1}{C_{Ls}}\right)$

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

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

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

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

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

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

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

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

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

10.27 INVALID-ORDER-27
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

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

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

10.29 INVALID-ORDER-29
$$Z(s) = \left(\infty, R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

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

$$H(s) = \frac{C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1}{s\left(C_5C_LL_5R_2g_ms^2 + C_5C_LL_5s^2 + C_5C_LR_2s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\right)}$$

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

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

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

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

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

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

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

$$H(s) = \frac{L_L s \left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{C_5 C_L L_5 L_L R_2 g_m s^4 + C_5 C_L L_L L_2 s^4 + C_5 C_L L_L R_2 s^3 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + 2 C_5 L_L R_2 g_m s^2 + 4 C_5 L_L s^2 + C_5 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$$

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

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

10.36 INVALID-ORDER-36
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

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

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

10.38 INVALID-ORDER-38
$$Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

$$H(s) = \frac{-C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2}{C_5C_LL_5R_2s^3 + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 + C_LR_2s + 2R_2g_m + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 + C_LR_2s + 2R_2g_m + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 +$$

10.40 INVALID-ORDER-40 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

10.41 INVALID-ORDER-41 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_{Ls}}\right)$

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

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

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

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

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

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

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

10.45 INVALID-ORDER-45 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

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

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

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

$$H(s) = \frac{C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_5C_LL_5R_2g_ms^2 + C_5C_LL_5s^2 + C_5C_LR_2R_5g_ms + C_5C_LR_2s + C_5C_LR_5s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\right)}$$

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

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

 $\textbf{10.50} \quad \textbf{INVALID-ORDER-50} \ Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls} \right)$ $H(s) = \frac{\left(C_L R_L s + 1 \right) \left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1 \right) }{s \left(C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 s^2 + C_5 C_L R_2 R_5 g_m s + 2 C_5 C_L R_2 R_L g_m s + C_5 C_L R_2 s + C_5 C_L R_2 s + 2 C_5 C_L R$

10.51 INVALID-ORDER-51 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.52 INVALID-ORDER-52 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.53 INVALID-ORDER-53 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.54 INVALID-ORDER-54 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

10.55 INVALID-ORDER-55 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.56 INVALID-ORDER-56 $Z(s) = \left(\infty, R_2, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

10.57 INVALID-ORDER-57 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5}{C_5C_LL_5R_2R_5s^3 + 2C_5L_5R_2g_ms^2 + 4C_5L_5R_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5R_2s^2 + C_LL_5R_5s^2 + C_LL_5R_5s^2 + C_LR_2R_5s + 2L_5R_2g_ms + 4L_5s + 2R_2R_5g_m + 4R_5s^2 + C_LR_2R_5s^2 + C_LR_2R_5s$$

10.58 INVALID-ORDER-58 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$

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10.59 INVALID-ORDER-59 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + 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 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5 R_5 s + R_2 R_5\right)}{2 C_5 C_L L_5 R_2 R_5 g_m s^3 + C_5 C_L L_5 R_2 R_5 s^3 + 4 C_5 C_L L_5 R_2 R_5 g_m s^2 + 4 C_5 L_5 R_2 R_5 g_m s^2 + 2 C_L L_5 R_5 g_m s^2 + 2 C_L L
10.60 INVALID-ORDER-60 Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ L_Ls + \frac{1}{C_Ls}\right)
                                                        \frac{\left(C_{L}L_{s}^{2}+1\right)\left(C_{5}L_{5}R_{2}R_{5}s^{2}-L_{5}R_{2}R_{5}g_{m}s+L_{5}R_{2}s-L_{5}R_{5}s+R_{2}R_{5}\right)}{2C_{5}C_{L}L_{5}L_{L}R_{2}g_{m}s^{4}+4C_{5}C_{L}L_{5}L_{L}R_{5}s^{4}+C_{5}C_{L}L_{5}R_{2}R_{5}g_{m}s^{2}+4C_{5}L_{5}R_{2}S_{2}+2C_{L}L_{5}L_{L}R_{2}g_{m}s^{3}+4C_{L}L_{5}L_{L}s^{3}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}R_{2}s^{2}+C_{L}L_{5}
10.61 INVALID-ORDER-61 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                  10.62 INVALID-ORDER-62 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + 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_5 L_5 R_2 R_5 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5 R_5 s + R_2 R_5\right)}{2 C_5 C_L L_5 L_L R_2 R_5 g_m s^4 + 4 C_5 C_L L_5 R_2 R_5 g_m s^3 + 2 C_5 L_5 R_2 R_5 g_m s^2 + 4 C_5 L_5 R_2 R_5 g_m s^3 + 4 C_5 L_4 R_5 g_m s^3 + 4 C_5 L_4 R_5 g_m s^3 + 4 C_5 L_4 R_5 g_m s^3 + 4 C_5 L_5 R_2 R_5 g_m s^3 + 4 C_5 L_5 R_5 g_m s^3 + 4 C_5 L_5 R_5 g_m s^3 + 4 C_5 L_5 R_5 g_m s^3 + 4 C
10.63 INVALID-ORDER-63 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                              \frac{L_L R_L s \left(-C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5\right)}{C_5 C_L L_5 L_L R_2 R_5 R_L s^4 + 2 C_5 L_5 L_L R_2 R_5 R_L s^3 + C_5 L_5 L_L R_2 R_5 R_L s^3 + C_L L_5 L_L R_2 R_5 R_L s^
10.64 INVALID-ORDER-64 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -\frac{2C_5C_LL_5L_LR_2R_5R_Lg_ms^4 + C_5C_LL_5L_LR_2R_5s^4 + 4C_5C_LL_5L_LR_2R_5g_ms^3 + 4C_5L_5L_LR_2s^3 + 2C_5L_5R_2R_5R_Lg_ms^2 + C_5L_5R_2R_5s^2 + 4C_5L_5R_2R_5s^2 + 4C_5L_5L_LR_2R_5g_ms^3 + 2C_LL_5L_LR_2R_5g_ms^3 + 4C_5L_5L_LR_2s^3 + 4C_5L_5L_2LR_2s^3 + 4C_5L_5L_2LR_2s^3 + 4C_5L_5L_2LR_2s^3 + 4C_5L_5L_2LR_2s^3 + 4C_5L_5L_2LR_2s^3 + 4C_5L_5L_2LR_2s^3
10.65 INVALID-ORDER-65 Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R_L (C_L L_L s^2 + 1) (C_5 L_5 R_2 R_5 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5 R_5 g_m s + L_5 R_5 g_m s +
                                                       \overline{2C_5C_LL_5L_LR_2R_5R_Lg_ms^4 + C_5C_LL_5L_LR_2R_5s^4 + 4C_5C_LL_5L_LR_5R_Ls^4 + C_5C_LL_5R_2R_5R_Ls^3 + 2C_5L_5R_2R_5R_Lg_ms^2 + C_5L_5R_2R_5s^2 + 4C_5L_5R_2R_5s^2 + 4C_5L_5R_2R_5s^3 + 2C_LL_5L_LR_2R_5g_ms^3 + 2C_LL_5L_LR_2R_5g_ms^3 + 2C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_LR_2s^3 + C_LL_5L_RR_2s^3 + C_LL_5
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 $H(s) = \frac{C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_2s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5}{C_5C_LL_5R_2g_ms^3 + C_5C_LL_5R_2s^3 + C_5C_LL_5R_2s^3 + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 + C_LR_2s + C_LR_2s + C_LR_5s + 2R_2g_m + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 +$

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

10.68 INVALID-ORDER-68 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$

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

10.69 INVALID-ORDER-69 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.70 INVALID-ORDER-70 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.71 INVALID-ORDER-71 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.72 INVALID-ORDER-72 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_{5s}}{C_5L_5s^2+1} + R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$

10.73 INVALID-ORDER-73 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.74 INVALID-ORDER-74 $Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

10.75 INVALID-ORDER-75 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_5C_LL_5R_2g_ms^3 + C_5C_LL_5R_2s^3 + C_5C_LL_5R_5s^3 + C_5C_LR_2R_5s^2 + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2C_5R_2g_ms + 4C_5R_5s + C_LR_2R_5g_ms + C_LR_2s +$

10.76 INVALID-ORDER-76 $Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

 $\frac{R_L\left(C_5L_5R_2R_5g_ms^2-C_5L_5R_2s^2+C_5L_5R_5s^2-C_5R_2R_5s+R_2R_5g_m-R_2+R_5\right)}{C_5C_LL_5R_2R_5R_Lg_ms^3+C_5C_LL_5R_2R_Ls^3+C_5C_LL_5R_5R_Ls^2+C_5L_5R_2R_5g_ms^2+2C_5L_5R_2s^2+C_5L_5R_2s^2+C_5L_5R_2s^2+2C_5R_2R_5g_ms+C_5R_2R_5s+4C_5R_5R_Ls+C_LR_2R_$

10.80 INVALID-ORDER-80
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.81 INVALID-ORDER-81
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

10.82 INVALID-ORDER-82
$$Z(s) = \left(\infty, R_2, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

10.83 INVALID-ORDER-83
$$Z(s) = \left(\infty, \ R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

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

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

$$H(s) = \frac{R_L (C_2 R_5 s + R_5 g_m - 1)}{C_2 R_5 s + 4C_2 R_L s + R_5 g_m + 2R_L g_m + 1}$$

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

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

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

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

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

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

10.88 INVALID-ORDER-88 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

10.90 INVALID-ORDER-90 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

$$H(s) = \frac{C_2s - C_5s + g_m}{s(4C_2C_5s + C_2C_Ls + C_5C_Ls + 2C_5g_m + C_Lg_m)}$$

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

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

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

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

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

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

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

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

10.96 INVALID-ORDER-96 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

10.98 INVALID-ORDER-98 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

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

10.100 INVALID-ORDER-100 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$

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

10.101 INVALID-ORDER-101 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.102 INVALID-ORDER-102 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.103 INVALID-ORDER-103 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

10.104 INVALID-ORDER-104 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.105 INVALID-ORDER-105 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

10.106 INVALID-ORDER-106 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2C_5R_5s^2 + C_2s + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_5C_LR_5s^2 + 4C_2C_5s + C_2C_Ls + C_5C_LR_5g_ms + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$$

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

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

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

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

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

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

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

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

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

10.112 INVALID-ORDER-112 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

10.114 INVALID-ORDER-114
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

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

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

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

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

$$H(s) = \frac{C_2C_5L_5s^3 + C_2s + C_5L_5g_ms^2 - C_5s + g_m}{s(C_2C_5C_LL_5s^3 + 4C_2C_5s + C_2C_Ls + C_5C_LL_5g_ms^2 + C_5C_Ls + 2C_5g_m + C_Lg_m)}$$

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

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

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

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

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

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

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

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

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

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

10.122 INVALID-ORDER-122 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

10.124 INVALID-ORDER-124 $Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)$

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

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

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

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

$$H(s) = \frac{C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1}{4C_2C_5L_5s^3 + C_2C_LL_5s^3 + 4C_2s + C_5C_LL_5s^3 + 2C_5L_5g_ms^2 + C_LL_5g_ms^2 + C_Ls + 2g_m}$$

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

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

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

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

10.129 INVALID-ORDER-129 $Z(s) = \left(\infty, \frac{1}{C_{2}s}, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^{2}+1}, L_{L}s + \frac{1}{C_{L}s}\right)$

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

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

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

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

$$(C_L L_L s^2 + C_L R_L s + 1) \left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 a_m s - 1\right)$$

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

10.132 INVALID-ORDER-132 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_{5s}}{C_5 L_{5s}^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

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

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

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

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

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

$$H(s) = \frac{C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_5C_LL_5s^3 + C_2C_5C_LR_5s^2 + 4C_2C_5s + C_2C_Ls + C_5C_LL_5g_ms^2 + C_5C_LR_5g_ms + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$$

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

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

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

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

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

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

10.140 INVALID-ORDER-140 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L L_S^5 + C_2 C_5 L_L L_R 5 s^4 + C_2 C_5 L_5 s^3 + 4 C_2 C_5 L_L s^3 + C_2 C_5 L_L L_S^3 + C_2 C_5 L_L L_S s^4 + C_5 C_L L_L L_S s^4 + C_5 C_L L_L L_S s^3 + C_5 C_L L_L R_5 g_m s^3 + C_5 C_L L_L R_5 g_m$ **10.141** INVALID-ORDER-141 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 s^3 + 4 C_2 C_5 C_L R_5 s^2 + 4 C_2 C_5 C_L R_L s^2 + 4 C_2 C_5 s + C_2 C_L s + C_5 C_L L_5 g_m s^2 + 2 C_5 C_L L_L g_m s^2 + C_5 C_L R_5 g_m s + 2 C_5 C_L R_L g_m s + C_5 C_L s + 2 C_5 g_m + C_L g_m\right)}$ 10.142 INVALID-ORDER-142 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ $L_L R_L s \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m \right)$ $H(s) = \frac{L_L R_L s \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L L_L R_L s^5 + C_2 C_5 L_L L_L R_L s^4 + C_2 C_5 L_L L_L R_5 s^3 + C_2 C_5 L_L R_L s^3 + C_5 C_L L_L R_L s^3 +$ 10.143 INVALID-ORDER-143 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L L_L s^5 + C_2 C_5 C_L L_L R_5 s^4 + 4 C_2 C_5 L_L s^3 + C_2 C_5 L_L s^3 + C_2 C_5 L_L s^3 + C_2 C_5 L_L L_L s^3 + C_2 C_5 L_L L_L s^3 + C_5 C_L L_L L_L g_m s^3 + C_5 C_L L_L R_5 g_m s^3 + C_5 C_L L_L$ 10.144 INVALID-ORDER-144 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ $H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_2 C_5 C_L L_5 L_L s^5 + C_2 C_5 C_L L_5 R_L s^4 + C_2 C_5 C_L L_L R_5 s^4 + 4 C_2 C_5 C_L L_L R_5 s^4 + 4 C_2 C_5 C_L L_L R_5 s^4 + C_2 C_5 L_L R_5 s^3 + C_2 C_5 R_5 s^2 + 4 C_2 C_5 R_5 s^2 + C_2 C_L L_L R_5 s^4 + C_3 C_L L_L R_5 g_m s^3 + C_5 C_$ 10.145 INVALID-ORDER-145 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$ $H(s) = \frac{R_L \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5 \right)}{4 C_2 C_5 L_5 R_5 R_L s^3 + C_2 L_5 R_5 s^2 + 4 C_2 L_5 R_L s^2 + 4 C_2 R_5 R_L s + 2 C_5 L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 s^2 + L_5 R_5 g_m s + 2 L_5 R_L g_m s + L_5 s + 2 R_5 R_L g_m + R_5}$ **10.146** INVALID-ORDER-146 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$ $H(s) = \frac{C_2L_5R_5s^2 - C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5}{4C_2C_5L_5R_5s^3 + C_2C_LL_5R_5s^3 + 4C_2L_5s^2 + 4C_2R_5s + C_5C_LL_5R_5s^3 + 2C_5L_5R_5g_ms^2 + C_LL_5R_5g_ms^2 + C_LL_5s^2 + C_LR_5s + 2L_5g_ms + 2R_5g_ms^2 + C_LL_5s^2 + C_LL_5$ 10.147 INVALID-ORDER-147 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$ $H(s) = \frac{R_L \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5 \right)}{4 C_2 C_5 L_5 R_5 R_L s^3 + C_2 C_L L_5 R_5 R_L s^3 + C_2 L_5 R_5 s^2 + 4 C_2 L_5 R_L s^2 + 4 C_2 R_5 R_L s + C_5 C_L L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 R_L g_m s^2 + C_L L_5 R_L g_m s^2 + C_L$

10.148 INVALID-ORDER-148 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)$

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

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10.149 INVALID-ORDER-149 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + 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_{5}R_{5}s^{2} + C_{5}L_{5}R_{5}s^{2} - L_{5}R_{5}g_{m}s + L_{5}s + R_{5}\right)}{4C_{2}C_{5}L_{L}E_{L}E_{5}s^{3} + 4C_{2}C_{L}L_{5}E_{L}s^{4} + C_{2}C_{L}L_{5}E_{5}s^{3} + 4C_{2}C_{L}L_{5}E_{5}s^{3} + 4C_{2}C_{L}L_{5}E_{5}s^{3} + 4C_{2}L_{5}E_{5}s^{3} + 4C_{2}L_{5}E_{5}s^{3} + 2C_{5}L_{5}E_{5}g_{m}s^{4} + C_{5}C_{L}L_{5}E_{5}g_{m}s^{2} + C_{L}L_{5}E_{5}g_{m}s^{2} + C_{L}L_{5}E_{5
10.150 INVALID-ORDER-150 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)
                                            H(s) = \frac{L_L s \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{4 C_2 C_5 L_5 L_L R_5 s^4 + 4 C_2 L_L L_5 s^3 + C_2 L_5 R_5 s^2 + 4 C_2 L_L R_5 s^2 + 2 C_5 L_L L_L R_5 s^4 + 2 C_5 L_5 L_L R_5 g_m s^3 + C_5 L_5 R_5 s^2 + C_L L_5 L_L R_5 g_m s^3 + C_L L_5 L_
10.151 INVALID-ORDER-151 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + 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_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5\right)}{4 C_2 C_5 C_L L_5 L_L R_5 s^5 + 4 C_2 C_5 L_L L_5 R_5 s^3 + 4 C_2 C_L L_5 R_5 s^3 + 2 C_5 L_L L_5 R_5 s^3 + 
10.152 INVALID-ORDER-152 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L R_L s \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{4 C_2 C_5 L_5 L_L R_5 R_L s^4 + C_2 C_L L_5 L_L R_5 s^3 + 4 C_2 L_5 L_L R_5 s^3 + C_2 L_5 R_L s^2 + C_5 C_L L_5 L_L R_5 R_L s^4 + 2 C_5 L_5 L_L R_5 R_L s^3 + C_5 L_5 R_L R_5 R_L s^3 + C_L L_5 L_L R_5 R_L s^3 + C_L L_5 R_L s^3 + C_L L_5 L_L R_5 R_L s^3 + C_L L_5 L_L 
10.153 INVALID-ORDER-153 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \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_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s +
                                    10.154 INVALID-ORDER-154 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R_L \left( C_L L_L s^2 + 1 \right) \left( -C_2 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5 \right)
```

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

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

10.156 INVALID-ORDER-156
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2C_5L_5R_5s^3 + C_2L_5s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_2C_5C_LL_5R_5s^4 + 4C_2C_5L_5s^3 + C_2C_LL_5s^3 + C_2C_LR_5s^2 + 4C_2s + C_5C_LL_5R_5g_ms^3 + C_5C_LL_5s^3 + 2C_5L_5g_ms^2 + C_LL_5g_ms^2 + C_LR_5g_ms + C_Ls + 2g_ms^2 + C_LR_5g_ms^2 + C$$

10.157 INVALID-ORDER-157
$$Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

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

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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_L s^2 + 1\right) \left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4 C_2 C_5 C_L L_5 L_L s^5 + C_2 C_5 C_L L_5 R_5 s^4 + 4 C_2 C_5 L_5 s^3 + 4 C_2 C_L L_5 s^3 + 4 C_2 C_L L_5 s^3 + 4 C_2 C_L L_5 s^3 + 2 C_5 C_L L_5 L_5 g_m s^4 + C_5 C_L L_5 R_5 g_m s^3 + C_5 C_L L_5 g_m s^2 + 
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 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_5 L_L R_5 s^5 + 4 C_2 C_5 L_5 L_5 s^4 + C_2 C_L L_5 L_L s^4 + C_2 C_L L_L R_5 s^3 + C_2 L_L s^2 + C_2 R_5 s + C_5 C_L L_5 L_L R_5 g_m s^4 + C_5 C_L L_5 L_L g_m s^3 + C_5 L_5 g_m s^2 + C_5 L_5 g_m s^3 + C_5 L_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}s^{3} + C_{2}L_{5}s^{2} + C_{2}R_{5}s + C_{5}L_{5}R_{5}g_{m}s^{2} - C_{5}L_{5}s^{2} + L_{5}g_{m}s + R_{5}g_{m} - 1\right)}{4C_{2}C_{5}C_{L}L_{5}L_{5}s^{4} + 4C_{2}C_{5}L_{5}L_{5}s^{3} + C_{2}C_{L}L_{5}s^{3} + C
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\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{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1 R_5 g_m s^2 - R
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{RL\left(C_LL_Ls + 1\right)\left(C_2C_5L_5R_1s^3 + C_2L_5s^3 + C_2L_5
10.165 INVALID-ORDER-165 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)
                                                                                                                                                                                                                                                               H(s) = \frac{R_L \left( C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1 \right)}{C_2 C_5 L_5 R_5 s^3 + 4 C_2 C_5 L_5 R_L s^3 + 4 C_2 C_5 R_5 R_L s^2 + C_2 R_5 s + 4 C_2 R_L s + C_5 L_5 R_5 g_m s^2 + 2 C_5 L_5 R_L g_m s^2 + C_5 L_5 s^2 + 2 C_5 R_5 R_L g_m s + C_5 R_5 s + R_5 g_m + 2 R_L g_m + 1 R_5 g_m + 2 R_L g_m + 2 
10.166 INVALID-ORDER-166 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{1}{C_L s}\right)
                                                                                                                                                                                                                                               H(s) = \frac{C_2C_5L_5R_5s^3 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_5R_5s^4 + 4C_2C_5L_5s^3 + 4C_2C_5R_5s^2 + C_2C_LR_5s^2 + 4C_2s + C_5C_LL_5R_5g_ms^3 + C_5C_LL_5s^3 + C_5C_LR_5s^2 + 2C_5L_5g_ms^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_LR
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 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_5 R_5 s^4 + 4 C_2 C_5 L_5 s^3 + C_2 C_L L_5 s^3 + C_2 C_L R_5 s^2 + 4 C_2 C_L R_L s^2 + 4 C_2 s + C_5 C_L L_5 R_5 g_m s^3 + 2 C_5 C_L L_5 R_L g_m s^3 + C_5 C_L L_5 g_m s^2 + C_L L_5 g_m s^2 + C_L L_5 g_m s^2 + C_L R_5 g_m s +$

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{R_L \left( C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1 \right)}{C_2 C_5 C_L L_5 R_5 R_L s^4 + C_2 C_5 L_5 R_5 s^3 + 4 C_2 C_5 L_5 R_L s^3 + 4 C_2 C_5 R_5 R_L s^2 + C_2 R_5 R_L s^2 + C_2 R_5 R_L s^2 + C_5 R_5 R_L g_m s^3 + C_5 C_L L_5 R_5 R_L g_m s^3 + C_5 C_L L_5 R_5 R_L g_m s^2 + 2 C_5 L_5 R_5 g_m s^2 + 2 C_5 L_5 R_5 g_m s^2 + 2 C_5 R_5 R_L g_m s + C_
10.168 INVALID-ORDER-168 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + 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 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_5 R_5 s^4 + 4 C_2 C_5 C_L L_5 R_L s^4 + 4 C_2 C_5 C_L R_5 s^2 + 4 C_2 C_4 R_5 s^3 + 2 C_5 C_4 L_5 R_5 g_m s^3 + C_5 C_4 L_5 R_5 
10.169 INVALID-ORDER-169 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + 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_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{4 C_2 C_5 C_L L_5 L_5 s^4 + 4 C_2 C_5 C_L L_5 R_5 s^4 + 4 C_2 C_5 L_5 L_5 s^3 + 4 C_2 C_5 R_5 s^2 + 4 C_2 C_L L_5 s^3 + 2 C_5 C_L L_5 L_5 g_m s^3 + C_5 C_L L_5 R_5 g_m s^3 + 
10.170 INVALID-ORDER-170 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + 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_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_5 L_L R_5 s^5 + 4 C_2 C_5 L_5 L_L s^4 + C_2 C_5 L_5 R_5 s^3 + 4 C_2 C_5 L_L R_5 s^3 + 4 C_2 L_L R_5 s^3 + 4 C_2 L_L R_5 s^3 + 4 C_2 L_L R_5 s^3 + 2 C_5 L_L L_L R_5 g_m s^4 + C_5 C_L L_L R_5 g_m s^4 + C_5 C_L L_L R_5 g_m s^3 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 R_5 g_m s^2 + C_5 R_5 s^2 + 2 C_5 L_L R_5 g_m s^2 + C_5 R_5 s^2 + 2 C_5 L_L R_5 g_m s^2 + C_5 R_5 s^2 + 2 C_5 L_L R_5 g_m s^2 + C_5 R_5 g_m s^2 + C_
10.171 INVALID-ORDER-171 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, 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_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1 \right) 
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}s^{3} + C_{2}R_{5}s + C_{5}L_{5}R_{5}g_{m}s^{2} - C_{5}L_{5}s^{2} - C_{5}R_{5}s + R_{5}g_{m} - 1\right)}{4C_{2}C_{5}C_{L}L_{5}L_{5}s^{5} + C_{2}C_{5}C_{L}L_{5}R_{5}s^{4} + 4C_{2}C_{5}C_{L}L_{5}R_{5}s^{4} + 4C_{2}C_{5}C_{L}L_{5}R_{5}s^{3} + 4C_{2}C_{5}L_{5}s^{3} + 4C_{2}C_{5}L_{5}L_{5}s^{3} + 4C_{2}C_{5}L_{5}R_{5}s^{3} + 4C_{2}C_{5}L
10.172 INVALID-ORDER-172 Z(s) = \left( \infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)
H(s) = \frac{L_L R_L s \left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^2 - C_5 R_5 s + R_5 g_m - 1 R_5 g_m s^2 - C_5 R_5 g_m s^2
10.173 INVALID-ORDER-173 Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + 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 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5)
H(s) = \frac{(C_L L_L R_L S^5 + 4C_2 C_5 L_L L_L R_
10.174 INVALID-ORDER-174 Z(s) = \left(\infty, \ \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 C_5 L_5 R_5 s^3 + C_2 R_5 \right)
H(s) = \frac{1}{C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5R_5R_Ls^4 + 4C_2C_5C_LL_Rs^4 + 4C_2C_5L_5R_5s^3 + 4C_2C_5L_5R_5s^3 + 4C_2C_5L_LR_5s^3 + 4C_2C_5L_LR_5s^3 + 4C_2C_LL_Rs^3 + 4C_2C_L
10.175 INVALID-ORDER-175 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     H(s) = \frac{R_L \left( C_2 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5 \right)}{C_2 R_2 R_5 s + 4 C_2 R_2 R_L s + R_2 R_5 g_m + 2 R_2 R_L g_m + R_2 + R_5 + 4 R_L}
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10.167 INVALID-ORDER-167 $Z(s) = \left(\infty, \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

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

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

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

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

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

10.179 INVALID-ORDER-179
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

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

10.180 INVALID-ORDER-180
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

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

10.181 INVALID-ORDER-181
$$Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

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

10.182 INVALID-ORDER-182
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2R_2s - C_5R_2s + R_2g_m + 1}{s\left(4C_2C_5R_2s + C_2C_LR_2s + C_5C_LR_2s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\right)}$$

10.183 INVALID-ORDER-183
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$$

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

10.184 INVALID-ORDER-184
$$Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

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

10.185 INVALID-ORDER-185 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{4 C_2 C_5 L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_2 R_2 s + C_5 C_L L_L R_2 s^3 + 2 C_5 L_L R_2 g_m s^2 + 4 C_5 L_L s^2 + C_5 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L s^2 + R_2 g_m + 1}$ **10.186** INVALID-ORDER-186 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(4C_2 C_5 C_L L_L R_2 s^3 + 4C_2 C_5 C_L R_2 R_L s^2 + 4C_2 C_5 R_2 s + C_2 C_L R_2 s + 2C_5 C_L L_L R_2 g_m s^2 + 4C_5 C_L L_L s^2 + 2C_5 C_L R_2 R_L g_m s + C_5 C_L R_2 s + 4C_5 C_L R_2 s +$ 10.187 INVALID-ORDER-187 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$ $H(s) = \frac{L_L R_L s \left(C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{4 C_2 C_5 L_L R_2 R_L s^3 + C_2 C_L L_L R_2 R_L s^3 + C_2 L_L R_2 s^2 + C_5 C_L L_L R_2 R_L s^3 + 2 C_5 L_L R_2 R_L g_m s^2 + C_5 L_L R_2 s^2 + 4 C_5 L_L R_2 s^2 + 4 C_5 L_L R_2 s^2 + C_5 L_L R_2 s^2 +$ 10.188 INVALID-ORDER-188 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$ $H(s) = \frac{\left(C_{L}L_{R}L^{s^{2}} + L_{L}s + R_{L}\right)\left(C_{2}R_{2}s - C_{5}R_{2}s + R_{2}g_{m} + 1\right)}{4C_{2}C_{5}C_{L}L_{L}R_{2}S^{3} + 4C_{2}C_{5}L_{L}R_{2}s^{3} + C_{2}C_{L}L_{L}R_{2}s^{3} + C_{5}C_{L}L_{L}R_{2}s^{3} + 4C_{5}C_{L}L_{L}R_{2}s^{3} + 4C_{5}C_{L}L_{L}R_{2}s^{3} + 4C_{5}C_{L}L_{L}R_{2}s^{3} + 4C_{5}L_{L}S^{2} + 2C_{5}R_{2}R_{L}g_{m}s^{2} + 4C_{5}L_{L}S^{2} + C_{2}L_{L}R_{2}g_{m}s^{2} + 4C_{5}L_{L}R_{2}s^{3} + 4C_{5}L_{L}S^{2} + 2C_{5}R_{2}R_{L}g_{m}s^{2} + C_{L}L_{L}S^{2} + R_{2}g_{m} + 1$ 10.189 INVALID-ORDER-189 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$ $\frac{R_L \left(C_L L_L s^2+1\right) \left(C_2 R_2 s-C_5 R_2 s+R_2 g_m+1\right)}{4 C_2 C_5 C_L L_L R_2 R_L s^4+4 C_2 C_5 R_2 R_L s^2+C_2 C_L L_L R_2 s^3+C_5 C_L L_L R_2 R_L s^3+4 C_5 C_L L_L R_2 s$ 10.190 INVALID-ORDER-190 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$ **10.191** INVALID-ORDER-191 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$ $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{4 C_2 C_5 C_L L_L R_2 R_5 s^4 + 4 C_2 C_5 R_2 R_5 s^2 + 4 C_2 C_L L_L R_2 s^3 + C_2 C_L R_2 R_5 s^2 + 4 C_2 R_2 s + 2 C_5 C_L L_L R_2 R_5 g_m s^3 + 4 C_5 C_L L_L R_5 s^3 + C_5 C_L R_2 R_5 s^2 + 2 C_5 R_2 R_5 g_m s + 4 C_5 R_5 s + 2 C_L L_L R_2 g_m s^2 + 4 C_L L_L s^2 + C_L R_2 R_5 g_m s + C_L R_2 s + C_L R_2 R_5 g_m s + C_L R_2 R_5$ **10.192** INVALID-ORDER-192 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$ $H(s) = \frac{L_L s \left(C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{4 C_2 C_5 L_L R_2 R_5 s^3 + C_2 C_L L_L R_2 s^2 + C_2 R_2 R_5 s + C_5 C_L L_L R_2 R_5 s^3 + 2 C_5 L_L R_2 R_5 g_m s^2 + 4 C_5 L_L R_5 s^2 + C_5 L_L R_2 R_5 g_m s^2 + C_L L_L R_2 s^2 + C_$

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

10.193 INVALID-ORDER-193 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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10.194 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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L R_L s \left(C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{4 C_2 C_5 L_L R_2 R_5 R_L s^3 + C_2 L_L R_2 R_5 R_L s^3 + C_2 L_L R_2 R_5 R_L s^3 + C_5 L_L 
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (C_L L_L R_L s^2 + L_L s + R_L) (C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5)
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               R_L (C_L L_L s^2 + 1) (C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5)
                                     \frac{1}{4C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}s^{4}+4C_{2}C_{5}R_{2}R_{5}R_{L}s^{2}+C_{2}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{2}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{2}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{L}R_{2}R_{5}s^{3}+4C_{5}C_{L}L_{
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)
                                                                                                                                                                                                                                                                                                  H(s) = \frac{C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_2C_5C_LR_2R_5s^2 + 4C_2C_5R_2s + C_2C_LR_2s + C_5C_LR_2R_5g_ms + C_5C_LR_2s + C_5C_LR_5s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\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)
                                       H(s) = \frac{R_L \left( C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 C_L R_2 R_5 R_L s^3 + C_2 C_5 R_2 R_5 s^2 + 4 C_2 C_5 R_2 R_L s^2 + C_2 C_L R_2 R_L s^2 + C_5 C_L R_2 R_L g_m s^2 + C_5 C_L R_2 R_L g_m s^2 + C_5 C_L R_2 R_L g_m s + C_5 R_2 R_5 g_m s + 2 C_5 R_2 R_L g_m s + C_5 R_2 s + C_5 R_2 R_5 g_m s + C_5 R_5 g_
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 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 R_2 s + C_2 C_L R_2 s + C_5 C_L R_2 R_5 g_m s + 2 C_5 C_L R_2 R_L g_m s + C_5 C_L R_2 s + C_5 C_L R_2 s + 2 C_5 R_2 g_m + 4 C_5 C_L R_2 g_m + 
10.200 INVALID-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)
                                                                                                                                                                  H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s \left(4 C_2 C_5 C_L L_L R_2 s^3 + C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 R_2 s + C_2 C_L R_2 s + 2 C_5 C_L L_L R_2 g_m s^2 + 4 C_5 C_L L_L s^2 + C_5 C_L R_2 R_5 g_m s + C_5 C_L R_2 s + C_5 C_L R_2 s + 2 C_5 R_2 g_m + 4 C_5 + C_L R_2 g_m + C_L\right)}
10.201 INVALID-ORDER-201 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \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 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_L R_2 R_5 s^4 + 4 C_2 C_5 L_L R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 C_L L_L R_2 s^3 + C_5 C_L L_
10.202 INVALID-ORDER-202 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, 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 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s \left(4 C_2 C_5 C_L L_L R_2 s^3 + C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 R_2 s + C_5 C_L L_L R_2 g_m s^2 + 4 C_5 C_L L_L s^2 + C_5 C_L R_2 R_5 g_m s + 2 C_5 C_L R_2 R_5 g_m s + C_5 C_L R_2 s + C_5 C_L R_2 R_5 g_m s + C_5 C_L R_2
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10.203 INVALID-ORDER-203 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L_L R_L s \left( C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1 \right)
H(s) = \frac{L_L R_L s \left(C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_L R_2 R_5 R_L s^4 + C_2 C_5 L_L R_2 R_5 s^3 + 4 C_2 C_5 L_L R_2 R_5 s^3 + C_5 C_L L_L R_2 R_5 R_L s^3 + C_5 C_L R_2 R_L s^3 + C_5 C_L R_2 R_L s^3 + C_5 C_L R_2 R_L s^3 + C_
10.204 INVALID-ORDER-204 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = \frac{\left(C_L L_R L^2 + L_L s + R_L\right) \left(C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_L R_2 R_5 s^4 + 4 C_2 C_5 L_L R_2 R_5 s^4 + 4 C_2 C_5 L_L R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + 4 C_2 C_5 R_2 R_5 s^2 + 4 C_2 C_5 R_2 R_5 s^2 + C_5 C_L L_L R_2 R_5 g_m s^3 + 2 C_5 C_L L_L R_2 R_5 g_m s^3 + C_5 C_L L_L R_2 s^3 + C_
10.205 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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R_L(C_LL_Ls^2+1)(C_2C_5R_2R_5s^2+C_2R_2s+C_5R_2R_5g_ms-C_5R_2s+C_5R_5s+R_2g_m+1)
                                      10.206 INVALID-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)
                                                                                                                                                                                                                                                                                                                            H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 L_5 R_2 s^3 + 4 C_2 C_5 R_2 R_L s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + 2 C_5 R_2 R_L g_m s + C_5 R_2 s + 4 C_5 R_L s + R_2 g_m + 1}
10.207 INVALID-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)
                                                                                                                                                                                                                                                                                                   H(s) = \frac{C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1}{s\left(C_2C_5C_LL_5R_2s^3 + 4C_2C_5R_2s + C_2C_LR_2s + C_5C_LL_5R_2g_ms^2 + C_5C_LL_5s^2 + C_5C_LR_2s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_L\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 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 C_L L_5 R_2 R_L s^4 + C_2 C_5 L_5 R_2 s^3 + 4 C_2 C_5 R_2 R_L s^2 + C_2 C_L R_2 R_L s^2 + C_5 C_L L_5 R_2 R_L g_m s^3 + C_5 C_L L_5 R_2 R_L s^3 + C_5 C_L L_5 R_2 R_L s^3 + C_5 C_L L_5 R_2 R_L s^3 + C_5 C_L 
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 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_5 C_L R_2 R_L s^2 + 4 C_2 C_5 R_2 s + C_2 C_L R_2 s + C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 s^2 + 2 C_5 C_L R_2 R_L g_m s + C_5 C_L R_2 s + 4 C_5 C_L R_2 s + 4 C_5 C_L R_2 s + 4 C_5 C_L R_2 s + C_5 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 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_5 R_2 s + C_2 C_L R_2 s + C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 R_2 g_m s^2 + 4 C_5 C_L L_4 R_2 g_m s^2 + C_5 C_L R_2 g_m 
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 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_5 L_L R_2 s^5 + C_2 C_5 L_5 R_2 s^3 + 4 C_2 C_5 L_L R_2 s^3 + C_2 C_L L_L R_2 s^3 + C_5 C_L L_5 L_L R_2 g_m s^4 + C_5 C_L L_L L_2 s^3 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + 2 C_5 L_L R_2 g_m s^2 + 4 C_5 L_L s^2 + C_5 R_2 s + C_L L_L R_2 g_m s^2 + C_L L_L R_2 g_m s^2
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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_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_5 C_L L_L R_2 s^3 + 4 C_2 C_5 C_L R_2 R_L s^2 + 4 C_2 C_5 R_2 s + C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 R_2 g_m s^2 + 4 C_5 C_L L_L R_2 g_m s^2 + 4 C_5 C_L L_L R_2 g_m s^2 + 4 C_5 C_L R_2 R_L g_m s + C_5 C_L R_
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L_L R_L s \left( C_2 C_5 L_5 R_2 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1 \right)
H(s) = \frac{L_L R_L s \left( C_2 C_5 L_5 R_2 s^5 + C_2 R_2 s + C_5 L_5 R_2 g_m s^5 + C_5 L_5 s^5 - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 C_L L_5 L_L R_2 R_L s^5 + C_2 C_5 L_5 R_2 R_L s^3 + C_5 L_5 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)
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_2 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_L R_2 s^5 + 4 C_2 C_5 L_L R_2 s^3 + 4 C_5 C_L L_L R_2 s^3 + 4 C_
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R_L (C_L L_L s^2 + 1) (C_2 C_5 L_5 R_2 s^3 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1)
H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 C_5 L_5 R_2 s^3 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 C_L L_5 L_L R_2 s^5 + C_2 C_5 C_L L_5 R_2 R_L s^4 + C_5 C_L L_5 R_2 R_L s^4 + C_5 C_L L_5 R_2 R_L s^3 + C_5 C_L L_5 R_
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)
                                                                                                                                                                                                                                                                                                                     10.217 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)
                                                                                                                                                                                                                                                                                                                      H(s) = \frac{C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2}{4C_2C_5L_5R_2s^3 + C_2C_LL_5R_2s^3 + 4C_2R_2s + C_5C_LL_5R_2s^3 + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + C_LL_5R_2g_ms^2 + C_LL_5s^2 + C_LL_5s^2 + C_LR_2s + 2R_2g_m + 4C_5R_2s^2 + C_LR_2s + C_LR_2s + 2R_2g_m + 4C_5R_2s^2 + C_LR_2s + C_LR
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 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2 \right)}{4 C_2 C_5 L_5 R_2 R_L s^3 + C_2 C_L L_5 R_2 R_L s^3 + C_2 L_5 R_2 s^2 + 4 C_2 R_L s + C_5 C_L L_5 R_2 R_L s^3 + 2 C_5 L_5 R_2 R_L g_m s^2 + C_5 L_5 R_2 s^2 + 4 C_5 L_5 R_2 s^2 + C_L L_5 R_L s^3 + 
10.219 INVALID-ORDER-219 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L + \frac{1}{C_Ls}\right)
                                                            \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}L_{5}R_{2}s^{2}-C_{5}L_{5}R_{2}s^{2}+L_{5}R_{2}g_{m}s+L_{5}s-R_{2}\right)}{4C_{2}C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{2}C_{L}L_{5}R_{2}s^{3}+4C_{2}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}+4C_{5}C_{L}L_{5}R_{2}s^{3}
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)
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 $H(s) = \frac{\left(C_{L}L_{S}^{2}+1\right)\left(C_{2}L_{5}R_{2}s^{2}-C_{5}L_{5}R_{2}s^{2}+L_{5}R_{2}g_{m}s+L_{5}s-R_{2}\right)}{4C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}s^{3}+4C_{2}C_{L}L_{5}R_{2}s^{3}+4C_{2}C_{L}L_{5}R_{2}s^{3}+4C_{2}C_{L}L_{5}L_{L}R_{2}g_{m}s^{4}+4C_{5}C_{L}L_{5}L_{L}s^{4}+C_{5}C_{L}L_{5}R_{2}g_{m}s^{2}+4C_{5}L_{5}s^{2}+C_{L}L_{5}R_{2}g_{m}s^{2}+4C_{L}L_{5}s^{2}+2C_{L}L_{L}R_{2}g_{m}s^{2}+4C_{L}L_{5}s^{2}+C_{L}L_{5}R_{2}g_{m}s^{2}+4C_{L}L_{5}s^{2}+C_{L}$

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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 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2\right)}{4 C_2 C_5 L_5 L_L R_2 s^4 + C_2 C_L L_5 L_L R_2 s^2 + 4 C_2 L_L R_2 s^2 + C_5 C_L L_5 L_L R_2 s^4 + 2 C_5 L_5 L_L R_2 g_m s^3 + 4 C_5 L_5 L_L s^3 + C_5 L_5 L_L R_2 g_m s^3 + C_L L_5 L_L R_2 s^2 + L_5 R_2 g_m s + L_5 s + 2 L_L R_2 g_m s + 4 L_L s + R_2 R_2 g_m s^3 + C_L L_5 L_L R_2 g_m s^3 + C_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)
H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2\right)}{4 C_2 C_5 C_L L_5 L_L R_2 s^5 + 4 C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_L L_5 R_2 s^3 + 4 C_5 C_L L_5 R_2 s^3 + 4 
10.223 INVALID-ORDER-223 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L_L R_L s \left( C_2 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2 \right)
H(s) = \frac{L_L \kappa_L s \left( C_2 L_5 \kappa_2 s^2 - C_5 L_5 \kappa_2 s^2 + L_5 \kappa_2 g_m s + L_5 s - \kappa_2 \right)}{4 C_2 C_5 L_5 L_L R_2 R_L s^4 + C_2 L_L L_L R_2 R_L s^3 + C_2 L_5 L_L R_2 R_L s^2 + 4 C_2 L_L R_2 R_L s^2 + C_5 C_L L_5 L_L R_2 R_L s^3 + C_5 L_5 L_L R_2 R_L s^
10.224 INVALID-ORDER-224 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^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 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2\right)}{4 C_2 C_5 C_L L_5 L_L R_2 R_L s^5 + 4 C_2 C_5 L_5 L_L R_2 s^4 + 4 C_5 C_L L_5 L_L R_2 s^4 + 4 C_5 L_L R_2 s^4 + 4 C_
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2 \right)}{4 C_2 C_5 C_L L_5 L_L R_2 R_L s^5 + 4 C_2 C_5 L_5 L_2 R_2 R_L s^3 + C_2 C_L L_5 R_2 R_L s^3 + 
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 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1 \right)}{C_2 C_5 L_5 R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + 4 C_2 C_5 R_2 R_L s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s + 2 C_5 R_2 R_L g_m s + C_5 R_2 s + C_5 R_5 s + 4 C_5 R_L s + R_2 g_m + 1}
10.227 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)
                                                                                                                                                                                                                      H(s) = \frac{C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_2C_5C_LL_5R_2s^3 + C_2C_5C_LR_2R_5s^2 + 4C_2C_5R_2s + C_2C_LR_2s + C_5C_LL_5R_2g_ms^2 + C_5C_LL_5s^2 + C_5C_LR_2R_5g_ms + C_5C_LR_2s + C_5
10.228 INVALID-ORDER-228 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
                                              \frac{R_L \left( C_2 C_5 L_5 R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 s + C_5 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 R_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 R_5 r_4 R_5 R_2 R_5 R_2 R_5 R_2 R_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 R_5 r_5 R_2 R_5 r_5 R_2 R_5 R
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$$H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 s^3 + C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 C_L R_2 R_5 s + C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 s^2 + C_5 C_L R_2 R_5 g_m s + 2 C_5 C_L R_2 R_5 g_m s + C_5 C_L R_2 s + C_5 C_L$$

10.229 INVALID-ORDER-229 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L + \frac{1}{C_L s}\right)$

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10.230 INVALID-ORDER-230 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + 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_5 R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_2 g_m s - C_5 R
10.231 INVALID-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)
H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_5 L_L R_2 s^5 + C_2 C_5 L_L L_2 R_2 s^4 + C_5 C_L L_L L_2 R_2 s^3 + C_5 C_L L_L R_2 
10.232 INVALID-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)
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 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_5 R_2 s^3 + 4 C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 C_L R_2 R_5 s^2 + 4 C_2 C_5 R_2 s + C_5 C_L L_5 R_2 g_m s^2 + C_5 C_L L_5 R_2 g_m s^2 + 4 C_5 C_L L_4 R_2 g_m s^2 + 4 C_5 C_L L_4 R_2 g_m s^2 + 4 C_5 C_L L_4 R_2 g_m s^2 + 4 C_5 C_L R_2 R_5 g_m s + 2 C_5 C_L R_2 R_4 g_m s + C_5 C_L R_2 R_5 g_m s + C_
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L \kappa_L s \left( \cup_2 \cup_5 L_5 \kappa_2 s^2 + \cup_2 \cup_5 \kappa_2 \kappa_5 s + C_2 C_5 L_L \kappa_2 s^2 + C_2 C_5 L_L \kappa_2 s^2 + C_2 C_5 L_L \kappa_2 s^2 + C_2 C_5 L_L \kappa_2 s^3 + 
10.234 INVALID-ORDER-234 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}C_{5}L_{5}R_{2}s^{3}+C_{2}C_{5}R_{2}R_{5}s^{2}+C_{2}R_{2}s+C_{5}L_{5}R_{2}g_{m}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{2}R_{5}g_{m}s^{2}+C_{5}L_{5}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}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_2 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s^2 + C_5 L_5 R_2 g_m s^3 + C_5 C_L L_4 R_2 R_5 g_m s^3 + C_5 C_4 L_5 R_5 g_m s^3 + C_5 C_4 L_5 R_5 g_m s^3 + C_5 C_5 R_5 R_5 g_m s^3 + 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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{1 + \frac{1}{12} \left( \frac{1
10.236 INVALID-ORDER-236 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)
                                                                                                          H(s) = \frac{R_L \left( C_2 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5 \right)}{4 C_2 C_5 L_5 R_2 R_5 s^2 + 4 C_2 L_5 R_2 R_5 s^2 + 4 C_2 L_5 R_2 R_5 R_L s + 2 C_5 L_5 R_2 R_5 R_L g_m s^2 + C_5 L_5 R_2 R_5 s^2 + 4 C_5 L_5 R_2 R_5 g_m s + 2 L_5 R_2 R_5 g_m s + 2 L_5 R_2 R_5 g_m s + L_5 R_2 s + L_5 R_5 s + 4 L_5 R_L s + 2 R_2 R_5 R_L g_m + R_2 R_5 + 4 R_5 R_L s + 2 R_5 R_5 R_
10.237 INVALID-ORDER-237 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_1 s}\right)
                                                                                                                               H(s) = \frac{C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5}{4C_2C_5L_5R_2R_5s^3 + C_2C_LL_5R_2s^2 + 4C_2R_2s^2 + 4C_2R_2R_5s + C_5C_LL_5R_2R_5g_ms^2 + 4C_5L_5R_2s^2 + C_LL_5R_2s^2 + C_L
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10.239 INVALID-ORDER-239 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (C_L R_L s + 1) (C_2 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 q_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5)
H(s) = \frac{(C_L R_L s + 1) \left(C_2 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5\right)}{4 C_2 C_5 C_L L_5 R_2 R_5 R_L s^4 + 4 C_2 C_5 L_5 R_2 R_5 s^3 + 4 C_2 C_L L_5 R_2 R_5 g_m s^2 + 4 C_2 L_5 R_2 R_5 g_m s^2 + 2 C_L L_5 R_5 R_5 g_m 
10.240 INVALID-ORDER-240 Z(s) = \left(\infty, \ \frac{R_2}{C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+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_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5\right)}{4 C_2 C_5 C_L L_5 L_L R_2 R_5 s^5 + 4 C_2 C_5 L_5 L_2 R_5 s^3 + 4 C_2 C_L L_5 R_2 R_5 s^3 + 4 C_2 C_L L_5 R_2 R_5 s^3 + 4 C_2 C_L L_5 R_2 R_5 s^3 + 4 C_2 L_5 L_4 R_2 s^4 + C_5 C_L L_5 L_4 R_5 s^4 + C_5 C_L L_5 L_4 R_5 s^4 + C_5 C_L L_5 R_2 R_5 s^3 + 2 C_5 L_5 R_5 R_5 s^3 + 2 C_5 L_5 R_5 R_
10.241 INVALID-ORDER-241 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \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 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5\right)}{4 C_2 C_5 L_5 L_L R_2 R_5 s^4 + C_2 C_L L_5 L_L R_2 R_5 s^4 + 4 C_2 L_5 L_L R_2 R_5 s^2 + C_5 C_L L_5 L_L R_2 R_5 s^4 + 2 C_5 L_5 L_L R_2 R_5 s^3 + C_5 L_5 L_L 
10.242 INVALID-ORDER-242 Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + R_L + \frac{1}{C_Ls}\right)
10.243 INVALID-ORDER-243 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L_L R_L s \left( C_2 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 s^2 \right)
                                          \frac{L_L R_L S \left(C_2 L_5 R_L R_5 S - C_5 L_5 R_L R_5 R_L R_5 S - C_5 L_5 R_L R_5 R_
10.244 INVALID-ORDER-244 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \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_5R_Ls^5 + 4C_2C_5L_5L_LR_2R_5s^4 + 4C_2C_5L_5R_LR_2R_5s^4 + 4C_2C_LL_5L_LR_2R_5s^4 + 4C_2C_LL_5L_RR_2R_5s^4 + 4
10.245 INVALID-ORDER-245 Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{1}{4C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_5R_2R_5R_Ls^3 + C_2C_LL_5L_LR_2R_5s^4 + 4C_2C_LL_5L_RR_2R_5R_Ls^3 + 4C_2C_LL_5R_2R_5R_Ls^3 +
10.246 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)
                                                                                           H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 s^2 + C_2 R_2 R_5 s + C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5 \right)}{C_2 C_5 L_5 R_2 R_5 s^3 + 4 C_2 C_5 L_5 R_2 R_2 s^2 + C_2 R_2 R_5 s + 4 C_2 R_2 R_L s + C_5 L_5 R_2 R_5 g_m s^2 + 2 C_5 L_5 R_2 R_L g_m s^2 + C_5 L_5 R_2 s^2 + C_
10.247 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)
                                      H(s) = \frac{C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2s^2 + C_5L_5R_2s^2 + C_5L_5R_2s^2 + C_5L_5R_2s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5}{C_2C_5C_LL_5R_2s^3 + C_2C_LL_5R_2s^3 + C_2C_LL_5R_2s^2 + C_5C_LL_5R_2s^3 + C_5C_LL_
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10.248 INVALID-ORDER-248 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}{C_L R_L s + 1}\right)
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 $R_L \left(C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 s^2 + C_2 R_2 R_5 s + C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m s^2 \right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 s^\circ + C_2 L_5 R_2 S^\circ + C_2 L_5 R_2 S^\circ + C_5 L_5 R_2 S^\circ + C_5$

10.249 INVALID-ORDER-249 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$

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

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{4 C_2 C_5 C_L L_5 L_L R_2 s^5 + C_2 C_5 C_L L_5 L_L R_2 s^3 + C_2 C_L L_5 R_2 s^3 + C_2 C_L L_5 R_2 s^3 + C_2 C_L L_5 R_2 s^3 + C_5 C_L L_5 R_2 s^3$

10.251 INVALID-ORDER-251 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 s^2 + C_2 R_2 R_5 s + C_5 L_5 R_2 s^2 + C_5 L_5 R_2 s^3 + C_5 L$

10.252 INVALID-ORDER-252 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{5}R_{2}R_{5}s^{3}+C_{2}L_{5}R_{2}s^{2}+C_{2}R_{2}R_{5}s+C_{5}L_{5}R_{2}R_{5}g_{m}s^{2}-C_{5}L_{5}R_{2}s^{2}+C_{5}L_{5}R_{2}s^{2$ $\frac{(C_L L_L s^2 + C_L R_L s + 1) \left(C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 s^2 + C_2 R_2 R_5 s + C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_5 R_5 g_m s^2 - C_5 L_5 R_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^$

10.253 INVALID-ORDER-253 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + C_2C_5L_5L_LR_2R_5s^4 + 4C_2C_5L_5L_LR_2R_Ls^4 + C_2C_5L_5R_2R_5R_Ls^3 + C_2L_LL_RR_2R_5s^4 + 4C_2L_LR_2R_5s^4 + 4C_2C_5L_5L_RR_2R_5s^4 + 4C_2L_LR_2R_5s^4 + 4C_2LR_2R_5s^4 + 4C_2L_LR_2R_5s^4 + 4C_2LR_2R_5s^4 + 4C_2LR_2R_2R_5s^4 + 4C_2LR_2R_5s^4 + 4C_2LR_2R_2s^4 +$

10.254 INVALID-ORDER-254 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{(C_L L_L R_L s^3 + C_2 C_L L_L L_R R_2 s^5 + 4C_2 C_5 L_L L_L R_2 R_2 s^5 + 4C_2 C_5 L_L L_R R_2 s^4 + C_2 C_5 L_5 R_2 R_2 s^3 + 4C_2 C_L L_L R_2 R_2 s^4 + C_2 C_L L_L R_2 R_2 s^3 + 4C_2 C_L L_L R_2$

10.255 INVALID-ORDER-255 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5R_2R_5s^3 + 4C_2C_5L_5R_2R_2s^3 + C_2C_LL_5R_2R_2s^3 +$

10.256 INVALID-ORDER-256 $Z(s) = \left(\infty, \frac{R_2}{C_2 R_2 s + 1}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)$

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

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 \begin{aligned} \textbf{10.257} \quad \textbf{INVALID-ORDER-257} \ \ Z(s) &= \left( \infty, \ \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \ \frac{R_5 \left( C_5 L_5 s^2 + 1 \right)}{C_5 L_5 R_2 s^2 + C_5 R_5 s + 1}, \ \frac{1}{C_L s} \right) \\ & \qquad \qquad \qquad \qquad \\ H(s) &= \frac{C_2 C_5 L_5 R_2 R_5 s^3 + C_2 R_2 R_5 s + C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5}{C_2 C_5 C_L L_5 R_2 R_5 s^3 + 4 C_2 C_5 R_2 R_5 s^2 + 4 C_2 R_2 s + C_5 C_L L_5 R_2 R_5 g_m s^3 + C_5 C_L L_5 R_2 s^
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10.258 INVALID-ORDER-258 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{R_L}{C_LR_Ls+1}\right)$

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

10.259 INVALID-ORDER-259 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)$

10.260 INVALID-ORDER-260 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$

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

10.261 INVALID-ORDER-261 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

10.262 INVALID-ORDER-262 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{(C_L L_L s^2 + C_L R_L s + 1)}{4C_2 C_5 C_L L_5 L_L R_2 s^5 + C_2 C_5 C_L L_5 R_2 R_5 s^4 + 4C_2 C_5 C_L L_5 R_2 R_5 s^4 + 4C_2 C_5 C_L L_5 R_2 R_5 s^4 + 4C_2 C_5 C_L L_5 R_2 R_5 s^3 + 4C_2 C_5 R_2 R_5 s^2 + 4C_2 C_L L_2 R_2 R_5 s^2 + 4C_2 C_L R_2 R_5 s^2 + 4C_2 C$

10.263 INVALID-ORDER-263 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + C_2C_5L_5L_LR_2R_5s^4 + 4C_2C_5L_5L_RR_2R_5s^4 + 4C_2C_5L_5R_2R_5R_Ls^3 + 4C_2C_5L_LR_2R_5R_Ls^3 + C_2L_LR_2R_5s^2 + 4C_2L_LR_2R_5s^2 + 4C_2L_LR_2R_2R_2s^2 + 4C_2L_LR_2R_2R_2s^2 + 4C_2L_LR_2R_2s^2 + 4C_2L_LR_2R_2s^2$

10.264 INVALID-ORDER-264 $Z(s) = \left(\infty, \frac{R_2}{C_2R_2s+1}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_LR_2R_5s^4 + 4C_2C_5L_5R_2R_5s^3 + 4C_2C_5L_LR_2s^3 + 4C_2C_5L_LR$

10.265 INVALID-ORDER-265 $Z(s) = \left(\infty, \ \frac{R_2}{C_2 R_2 s + 1}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

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

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

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

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

10.269 INVALID-ORDER-269 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.270 INVALID-ORDER-270 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

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

10.272 INVALID-ORDER-272 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

$$H(s) = \frac{-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m}{s\left(C_2C_5C_LR_2s^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_2C_LR_2g_ms + C_2C_Ls + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$$

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

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

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

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

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

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

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

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

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

10.279 INVALID-ORDER-279 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

10.280 INVALID-ORDER-280 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

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

10.281 INVALID-ORDER-281 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{R_L(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(-C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m \right)}{2 C_2 C_5 C_L L_L R_2 g_m s^4 + C_2 C_5 C_L L_L R_2 s^4 + 4 C_2 C_5 C_L L_L R_2 s^4 + 2 C_2 C_5 R_2 R_L g_m s^2 + C_2 C_5 R_2 s^2 + 4 C_2 C_5 R_L s^3 + C_2 C_L L_L R_2 g_m s^3 + C_2 C_L L_L R_2 g_m s^3 + C_2 C_L R_L g_m s^2 + C_2 C_L R_L g_m s^3 + C_3 C_L L_L R_2 g_m s^3 + C_5 C_L R_2 g_m s^3 + C_5 C_L$$

10.282 INVALID-ORDER-282 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{1}{C_L s}\right)$

$$H(s) = \frac{-C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_5C_LR_2R_5s^3 + 2C_2C_5R_2R_5g_ms^2 + 4C_2C_5R_5s^2 + C_2C_LR_2g_ms^2 + C_2C_LR_2s^2 + C_2C_LR_2s^2 + 2C_2R_2g_ms + 4C_2s + C_5C_LR_5s^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_LR_5$$

10.283 INVALID-ORDER-283 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(-C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1 \right)}{C_2 C_5 C_L R_2 R_5 R_L s^3 + 2 C_2 C_5 R_2 R_5 R_L g_m s^2 + C_2 C_5 R_2 R_5 R_L g_m s^2 + C_2 C_L R_2 R_5 R_L g_m s^2 + C_2 C_L R_2 R_5 R_L g_m s^2 + C_2 C_L R_2 R_5 R_L g_m s + C_2 R_2 R_5 g_m s + 2 C_2 R_2 R_5 g_m s + C_2 R_2 R_5 R_L g_m s + C_5 R_5 R_L g_m s + C$$

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\frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}C_{5}R_{2}R_{5}s^{2}-C_{2}R_{2}R_{5}g_{m}s+C_{2}R_{2}s-C_{2}R_{5}g_{m}s+C_{5}R_{5}s-R_{5}g_{m}+1\right)}{2C_{2}C_{5}C_{L}L_{L}R_{2}g_{m}s^{4}+4C_{2}C_{5}L_{L}R_{5}s^{4}+C_{2}C_{5}L_{L}R_{5}s^{3}+2C_{2}C_{5}R_{2}R_{5}g_{m}s^{2}+4C_{2}C_{5}R_{5}s^{2}+2C_{2}L_{L}R_{2}g_{m}s^{3}+4C_{2}C_{L}L_{L}s^{3}+C_{2}C_{L}R_{2}s^{2}+C_{2}C_{L}R_{2}s^{2}+2C_{2}R_{2}g_{m}s+4C_{2}s+2C_{5}C_{L}L_{L}R_{5}g_{m}s^{3}+C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s^{3}+4C_{2}C_{L}L_{L}s^{3}+C_{2}C_{L}R_{5}s^{2}+2C_{2}R_{2}g_{m}s+4C_{2}s+2C_{5}C_{L}L_{L}R_{5}g_{m}s^{3}+C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s^{3}+4C_{2}C_{L}L_{L}s^{3}+C_{2}C_{L}R_{5}s^{2}+2C_{2}R_{2}g_{m}s+4C_{2}s+2C_{5}C_{L}L_{L}R_{5}g_{m}s^{3}+C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s^{3}+4C_{2}C_{L}L_{L}s^{3}+C_{2}C_{L}R_{5}s^{2}+2C_{2}R_{2}g_{m}s+4C_{2}s+2C_{5}C_{L}L_{L}R_{5}g_{m}s^{3}+C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s^{3}+4C_{2}C_{L}R_{5}s^{2}+2C_{2}R_{5}g_{m}s+4C_{2}s+2C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s^{3}+4C_{2}C_{L}R_{5}s^{2}+2C_{2}R_{2}g_{m}s+4C_{2}s+2C_{5}C_{L}R_{5}s^{2}+2C_{5}R_{5}g_{m}s+2C_{L}L_{L}g_{m}s+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_{5}s^{2}+2C_{L}R_
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  L_L s \left( -C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1 \right)
H(s) = \frac{L_L s \left(-C_2 C_5 R_2 R_5 s^2 + C_2 R_2 S_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_L R_2 R_5 s^4 + 2 C_2 C_5 L_L R_2 S_3 + 4 C_2 C_5 L_L R_5 s^3 + 2 C_2 L_L R_2 S_3 + C_2 C_L L_L R_2 s^3 + 2 C_2 L_L R_2
10.287 INVALID-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)
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L_L R_L s \left(-C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m \right)
                                 \frac{L_L u_L s \left(- \bigcirc_2 \bigcirc_5 u_2 u_5 s + \bigcirc_2 u_2 u_5 g_m s - \bigcirc_2 u_2 u_5 - \bigcirc_2 u_2 u_5 s + \bigcirc_2 u_2 u_5 g_m s - \bigcirc_2 u_2 s + \bigcirc_2 u_5 s - \bigcirc_5 u_5 s + u_5 g_m s - \bigcirc_2 u_2 u_
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)
                                         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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              R_L (C_L L_L s^2 + 1) (C_2 C_5 R_2 R_5 s^2)
                                           \overline{2C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}R_{L}q_{m}s^{4} + C_{2}C_{5}C_{L}L_{L}R_{2}R_{5}s^{4} + 4C_{2}C_{5}C_{L}L_{L}R_{5}R_{L}s^{4} + C_{2}C_{5}C_{L}R_{2}R_{5}R_{L}s^{3} + 2C_{2}C_{5}R_{2}R_{5}R_{L}q_{m}s^{2} + C_{2}C_{L}L_{L}R_{2}R_{5}q_{m}s^{3} + 2C_{2}C_{L}L_{L}R_{2}R_{5}q_{m}s^{3} + 2C_{2}C_{L}L_{L}R_{2}S^{3} + 4C_{2}C_{L}L_{L}R_{5}S^{3} + 4C_{2}C_{L}L_{L}R_{5}S
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_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_5C_LR_2s_2g_ms^2 + C_2C_5C_LR_2s^2 + C_2C_5C_LR_2s^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_2C_LR_2g_ms + C_2C_Ls + C_5C_LR_5g_ms + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}
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{R_L \left( C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_2 C_5 C_L R_2 R_5 R_L g_m s^3 + C_2 C_5 C_L R_5 R_L s^3 + C_2 C_5 R_2 R_5 g_m s^2 + 2 C_2 C_5 R_2 R_5 g_m s^2 + 2 C_2 C_5 R_2 s^2 + C_2 C_5 R_2
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 $(C_L R_L s + 1) (C_2 C_5 R_2 R_5 s^2 - C_2 R_2 R_5 g_m s + C_2 R_2 s - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1)$

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

10.284 INVALID-ORDER-284 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

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

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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_L s}\right)
                                                                                                                                  H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L R_5 s^2 + 4 C_2 C_5 C_L R_2 s^2 + 2 C_2 C_5 R_2 g_m s + 4 C_2 C_5 s + C_2 C_L R_2 g_m s + C_2 C_L R_5 g_m s + 2 C_5 C_L R_2 g_m s + C_5 C_L R_2 g_m 
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 s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(2 C_2 C_5 C_L L_L R_2 g_m s^3 + 4 C_2 C_5 C_L L_L s^3 + C_2 C_5 C_L R_2 g_m s^2 + C_2 C_5 C_L R_5 s^2 + C_2 C_5 C_L R_5 s^2 + 2 C_2 C_5 R_2 g_m s + 4 C_2 C_5 s + C_2 C_L R_2 g_m s + C_2 C_L L_L g_m s^2 + C_5 C_L R_5 g_m s + C_5 C_L 
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)
H(s) = \frac{L_L s \left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L R_2 R_5 g_m s^4 + C_2 C_5 C_L L_L R_5 s^4 + 2 C_2 C_5 L_L R_2 g_m s^3 + 4 C_2 C_5 L_L R_3 s^4 + C_2 C_5 R_2 R_5 g_m s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 C_L L_L R_3 s^3 + C_2 C_L L_L R_5 g_m s^3 + C_5 C_L L_L R_5 g_m s^3 
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 L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(2 C_2 C_5 C_L L_L R_2 g_m s^3 + 4 C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_2 g_m s^2 + C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L R_2 s^2 + 2 C_2 C_5 R_2 g_m s + 4 C_2 C_5 s + C_2 C_L R_2 g_m s + C_
10.297 INVALID-ORDER-297 Z(s) = \left(\infty, R_2 + \frac{1}{C_{7}s}, \infty, \infty, R_5 + \frac{1}{C_{5}s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      L_L R_L s \left( C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_r \right)
H(s) = \frac{L_L R_L s \left( C_2 C_5 R_2 R_5 g_m s - C_2 C_5 R_2 s + C_2 C_5 R_2 s 
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{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L R_2 R_5 g_m s^4 + 2 C_2 C_5 L_L L_R g_m s^4 + C_2 C_5 C_L L_L R_2 s^4 + C_2 C_5 C_L L_L R_2 s^4 + C_2 C_5 L_L R_2 g_m s^3 + 4 C_2 C_5 L_L R_2 g_m s^3 + 4 C_2 C_5 L_L R_2 g_m s^3 + 2 C_2 C_5 R_2 R_2 g_m s^2 + 2 C_2 C_5 R_2 R_2 g_m s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 R_
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{1}{C_2C_5C_LL_LR_2R_5g_ms^4 + 2C_2C_5C_LL_LR_2s^4 + C_2C_5C_LL_LR_2s^4 + C_2C_5C_LR_2s^2 + C_2
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 s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + 2 C_2 C_5 R_2 R_L q_m s^2 + C_2 C_5 R_2 s^2 + 4 C_2 C_5 R_L s^2 + C_2 R_2 q_m s + C_2 s + C_5 L_5 q_m s^2 + 2 C_5 R_L q_m s + C_5 s + q_m r^2 + 2 C_5 R_L r^2 + 2 C_5 R_
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_L s}\right)
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 $H(s) = \frac{C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m}{s\left(C_2C_5C_LL_5R_2g_ms^3 + C_2C_5C_LL_5s^3 + C_2C_5C_LR_2s^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_2C_LR_2g_ms + C_2C_Ls + C_5C_LL_5g_ms^2 + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$

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H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m s^3 + C_2 C_5 C_L L_5 s^3 + 2 C_2 C_5 C_L R_2 R_L g_m s^2 + C_2 C_5 C_L R_2 s^2 + 4 C_2 C_5 C_L R_L s^2 + 2 C_2 C_5 R_2 g_m s + 4 C_2 C_5 s + C_2 C_L R_2 g_m s + C_2 C_L S_2 g_m s^2 + 2 C_5 C_L L_5 g_m s^2 + 2 C_5 C_L R_2 g_m s + C_5 C_L R_2 g_m s 
10.304 INVALID-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)
                                                                                                                   H(s) = \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}C_{5}L_{5}R_{2}g_{m}s^{3}+C_{2}C_{5}L_{5}s^{3}-C_{2}C_{5}R_{2}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s+C_{5}L_{5}g_{m}s^{2}-C_{5}s+g_{m}\right)}{s\left(C_{2}C_{5}C_{L}L_{5}s^{3}+2C_{2}C_{5}C_{L}L_{L}R_{2}g_{m}s^{3}+4C_{2}C_{5}C_{L}L_{L}s^{3}+C_{2}C_{5}C_{L}R_{2}s^{2}+2C_{2}C_{5}R_{2}g_{m}s+4C_{2}C_{5}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}s+C_{5}C_{L}L_{5}g_{m}s^{2}+2C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2}+C_{5}C_{L}L_{5}g_{m}s^{2
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)
H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_5 C_L L_5 L_L R_2 g_m s^5 + C_2 C_5 L_L L_2 S^4 + C_2 C_5 L_L R_2 g_m s^3 + C_2 C_
10.306 INVALID-ORDER-306 Z(s) = \left(\infty, R_2 + \frac{1}{C_{2s}}, \infty, \infty, L_5 s + \frac{1}{C_{5s}}, L_L s + 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 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m s^3 + C_2 C_5 C_L L_L R_2 g_m s^3 + 4 C_2 C_5 C_L L_L s^3 + 2 C_2 C_5 C_L R_2 R_2 G_m s^2 + 2 C_2 C_5 C_L R_2 s^2 + 4 C_2 C_5 C_L R_2 s^2 + 4 C_2 C_5 C_L R_2 g_m s + C_2 C_L 
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L_L R_L s \left( C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^3 \right)
H(s) = \frac{L_L R_L s \left( C_2 C_5 L_5 R_2 g_m s^5 + C_2 C_5 L_5 s^5 - C_2 C_5 R_2 s^5 + C_2 R_2 g_m s + C_2 S_4 L_5 g_m s^5 + C_2 C_5 L_5 R_2 g_m s^5 + C_2 C_5 R_2 g_m s^5 + C_2 C_5 L_5 R_2 g_m s^5 + C_
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{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_5 C_L L_5 L_L R_2 g_m s^5 + C_2 C_5 C_L L_L R_2 R_L g_m s^4 + C_2 C_5 C_L L_L R_2 s^4 + 4 C_2 C_5 L_L R_2 s^4 + 4 C_2 C_5 L_L R_2 g_m s^3 + 2 C_2 C_5 R_2 R_L g_m s^3 + 2 C_2 C_5 R_2 R_L g_m s^3 + C_2 C_5 R_2 R_L g_m s^3 + C_2 C_5 R_L R_2 g_m s^3 + C_2 C_5 R_2 R_2 g_m s^3 + C_2 C_
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(C_L L_L s^2 + 1)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 s^3 \right)
H(s) = \frac{RL\left(C_LL_Ls + 1\right)\left(C_2C_5L_5R_{12}g_ms^5 + C_2C_5L_Ls^5 - C_2C_5R_{12}s^4 + C_2C_5L_Ls^5 - C_2C_5R_{12}s^4 + C_2C_5L_Ls^5 - C_2C_5R_{12}s^4 + C_2C_5L_Ls^6 + C_2C_5L_Ls^6 + C_2C_5R_{12}s^4 + C_2C_5L_Ls^6 + C_2C_5L_Ls^6 + C_2C_5R_{12}s^4 + C_2C_5L_Ls^6 + C_2C_5L_Ls^6
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)
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 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_2 C_5 C_L L_5 R_2 R_L g_m s^4 + C_2 C_5 C_L L_5 R_L s^4 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 g_m s^2 + C_2 C_5 R_2 R_L g_m s^2 + C_2 C_5 R_2 R_L g_m s^2 + C_2 C_L R_2 R_L g_m s^2 + C_2 C_L R_2 R_L g_m s^3 + C_5 C_L L_5 R_L g_m s^3 + C_5 C_L R_2 R_L g_m s^3 + C_5 C_$

10.302 INVALID-ORDER-302 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

10.303 INVALID-ORDER-303 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, R_L + \frac{1}{C_4 s}\right)$

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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 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + L_5 g_m s - 1 \right)}{C_2 C_5 C_L L_5 R_2 R_L g_m s^3 + C_2 C_5 L_5 R_2 R_L g_m s^3 + C_2 C_L L_5 R_L g_m s^2 + C_2 L_5 R_2 g_m s^2
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{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_5 R_2 s^3 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_2 C_5 C_L L_5 R_2 g_m s^4 + C_2 C_5 C_L L_5 R_2 g_m s^3 + 4 C_2 C_5 L_5 R_2 g_m s^3 + 4 C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_L L_5 R_2 g_m s^3 + C
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_{S}^{2}+1\right)\left(C_{2}C_{5}L_{5}R_{2}s^{3}-C_{2}L_{5}R_{2}g_{m}s^{2}-C_{2}L_{5}s^{2}+C_{2}R_{2}s+C_{5}L_{5}s^{2}-L_{5}g_{m}s+1\right)}{2C_{2}C_{5}C_{L}L_{5}L_{L}g_{m}s^{5}+4C_{2}C_{5}L_{L}g_{m}s^{3}+4C_{2}C_{5}L_{5}R_{2}g_{m}s^{3}+4C_{2}C_{5}L_{5}R_{2}g_{m}s^{3}+C_{2}C_{L}L_{5}R_{2}g_{m}s^{3}+C_{2}C_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_{2}L_{L}L_{5}s^{3}+2C_
10.315 INVALID-ORDER-315 Z(s) = \left(\infty, R_2 + \frac{1}{C_{7}s}, \infty, \infty, \frac{L_{5}s}{C_{5}L_{5}s^2+1}, \frac{L_{L}s}{C_{L}L_{1}s^2+1}\right)
H(s) = \frac{L_L s \left(-C_2 C_5 L_5 R_2 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2 C_5 C_L L_5 L_L R_2 g_m s^4 + 4 C_2 C_5 L_5 L_L s^4 + C_2 C_L L_5 L_L R_2 g_m s^4 + C_2 C_L L_5 L_L R_2 g_m s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 R_2 g_m s^2 + 4 C_2 L_L s^2 + C_2 R_2 s + C_5 C_L L_5 L_L s^4 + 2 C_5 L_5 L_L g_m s^3 + C_5 L_5 L_2 g_m s^3 + C_5 L_5 L_2 g_m s^3 + C_5 L_5 L_5 R_2 g_m s^3 + C_5 L_5 R_2 g
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{5}R_{2}s^{3}-C_{2}L_{5}R_{2}g_{m}s^{2}-C_{2}L_{5}s^{2}+C_{2}R_{2}s+C_{5}L_{5}s^{2}-L_{5}g_{m}s+1\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^3 - C_2 L_5 R_2 g m s^2 + C_5 L_5 s^2 - L_5 g m s s + 1\right)}{2C_2 C_5 C_L L_5 L_L R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_L L_5 R_2 g m s^3 + 4C_2 C_5 L_5 R_2 g m s^3 + 4C_2 
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_5 R_2 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + L_5 g_m s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 R_2 R_2 g_m s^2 + C_2 L_5 
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (C_L L_L R_L s^2 + L_L s + R_L) (C_2 C_5 L_5 R_2 s^3 - C_2 L_5
                                                        \frac{(c_L L_L L_L R_2 R_L g_m s^5 + C_2 C_5 C_L L_5 L_L R_2 s^5 + 4 C_2 C_5 C_L L_5 L_L R_2 s^5 + 4 C_2 C_5 L_5 L_L R_2 g_m s^4 + 4 C_2 C_5 L_5 L_L R_2 g_m s^3 + C_2 C_5 L_5 L_L R_2 g_m s^3 + C_2 C_L L_5 L_L R_2 g_m s
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                       \frac{1}{2C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}R_{L}q_{m}s^{5} + C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L_{5}L_{L}R_{2}s^{5} + 4C_{2}C_{5}L_{L}L_{5}R_{2}R_{L}q_{m}s^{3} + C_{2}C_{5}L_{5}R_{2}R_{L}q_{m}s^{3} + C_{2}C_{L}L_{5}L_{L}R_{2}q_{m}s^{4} + C_{2}C_{L}L_{5}L_{L}S^{4} + C_{2}C_{L}L_{5}R_{L}q_{m}s^{3} + C_{2}C_{L}L_{5}R_{L}q_{m}s^{3} + C_{2}C_{L}L_{5}L_{L}S^{4} + C_{2}C_{L}L_{5}L_{L}S^{4} + C_{2}C_{L}L_{5}L_{L}S^{4} + C_{2}C_{L}L_{5}R_{L}S^{4} + C_{2}C_{L}L_{5}R_{L
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10.311 INVALID-ORDER-311 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{1}{C_L s}\right)$

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H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 g_m s^2 + 2 C_2 C_5 R_2 R_2 g_m s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 
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_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_2s^2 + C_2C_5R_2s^2 + C_2S_2g_ms + C_2S + C_5L_5g_ms^2 + C_5S_2g_ms - C_5S + g_m}{s\left(C_2C_5C_LL_5R_2g_ms^3 + C_2C_5C_LL_5s^3 + C_2C_5C_LR_2s^2 + C_2C_5C_LR_2s^2 + C_2C_5R_2g_ms + 4C_2C_5s + C_2C_LR_2g_ms + C_2C_LS + C_5C_LL_5g_ms^2 + C_5C_LR_5g_ms + C_5C_LS 
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R_L \left( C_2 C_5 L_5 R_2 q_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 q_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 q_m s + C_2 s + C_5 L_5 q_m s^2 + C_5 R_5 q_m s - C_5 s + q_m s^2 + C_5 R_5 q_m s^2 + C
H(s) = \frac{R_L \left( C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 s_2 g_m s - C_5 s + g_m s^2 + C_5 C_5 R_2 R_2 g_m s^3 + C_2 C_5 R_2 R_2 g_m s^2 + C_2 C_5 
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 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m s^3 + C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_2 g_m s^2 + C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L R_2 s^2 + 2 C_2 C_5 R_2 g_m s + 4 C_2 C_5 s + C_2 C_L R_2 g_m s + C_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 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m s^3 + C_2 C_5 C_L L_5 s^3 + 2 C_5 C_L 
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              L_L s \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m s^2 + C_5 R_5 g_m s^2 + 
H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 s^2 + C_2 C_5 R_3 s^2 + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m S_5 + C_2 C_5 L_L R_2 g_m s^3 + C_2 C_5 R_2 g_m s^3 + C_2 C
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 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_5 R_2 g_m s^3 + C_2 C_5 C_L L_2 S^3 + 2 C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_2 g_m s^2 + C_2 C_5 C_L R_2 R_2 g_m s + 4 C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_5 g_m s^2 + 2 C_2 C_5 C_L R_2 R_2 g_m s + 4 C_2 C_5 C_L R_2 g_m s + C_2 C_5 C_L R_2 g_m s^2 + 2 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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_{c}C_{5}C_{L}L_{5}L_{L}R_{2}R_{L}g_{m}s^{5} + C_{2}C_{5}L_{L}L_{L}R_{2}s^{5} + C_{2}C_{5}L_{L}L_{R}R_{2}s^{4} + C_{2}C_{5}L_{L}R_{2}s^{4} + C_{2}C_{5}L_{L}
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (C_L L_L R_L s^2 + L_L s + R_L) (C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2
H(s) = \frac{(C_L L_L L_C + L_L L_C +
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10.320 INVALID-ORDER-320 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, R_L\right)$

10.329 INVALID-ORDER-329 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

 $H(s) = \frac{R_L \left(c_1 + c_2 + c_3 + c_4 + c_4 + c_5 + c_4 + c_4 + c_5 + c_4 +$

10.330 INVALID-ORDER-330 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$

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

10.331 INVALID-ORDER-331 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2L_5R_2s^2 + C_2L_5R_2s^2 + C_2L_5R_5s^2 - C_2R_2R_5s - C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5}{C_2C_5L_5R_2s^4 + 2C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_2s^3 + C_2C_LL_5R_2s^3 + C_2C_LL_$

10.332 INVALID-ORDER-332 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$

10.333 INVALID-ORDER-333 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)$

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

10.334 INVALID-ORDER-334 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)$

 $H(s) = -\frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_5 R_2 R_5 s^3 - C_2 L_5 R_2 R_5 g_m s^2 + C_2 L_5 R_2 s^2 - C_2 L_5 R_5 s^2 + C_2 R_2 R_5 g_m s^3 + 4 C_2 C_2 L_5 L_5 R_2 R_5 g_m s^3 + 4 C_2 C_2 L_5 L_5 R_2 R_5 g_m s^3 + 4 C_2 C_2 L_5 L_5 R_2 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_5 R_5 R_5 g_m s^3 + 4 C_2 C_2 L_$

10.335 INVALID-ORDER-335 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

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

10.336 INVALID-ORDER-336 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)$

10.337 INVALID-ORDER-337 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Ls^5 + 2C_2C_5L_5L_LR_2R_5R_Lg_ms^4 + C_2C_5L_5L_LR_2R_5s^4 + 4C_2C_5L_5L_LR_2R_5R_Ls^3 + C_2C_LL_5L_LR_2R_5R_Lg_ms^4 + C_2C_LL_5L_LR_2R_5R_Ls^3 + C_2C_LL_5L_RR_2R_5R_Ls^3 + C_2C_LL_5L_RR_2R_5R_2R_5R_Ls^3 + C_2C_LL_5L_RR_2R_5R_2R_2R_2R_2R_2R_2R_2R_2R_2R_$

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10.338 INVALID-ORDER-338 Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
```

 $H(s) = -\frac{1}{2C_2C_5C_LL_5L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_2R_5g_ms^4 + 4C_2C_5L_5L_Rg_ms^3 + C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5L_Rg_ms^3 + C_2C_5L_Rg_ms^3 + C_2C_5L_5L_Rg_ms^3 + C_2C_5L_Tg_ms^3 + C_2C_5L_Tg_ms^3$

10.339 INVALID-ORDER-339
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = -\frac{1}{2C_2C_5C_LL_5L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + 4C_2C_5C_LL_5L_LR_2R_5s^4 + 2C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5R_2R_5R_Lg_ms^3 + C_2C_5L_5L_LR_2R_5g_ms^4 + 2C_2C_LL_5L_LR_2R_5g_ms^4 + 2C_2C_LL_5L_RR_2R_5g_ms^4 + 2C_2C_LL_5L_RR_2g_ms^4 + 2C_2C_LL_$

10.340 INVALID-ORDER-340
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1 \right)}{C_2 C_5 L_5 R_2 g_m s^3 + 2 C_2 C_5 L_5 R_2 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 g_m s + C_2 R_2 g_m s$

10.341 INVALID-ORDER-341
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2s + C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_2C_5C_LL_5R_2s^4 + C_2C_5C_LL_5R_2s^4 + C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5R_2g_ms^3 + C_2C_LL_5s^3 + C_2C_LL_5s^3 + C_2C_LR_2s^2 + C_2C_LR_$

10.342 INVALID-ORDER-342
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.343 INVALID-ORDER-343
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

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

10.344 INVALID-ORDER-344 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$

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

10.345 INVALID-ORDER-345 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.346 INVALID-ORDER-346
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

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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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
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 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5L_5L_LR_2R_2g_ms^4 + 2C_2C_5L_5L_LR_2s^4 + C_2C_5L_5L_LR_2s^4 + C_2C_5L_5L_L$

10.348 INVALID-ORDER-348
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5L_LL_5L_LR_2g_ms^5 + C_2C_5L_LL_5L_LR_2s^5 + C_2C_5L_LL_5L_LR_2s^5 + 4C_2C_5L_LL_5L_LR_2s^5 + 4C_2C_5L_5L_LR_2s^5 + 4C_2C_5L_LR_2s^5 + 4C_2C_5L$

10.349 INVALID-ORDER-349
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5R_2R_2R_2g_ms^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_2R_Ls^4$

10.350 INVALID-ORDER-350
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1 \right)}{C_2 C_5 L_5 R_2 R_5 g_m s^3 + 2 C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^3 + 2 C_2 C_5 R_2 R_5 R_2 s^2 + 2 C_2 R_2 R_5 g_m s^2 + 2 C_2 R_2 R_5 g_m s + 2 C_2 R_5 R_5 g_m s^2 + 2 C_5 L_5 R_5 g_m s^$

10.351 INVALID-ORDER-351
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2R_2s + C_2R_2s + C_2R_2s + C_2R_2s + C_2L_5s^2 - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_5R_2s^4 + C_2C_5C_LL_5R_5s^4 + C_2C_5C_LL_5R_5s^3 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2C_5R_2s^3 + 2C_2C_$

10.352 INVALID-ORDER-352
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

10.353 INVALID-ORDER-353
$$Z(s) = \left(\infty, \ R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L + \frac{1}{C_L s}\right)$$

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

10.354 INVALID-ORDER-354
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + \frac{1}{C_L s}\right)$$

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

10.355 INVALID-ORDER-355
$$Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^3 - C_2 C_5 R_2 R_5 s^3 - C_2 C_5 R_2 R_5 s^3 - C_2 C_5 R_2 R_5 s^3 + C_2 C_5 L_L R_2 R_5 g_m s^5 + C_2 C_5 L_L R_2 R_5 g_m s^5 + C_2 C_5 L_L R_2 R_5 g_m s^3 + C_2 C$

10.356 INVALID-ORDER-356 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{(C_L L_L)}{2C_2 C_5 C_L L_5 L_L R_2 g_m s^5 + 4C_2 C_5 C_L L_5 L_L s^5 + C_2 C_5 C_L L_5 R_2 R_5 g_m s^4 + 2C_2 C_5 C_L L_5 R_2 s^4 + C_2 C_5 C_L L_5 R_2 s^4 + 4C_2 C_5 C_L$

10.357 INVALID-ORDER-357 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2R_Ls^5 + C_2C_5C_LL_5L_LR_2R_5R_Ls^4 + C_2C_5L_5L_LR_2R_5g_ms^4 + 2C_2C_5L_5L_LR_2s^4 + C_2C_5L_5L_LR_2s^4 + C_2$

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

 $H(s) = \frac{1}{C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5L_Rs^5 + 4C_2C_5$

10.359 INVALID-ORDER-359 $Z(s) = \left(\infty, R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

$$H(s) = \frac{C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1}{C_2C_LL_2R_5g_ms^3 + C_2C_LL_2s^3 + C_2C_LR_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + C_LR_5g_ms + C_Ls + 2g_m}$$

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

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

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

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

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

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2 C_L L_2 L_2 g_m s^4 + C_2 C_L L_2 S^3 + 4C_2 C_L L_2 s^3 + 4C_2 C_L L_2 s^3 + 2C_2 L_2 g_m s^2 + 4C_2 s + 2C_L L_2 g_m s^2 + C_L R_5 g_m s + C_L s + 2g_m r^2 + 2C_L R_5 g_m s^2 +$$

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

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

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

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

10.366 INVALID-ORDER-366 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

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

 $H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{C_2 C_L L_2 L_L R_5 g_m s^4 + 2 C_2 C_L L_2 L_L R_5 g_m s^4 + C_2 C_L L_L R_5 s^3 + 4 C_2 C_L L_L R_5 s^3 + 4 C_2 L_L R_5 g_m s^2 + 2 C_2 L_2 R_1 g_m s^2 + C_2 L_2 R_5 g_m s^2 + 2 C_2$

10.368 INVALID-ORDER-368 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

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

10.370 INVALID-ORDER-370 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \frac{1}{C_{5s}}, \frac{1}{C_{Ls}}\right)$

 $H(s) = \frac{-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m}{s\left(C_2C_5C_LL_2s^3 + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + C_2C_LL_2g_ms^2 + C_2C_Ls + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$

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

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

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

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

10.373 INVALID-ORDER-373 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$

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

10.374 INVALID-ORDER-374 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

$$H(s) = \frac{L_L s \left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{C_2 C_5 C_L L_2 L_L s^5 + 2 C_2 C_5 L_2 L_L g_m s^4 + C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_L s^3 + C_2 C_L L_L L_L g_m s^4 + C_2 C_L L_L s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 C_L L_L s^3 + 2 C_5 L_L g_m s^2 + C_5 s + C_L L_L g_m s^2 + g_m s^2 + C_5 c_L L_L s^3 + C_5$$

10.375 INVALID-ORDER-375 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.376 INVALID-ORDER-376 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

$$H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{C_2 C_5 C_L L_2 L_L R_L s^5 + 2 C_2 C_5 L_2 L_L R_L g_m s^4 + C_2 C_5 L_2 L_L s^3 + 4 C_2 C_5 L_L R_L s^3 + C_2 L_L L_L R_L s^3 + C_2 L_L L_L R_L s^3 + C_2 L_L R_L g_m s^2 + C_2 L_L$$

10.377 INVALID-ORDER-377 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

$$H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{2 C_2 C_5 C_L L_L L_L R_L g_m s^5 + C_2 C_5 L_L L_L R_L s^4 + 2 C_2 C_5 L_2 L_L g_m s^4 + 2 C_2 C_5 L_2 R_L g_m s^3 + C_2 C_5 L_2 R_L g_m s^3 + C_2 C_5 L_2 R_L g_m s^3 + C_2 C_5 L_2 R_L g_m s^4 + C_2 C_L L_L L_L R_L g_m s^4 + C_2 C_L L_L R_L g_m s^3 + C_5 C_L R_L g_m s^3 + C$$

10.378 INVALID-ORDER-378 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(C_L L_L s^2 + 1 \right) \left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m \right)}{2 C_2 C_5 C_L L_2 L_L R_L g_m s^5 + C_2 C_5 C_L L_2 L_L s^5 + C_2 C_5 C_L L_2 R_L s^4 + 4 C_2 C_5 L_L R_L g_m s^3 + C_2 C_5 L_2 R_L g_m s^3 + C_2 C_L L_2 L_L g_m s^4 + C_2 C_L L_2 R_L g_m s^3 + C_2 C_L L_L R_L g_m s^3 + C_2 C_L R_L$$

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

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1 \right)}{2 C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_5 s^3 + 4 C_2 C_5 R_5 R_L s^2 + C_2 L_2 R_5 g_m s^2 + 2 C_2 L_2 R_L g_m s^2 + C_2 L_2 s^2 + C_2 R_5 s + 4 C_2 R_L s + 2 C_5 R_5 R_L g_m s + C_5 R_5 s + R_5 g_m + 2 R_L g_m + 1}$$

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

$$H(s) = \frac{-C_2C_5L_2R_5s^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_2R_5s^4 + 2C_2C_5L_2R_5g_ms^3 + 4C_2C_5R_5s^2 + C_2C_LL_2R_5g_ms^3 + C_2C_LL_2s^3 + C_2C_LR_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + C_5C_LR_5s^2 + 2C_5R_5g_ms + C_LR_5g_ms + C_LR_5g_ms$$

10.381 INVALID-ORDER-381 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1 \right)}{C_2 C_5 C_L L_2 R_5 R_L s^4 + 2 C_2 C_5 L_2 R_5 R_L g_m s^3 + C_2 C_5 L_2 R_5 R_L s^2 + C_2 C_L L_2 R_5 R_L g_m s^3 + C_2 C_L L_2 R_5 R_L g_m s^3 + C_2 C_L L_2 R_5 R_L s^3 + C_2 C_L L_2 R$$

10.382 INVALID-ORDER-382 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$

$$H(s) = -\frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 R_5 s^3 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2 C_2 C_5 C_L L_2 R_5 R_L g_m s^4 + C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_L R_5 g_m s^3 + 2 C_2 C$$

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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 s^3 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2 C_2 C_5 C_L L_2 L_L R_5 g_m s^5 + C_2 C_5 C_L L_2 R_5 s^4 + 4 C_2 C_5 L_L R_5 s^4 + 2 C_2 C_5 L_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 g_m s^4 + C_2 C_L L_2 R_5 g_m s^3 + C_2 C_L L_2 R_5 s^2 + 2 C_2 L_2 L_2 g_m s^3 + C_2 C_L L_2 R_5 g_m s^3 + C_2 C_L L_2
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 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_5 C_L L_2 L_L R_5 s^5 + 2 C_2 C_5 L_2 L_L R_5 g_m s^4 + C_2 C_5 L_L R_5 s^3 + 2 C_2 L_2 L_L R_5 g_m s^4 + C_2 C_L L_L L_R s^4 + C_2 C_L L_L L_R s^3 + 2 C_2 L_2 L_L g_m s^3 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 + 4 C_2 L_L s^2 + C_2 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 C_L L_L R_5 g_m s^2 + C_5 R_5 s + C_5 R_5 s
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (C_LL_Ls^2 + C_LR_Ls + 1)(C_2C_5L_2R_5s^3 - C_2L_2R_5g_ms^2 + C_2L_2s^2 - C_2R_5s + C_5R_5s - R_5g_m + 1)
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 s^3 - C_2 L_2 R_5 g_m s^3 + C_2 L_2 s^2 - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2C_2 C_5 C_L L_2 L_L R_5 g_m s^5 + 2C_2 C_5 L_L R_5 g_m s^4 + C_2 C_5 C_L L_2 R_5 g_m s^3 + 2C_2 C_L L_2 R_5 g_m s^3 + 2C_
10.386 INVALID-ORDER-386 Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m r^2 - C_2 L_2 r^2 + C_2 R_5 
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)
                                                         \frac{(C_L L_L L_L S_1 + L_L S_2 + L_L S_3 + L_L S_4 + L_L
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 C_5 L_2 R_5 s^3 \right)
                                                          -\frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}g_{m}s^{5}+C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}s^{5}+C_{2}C_{5}C_{L}L_{2}R_{5}R_{L}s^{4}+4C_{2}C_{5}L_{L}R_{5}R_{L}s^{4}+2C_{2}C_{5}L_{2}R_{5}R_{L}g_{m}s^{3}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+2C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{L}R_{5}g_{m}s^{4}+C_{2}C_{L}L_{
10.389 INVALID-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)
                                                                                                                                                                                                                                                                                                                                                       H(s) = \frac{R_L \left( C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_2 C_5 L_2 R_5 g_m s^3 + 2 C_2 C_5 L_2 R_L g_m s^3 + C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + 4 C_2 C_5 R_L s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s + 2 C_5 R_L g_m s + C_5 s + g_m g_m s^2 + C_5 R_5 g_m s^2 + C_5 R_
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$$\textbf{10.390} \quad \textbf{INVALID-ORDER-390} \ Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5 s}, \ \frac{1}{C_L s} \right)$$

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

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

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

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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 s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_5 C_L L_2 g_m s^3 + C_2 C_5 C_L L_2 s^3 + C_2 C_5 C_L R_5 s^2 + 4 C_2 C_5 C_L R_2 s^2 + 2 C_2 C_5 L_2 g_m s^2 + 4 C_2 C_5 s + C_2 C_L L_2 g_m s^2 + C_2 C_L L_2 g_m s^2 + C_2 C_L R_5 g_m s + 2 C_5 C_L R_5 g_m s + 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 s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(2C_2 C_5 C_L L_2 L_2 g_m s^4 + C_2 C_5 C_L L_2 S^3 + C_2 C_5 C_L L_2 s^3 + 4C_2 C_5 C_L L_2 s^3 + C_2 C_5 C_L L_2 s^3 + C_2 C_5 C_L L_2 g_m s^2 + 4C_2 C_5 s + C_2 C_L L_2 g_m s^2 + C_2 C_L L_2 g_m s^2 + C_5 C_L L_2 g_m
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 s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_2 L_L R_5 g_m s^5 + C_2 C_5 C_L L_L R_5 s^4 + 2 C_2 C_5 L_2 L_2 g_m s^4 + C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_2 s^3 + C_2 C_5 L_2 L_2 g_m s^4 + C_2 C_4 L_2 L_4 g_m s^4 + C_2 C_4 L_4 L_4 g_m s^4 + C_4 C_4 L_4 L_4 g_m s^4 + C_4 C_5 L_4 L_4 g_m s^4 + C_5 C_5 L_5 g_m s^4 + C_
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 s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(2 C_2 C_5 C_L L_2 L_2 g_m s^4 + C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_5 C_L L_2 s^3 + 4 C_2 C_5 C_L L_2 s^3 + 4 C_2 C_5 C_L R_5 s^2 + 4 C_2 C_5 C_L L_2 g_m s^2 + C_2 C_L L_2 
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L_L R_L s \left( C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s^2 \right)
H(s) = \frac{L_L R_L s \left( \bigcirc_2 \bigcirc_5 L_2 R_5 g_m s - \bigcirc_2 \bigcirc_5 L_2 s + \bigcirc_2 C_5 R_5 s + \bigcirc_2 L_2 g_m s + \bigcirc_2 s + \bigcirc_5 R_5 g_m s + \bigcirc_2 s 
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{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 C_L L_2 L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L L_L R_5 g_m s^5 + 2 C_2 C_5 L_L R_5 g_m 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}C_{5}L_{2}R_{5}g_{m}s^{3}-C_{2}C_{5}L_{2}s^{3}+C_{2}C_{5}R_{5}s^{2}+C_{2}L_{2}g_{m}s^{2}+C_{2}s+C_{5}R_{5}g_{m}s-C_{5}s+g_{m}\right)
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R_L (C_L L_L s^2 + 1) (C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2
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)
                                                                                                                                                                                                                                                                                        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)
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 $H(s) = \frac{C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_5s + g_m}{s\left(C_2C_5C_LL_2S_ms^4 + C_2C_5C_LL_2s^3 + C_2C_5C_LL_5s^3 + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + C_2C_LL_2g_ms^2 + C_2C_Ls + C_5C_LL_5g_ms^2 + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}$

```
10.401 INVALID-ORDER-401 Z(s) = \left( \infty, \ L_2s + \frac{1}{C_2s}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L}{C_1R_Ls+1} \right)
R_L \left( C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_6s + g_m \right)
R_L \left( C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_6s + g_m \right)
R_L \left( C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_5s + g_m \right)
R_L \left( C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2s^3 + C_2C_5L_2g_ms^3 + C_2C_5L_2g_ms^3 + C_2C_5L_2g_ms^3 + C_2C_5L_5g_ms^3 + C_2C_5L_2g_ms^3 + C_2C_5L_2g_ms^
```

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

$$H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_5 C_L L_2 L_L g_m s^6 + C_2 C_5 L_L L_L s^5 + C_2 C_5 L_L L_5 g_m s^4 + 2 C_2 C_5 L_2 L_1 g_m s^4 + C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_2 s^3 + 4 C_2 C_5 L_2 s^3 + C_2 C_4 L_2 L_4 g_m s^4 + C_5 C_4 L_5 L_4 g_m s^4 + C_5 C_4 L_4 L_5 s^3 + C_5 L_5 g_m s^2 + C_5 L_5 g_m$$

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

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

10.406 INVALID-ORDER-406 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

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

$$H(s) = \frac{\left(C_{L}L_{L}R_{L}s^{2} + L_{L}s + R_{L}\right)\left(C_{2}C_{5}L_{2}L_{5}g_{m}s^{4} - C_{2}C_{5}L_{2}s^{3} + C_{2}L_{5}g_{m}s^{2} + C_{5}s + C_{5}L_{5}g_{m}s^{2} - C_{5}s + g_{m}\right)}{C_{2}C_{5}C_{L}L_{2}L_{5}L_{2}g_{m}s^{6} + 2C_{2}C_{5}L_{L}L_{L}R_{L}g_{m}s^{5} + C_{2}C_{5}L_{L}L_{L}S^{5} + 4C_{2}C_{5}L_{L}L_{L}S^{5} + 4C_{2}C_{5}L_{L}L_{L}S^{5} + 4C_{2}C_{5}L_{L}L_{L}S^{5} + 4C_{2}C_{5}L_{L}L_{L}S^{5} + C_{2}C_{5}L_{L}L_{L}S^{5} + C_{2}C_{5}L_{$$

10.408 INVALID-ORDER-408 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

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

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

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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_5s^4 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1}{C_2C_5C_LL_2L_5s^5 + 2C_2C_5L_2L_5g_ms^4 + 4C_2C_5L_5s^3 + C_2C_LL_2s^3 + C_2C_LL_2s^3 + 2C_2L_2g_ms^2 + 4C_2s + C_5C_LL_5s^3 + 2C_5L_5g_ms^2 + C_LL_5g_ms^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 s^4 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 s^2 + L_5 g_m s - 1 \right)}{C_2 C_5 C_L L_2 L_5 R_L s^5 + 2 C_2 C_5 L_2 L_5 R_L s^4 + C_2 C_5 L_2 L_5 R_L s^3 + C_2 C_L L_2 R_L g_m s^4 + C_2 C_L L_2 R_L g_m s^4 + C_2 C_L L_2 R_L g_m s^4 + C_2 C_L L_2 R_L g_m s^3 + C_2 L_2 L_5 g_m s^3 + 2 C_2 L_2 R_L g_m s^2 + C_2 L_2 s^2 + C_2 L_5 s^2 + 4 C_2 R_L s + C_5 C_L L_5 R_L g_m s^2 + C_5 L_5
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)
                                                       \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}L_{5}s^{4}-C_{2}L_{2}L_{5}g_{m}s^{3}+C_{2}L_{2}s^{2}-C_{2}L_{5}s^{2}+C_{5}L_{5}s^{2}-L_{5}g_{m}s+1\right)}{2C_{2}C_{5}C_{L}L_{2}L_{5}g_{m}s^{5}+C_{2}C_{5}L_{L}L_{5}S^{5}+4C_{2}C_{5}L_{L}L_{5}S^{3}+2C_{2}L_{2}L_{5}g_{m}s^{4}+4C_{2}C_{5}L_{5}S^{3}+C_{2}C_{L}L_{2}L_{5}g_{m}s^{3}+C_{2}C_{L}L_{2}S^{3}+4C_{2}C_{L}L_{2}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}+4C_{2}C_{L}L_{5}S^{3}
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 s^4 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 s^2 + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2 C_2 C_5 C_L L_2 L_5 g_m s^6 + C_2 C_5 C_L L_2 L_5 g_m s^4 + 4 C_2 C_5 L_2 L_5 g_m s^4 + 2 C_2 C_L L_2 L_2 g_m s^4 + 2 C_2 L_2 L_2 g_m s^4 + C_2 C_L L_2 s^3 + 2 C_2 L_2 L_2 g_m s^2 + 4 C_2 s + 2 C_5 C_L L_5 L_2 g_m s^4 + C_5 C_L L_5 g_m s^2 + C_5 L_5 g
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 s^4 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 s^2 + L_5 g_m s - 1\right)}{C_2 C_5 C_L L_2 L_5 L_L s^6 + 2 C_2 C_5 L_2 L_5 L_L g_m s^5 + C_2 C_5 L_2 L_5 L_L s^4 + C_2 C_L L_2 L_5 L_L s^4 + C_2 C_L L_2 L_5 L_L s^4 + C_2 L_2 L_5 L_L s^4 + C_2 L_2 L_5 g_m s^3 + 2 C_2 L_2 L_L g_m s^3 + C_2 L_2 s^2 + C_2 L_5 s^2 + 4 C_2 L_L s^4 + 2 C_5 L_5 L_L s^4 + 2 C_5 L_5 L_L g_m s^3 + C_5 L_5 s^2 + 4 C_5 L_5 L_L g_m s^3 + C_5 L_5 L_L g_m s^3 + C_5 L_5 s^2 + C_5 L_5 L_L g_m s^3 + C_5 L_L g_m s^3 +
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}L_{5}s^{4}-C_{2}L_{2}L_{5}g_{m}s^{3}+C_{2}L_{2}s^{2}-C_{2}L_{5}s^{2}+C_{5}L_{5}s^{2}-L_{5}g_{m}s+1\right)
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$$H(s) = -\frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 s^4 - C_2 L_2 s^2 - C_2 L_5 s^2 + C_5 L_5 s^2 - L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 s^2 - L_5 g_m s^4 + 2C_2 C_5 L_4 L_5 g_m s^4 + 2C_2 C_4 L_2 L_5 g_m s^4 + 2C_2 C_4 L_5 g_m s^4 + 2$$

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

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

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

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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 s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m \right)}{C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 + 2 C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + 4 C_2 C_5 R_L s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s + 2 C_5 R_5 g_m s + C_5 R_5 g_m s 
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_ms^4 + C_2C_5L_2g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_5C_LL_2L_5g_ms^4 + C_2C_5C_LL_2s^3 + C_2C_5C_LL_5s^3 + C_2C_5C_LL_5s^3 + C_2C_5C_LL_2s^3 + C_2C_5C_
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R_L \left( C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m s^2 + C_5 R_5 g_m s^2 +
H(s) = \frac{R_L \left( C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 S^3 + C_2 C_5 L_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 + 2 C_2 C_5 L_2 R_5 g_m s^3 + 2 C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_5 
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_4 s}\right)
H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_2 L_5 g_m s^4 + C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_5 C_L L_2 s^3 + C_2 C_5 
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)
                                                     \frac{\left(C_{L}L_{L}s^{2}+1\right)\left(C_{2}C_{5}L_{2}L_{5}g_{m}s^{4}+C_{2}C_{5}L_{2}R_{5}g_{m}s^{3}-C_{2}C_{5}L_{2}s^{3}+C_{2}C_{5}L_{2}s^{3}+C_{2}C_{5}L_{5}s^{3}+C_{2}C_{5}L_{5}s^{3}+C_{2}C_{5}L_{5}s^{3}+C_{2}C_{5}L_{5}g_{m}s^{2}+C_{5}L_{5}g_{m}s^{2}+C_{5}R_{5}g_{m}s-C_{5}s+g_{m}\right)}{s\left(C_{2}C_{5}C_{L}L_{2}L_{5}g_{m}s^{4}+2C_{2}C_{5}C_{L}L_{2}R_{5}g_{m}s^{3}+C_{2}C_{5}C_{L}L_{2}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+4C_{2}C_{5}C_{L}L_{5}s^{3}+4C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2}C_{5}C_{L}L_{5}s^{3}+C_{2
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)
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 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 s^3 + C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_5 s + C_5 L_5 g_m s^2 + C_5 s + C_5 L_5 g_m s^2 + C_5 s^3 + C_5 S_5 g_m s^2 + C_5 S_5 g_m s^2 + C_5 S_5 g_m s^2 + C_5 S_5 g_m s^3 + C_5 S_5 g_m s$

10.425 INVALID-ORDER-425
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_T s}\right)$$

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

10.426 INVALID-ORDER-426
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$$

10.427 INVALID-ORDER-427
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = \frac{\left(C_L L_L R_L s^2 + L_L s + R_L\right) \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 L_2 L_2 L_2 R_5 g_m s^4 + C_2 C_5 L_2 L_2 L_2 R_5 g_m s^4 + C_2 C_5 L_2 L_2 L_2 R_5 g_m s^4 + C_2 C_5 L_2 L_2 L_2 R_5 g_m s^4 + C_2 C_5 L_2 L_2 L_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^4 + C$$

10.428 INVALID-ORDER-428 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

10.429 INVALID-ORDER-429 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_{2s}}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 R_5 s^2 + C_2 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5 \right)}{2 C_2 C_5 L_2 L_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^3 + 2 C_2 L_2 R_5 R_L g_m s^2 + C_2 L_2 R_5 R_L g_m s^2 + C_2 L_5 R_5 g_m s - L_5 R_5 R_L g_m s^2 + C_5 L_5 R_5 R_L g_m s^2 + C$

10.430 INVALID-ORDER-430 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_4 s}\right)$

 $H(s) = \frac{-C_2C_5L_2L_5R_5s^4 + C_2L_2L_5R_5g_ms^3 - C_2L_2L_5s^3 - C_2L_2L_5s^3 - C_2L_2R_5s^2 + L_5R_5g_ms - L_5s - R_5}{C_2C_5L_2L_5R_5s^5 + 2C_2C_5L_2L_5R_5g_ms^4 + 4C_2C_5L_5R_5g_ms^4 + C_2C_LL_2R_5s^3 + C_2C_LL_2R_5s^3 + 2C_2L_2L_5g_ms^3 + 2C_2L_2R_5g_ms^2 + 4C_2L_5s^2 + 4C_2R_5s + C_5C_LL_5R_5s^3 + 2C_5L_5R_5g_ms^2 + C_LL_5R_5g_ms^2 + C_LL_5R_5$

10.431 INVALID-ORDER-431 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$

10.432 INVALID-ORDER-432 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)$

 $(C_L R_L s + 1) (C_2 C_5 L_2 L_5 R_5 s^4 - C_2 L_2 L_5 R_5 g_m s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_5 s^2 - C_2 L_5 R_5 s^2)$ $\frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_5 s^4 - C_2 L_2 L_5 R_5 g_m s^6 + C_2 L_2 L_5 s^6 + C_2 L_2 L_5 s^5 - C_2 L_5 R_5 s^2 - C_2 L_5 R_5 s^4 - C_2 L_2 L_5 R_5 g_m s^6 + C_$

10.433 INVALID-ORDER-433 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)$

 $(C_LL_Ls^2+1)(C_2C_5L_2L_5R_5s^4-C_2L_2L_5R_5g_ms^3+C_2L_2L_5s^3+C_2L_2R_5s^2-C_2L_5R_5s^2)$ $\frac{(C_L L_L s + 1)(C_2 C_5 L_2 L_5 R_5 s - C_2 L_2 L_5 R_5 s - C_$

10.434 INVALID-ORDER-434 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

 $L_L s \left(-C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 L_5 s^3 - C_2 L_2 R_5 s^2 + C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + R_5 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 + C_5$ $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 L_5 s^3 - C_2 L_2 R_5 s^4 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 L_5 R_5 g_m s^3 + C_2 L_2 R_5 g_m s^3 + C_2 R_5 g_m s^$

10.435 INVALID-ORDER-435 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)$

 $-\frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{5}g_{m}s^{6}+2C_{2}C_{5}C_{L}L_{2}L_{5}R_{5}R_{L}g_{m}s^{5}+C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{5}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{5}+4C_{2}C_{5}L_{L}L_{5}R_{5}s^{5}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{5}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{L}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L_{5}R_{5}s^{6}+4C_{2}C_{5}L_{5}L$

10.436 INVALID-ORDER-436 $Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + 2C_2C_5L_2L_5L_LR_5R_Lg_ms^5 + C_2C_5L_2L_5L_LR_5s^4 + 4C_2C_5L_5L_LR_5R_Ls^4 + 4C_2C_5L_5L_LR_5R_Lg_ms^5 + C_2C_LL_2L_5L_LR_5R_Ls^4 + C_2C_LL_2L_5L_Rs^4 + C_2C_LL_2L_5L$

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10.437 INVALID-ORDER-437 Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)
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10.438 INVALID-ORDER-438
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_5R_5R_Ls^5 + 4C_2C_5L_LL_5R_5R_Ls^5 + 2C_2C_5L_2L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5L_5R_5R_Lg_ms^4 + C_2C_5L_2L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5L_5R_5R_Lg_ms^4 + C_2C_5L_5R_5R_Lg_ms^4 + C_2C_5R_Lg_ms^4 +$

10.439 INVALID-ORDER-439
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 s^2 + C_2 L_5 s^2 + C_2 L_5 s^2 + L_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1 \right)}{C_2 C_5 L_2 L_5 R_5 g_m s^4 + 2 C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + 4 C_2 C_5 L_5 R_5 s^3 + C_2 L_2 R_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 + 2 C_2 L_2 R_5 g_m s^2 + C_2 L_5 s^2 + C_2 R_5 s + 4 C_2 R_5 g_m s^2 + 2 C_5 L_5 R_5 g_m s^2 +$

10.440 INVALID-ORDER-440
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_2E_5s^3 + C_2L_2E_5g_ms^3 + C_2L_2E_5g_ms^3 + C_2L_2E_5g_ms^3 + C_2L_2E_5g_ms^2 - C_5L_5s^2 + L_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_2C_5C_LL_2E_5S_ms^5 + C_2C_5L_2E_5S_ms^4 + 4C_2C_5L_5S_ms^4 + 4C_2C_5L_5S_ms^4 + C_2C_LL_2E_5g_ms^4 + C_2C_LL_2E_5g_ms^4$

10.441 INVALID-ORDER-441
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 L_5 g_m s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 R_5 g_m s^2 - C_2 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_5 g_m s^4 + C_2 C_5 L_5 R_5 g_m s^4 + C_$

10.442 INVALID-ORDER-442
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^3 + C_5 L_5 R_5 g_m s^4 + C_5 C_5 L_5 R_5 g_m s^4 +$

10.443 INVALID-ORDER-443
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 R_5 g_m s^2 + C_5 R_5 g_m s^3 + C_5 R_5 g_m s$

10.444 INVALID-ORDER-444
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 R_5 g_m s^2 - C_2 R_5 g_m s^4 + C_2 C_5 L_4 L_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 L_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 L_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 L_5 L_4 R_5 g_m s^4 + C_2 C_4 L_4 L_5 L_4 R_5 g_m s^4 + C_4 C_5 L_5 L_4 R_5 g_m s^4 + C_4 C_5 L_5 L_5 R_5 g_m s^4 + C_5 L$

10.445 INVALID-ORDER-445
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_4 L_5 R_5 g_m s^4 + C_2 C_5 L_4 L_5 R_5 g_m s^5 + C_4 C_5 L_5 L_5 R_5 g_m s^5 + C_5 C_5 L$

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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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
```

10.447 INVALID-ORDER-447
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 2C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_RR_5s^5 + 4C_2C_5C_LL_5L_RR_5s^5$

10.448 INVALID-ORDER-448
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5R_Ls^6 + C_2C_5C_LL_5L_LR_5s^6 + C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_5R_5s^5 + 4C_2C_5C_LL_5L_5C_5C_LL_5L_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_LL_5C_5C_$

10.449 INVALID-ORDER-449
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ R_L\right)$$

10.450 INVALID-ORDER-450
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 - C_2C_5L_2R_5s^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_2L_5R_5g_ms^5 + C_2C_5L_LL_5S^4 + C_2C_5L_LL_5S^4 + C_2C_5L_LL_5S^4 + C_2C_5L_LL_5S^4 + C_2C_5L_LL_5S^4 + C_2C_5L_LL_5S^3 + C_2C_LL_2S^3 + C_2C_LL_$

10.451 INVALID-ORDER-451
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L}{C_L R_L s + 1}\right)$$

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

10.452 INVALID-ORDER-452
$$Z(s) = \left(\infty, L_2 s + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 L_5 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^4 + C_2 C_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 R_5 g_m s^5 + C_2 C_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 R_5 g_m s^4 + C_2 C_5 L_4 R_5 g_m s^5 + C_2 C_5 L_5 R_5 g_m s^5 + C_2 C_5 L_4 R_5 g_m s^5 + C$

10.453 INVALID-ORDER-453
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_5 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 R_5 g_m s^4 - C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^5 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^5 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^5 + C_2 C_5 L_4 L_5 R_5 g_m s^5 + C_4 L_5 R_5 g_m s^5$

10.454 INVALID-ORDER-454
$$Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^5 + C_2 C_5 L_2 L_5 R_5 s^5 + C_2 C_5 L_5 L_5 R_5 s^5 + C_2 C_5$

10.455 INVALID-ORDER-455 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

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

10.456 INVALID-ORDER-456 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_LR_5R_Ls^5 + C_2C_5L_2L_5L_Rs^6 + C_2C_5L_2L_5L$

10.457 INVALID-ORDER-457 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LS^6 + 2C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_5s^5 + 4C_2C_5C_LL_5L_LR_5s^5 + 4C_2C_5C_LL_5L_5C_LR_5s^5 + 4C_2C_5C_LL_5L_5C_LR_5s^5 + 4C_2C_5C_LL_5C_LR_5s^5 + 4C_2C_5C_LL_5C_LR_5s^5 + 4C_2C_5C_L$

10.458 INVALID-ORDER-458 $Z(s) = \left(\infty, \ L_2 s + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$

10.459 INVALID-ORDER-459 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{1}{C_L s}\right)$

$$H(s) = \frac{C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1}{C_2C_LL_2R_5g_ms^3 + C_2C_LL_2s^3 + C_2C_LR_2s + C_2C_LR_2s^2 + C_2C_LR_2s^2 + C_2C_LR_2s^2 + 2C_2L_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + C_LR_5g_ms + C_Ls + 2g_ms^2 + 2C_2R_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + C_LR_5g_ms + C_Ls + 2g_ms^2 + 2C_2R_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + C_LR_5g_ms + C_Ls + 2g_ms^2 + 2C_2R_2g_ms + 2C_2R_2$$

10.460 INVALID-ORDER-460 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{R_L}{C_L R_L s + 1}\right)$

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

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

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

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

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

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

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

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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}s^{2} - C_{2}L_{2}s^{2} + C_{2}R_{2}g_{m}s - C_{2}R_{2}s + R_{5}g_{m} - 1\right)}{2C_{2}C_{L}L_{2}L_{2}g_{m}s^{3} + 2C_{2}C_{L}L_{2}R_{3}s + C_{2}C_{L}L_{2}s^{3} + 2C_{2}C_{L}L_{2}R_{3}s + C_{2}C_{L}L_{2}s^{3} + 2C_{2}C_{L}L_{2}S^{3} + 2C_{2}C_{L}L_{2}S
10.465 INVALID-ORDER-465 Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L_L R_L s \left( C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1 \right)
H(s) = \frac{L_L L_L S \left( C_2 L_2 L_1 S g_m s^3 - C_2 L_2 S + C_2 L_1 S g_m s^3 - C_2 L_2 S + C_2 L_1 S g_m s^4 - C_2 L_2 S + C_2 L_1 S g_m s^4 - C_2 L_2 S + C_2 L_2 S g_m s^4 - C_2 L_2 S g_m s^4 + C_2 L_2 L_2 S g_m s^4 + C_2 L_2 L_2 L_2 S g_m 
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    \left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(C_{2}L_{2}R_{5}g_{m}s^{2}-C_{2}L_{2}s^{2}+C_{2}R_{2}R_{5}g_{m}s-C_{2}R_{2}s+C_{2}R_{5}s+R_{5}g_{m}-1\right)
H(s) = \frac{(C_L L_L R_L s + L_L s + R_L)(C_2 L_2 R_5 g_m s - C_2 L_2 s + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_2 R_5 g_m s - C_2 R
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m s^2 \right)
H(s) = \frac{1}{C_2C_LL_2L_LR_5g_ms^4 + 2C_2C_LL_2L_LR_5g_ms^4 + 2C_2C_LL_2L_LR_5g_ms^4 + 2C_2C_LL_2R_5g_ms^3 + 2C_2C_LR_2R_5g_ms^3 + 
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 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m \right)}{2C_2 C_5 L_2 R_4 g_m s^3 + C_2 C_5 L_2 s^3 + 2C_2 C_5 R_2 R_4 g_m s^2 + C_2 C_5 R_2 s^2 + 4C_2 C_5 R_4 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + 2C_5 R_4 g_m s + C_5 s + g_m \right)}
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_5} s}\right)
                                                                                                                                                                                                                                    H(s) = \frac{-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m}{s\left(C_2C_5C_LL_2s^3 + C_2C_5C_LR_2s^2 + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_2C_LL_2g_ms^2 + C_2C_LR_2g_ms + C_2C_Ls + C_5C_Ls + 2C_5g_m + C_Lg_m\right)}
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)
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 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{s \left(2C_2 C_5 C_L L_2 R_L g_m s^3 + C_2 C_5 C_L L_2 s^3 + 2C_2 C_5 C_L R_2 R_L g_m s^2 + C_2 C_5 C_L R_2 s^2 + 4C_2 C_5 C_L R_L s^2 + 2C_2 C_5 L_2 g_m s^2 + 2C_2 C_5 R_2 g_m s + 4C_2 C_5 s + C_2 C_L L_2 g_m s^2 + C_2 C_L R_2 g_m s + C_2 C_L R
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}s^{3}-C_{2}C_{5}R_{2}s^{2}+C_{2}L_{2}g_{m}s^{2}+C_{2}S_{2}g_{m}s+C_{2}s-C_{5}s+g_{m}\right)}{s\left(2C_{2}C_{5}C_{L}L_{2}g_{m}s^{4}+C_{2}C_{5}C_{L}L_{2}s^{3}+2C_{2}C_{5}C_{L}L_{2}s^{3}+4C_{2}C_{5}C_{L}L_{2}s^{3}+4C_{2}C_{5}C_{L}L_{2}s^{3}+2C_{2}C_{5}L_{2}g_{m}s^{2}+2C_{2}C_{5}R_{2}g_{m}s+4C_{2}C_{5}s+C_{2}C_{L}R_{2}g_{m}s+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_{m}s^{2}+C_{2}C_{L}L_{2}g_
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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 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L L_S^5 + C_2 C_5 L_L L_R g_m s^4 + C_2 C_5 L_L g_m s^4 + C_2 C_5 L_L g_m s^3 + 4 C_2 C_5 L_L g_m s^3 + 4 C_2 C_5 L_L g_m s^3 + C_2 C_L L_L L_R g_m s^3
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 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{s \left(2C_2 C_5 C_L L_2 L_L g_m s^4 + 2C_2 C_5 C_L L_2 R_L g_m s^3 + C_2 C_5 C_L L_2 R_2 g_m s^3 + 4C_2 C_5 C_L L_2 R_2 g_m s^3 + 4C_2 C_5 C_L L_2 R_2 g_m s^2 + C_2 C_5 C_L R_2 R_2 g_m s^2 + 2C_2 C_5 L_2 g_m s^2 + 2C_2 C_5 R_2 g_m s + 4C_2 C_5 C_L L_2 g_m s^2 + C_2 C_L L_2 g_m s^2 
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{C_2 C_5 C_L L_L L_L R_L s^5 + C_2 C_5 L_L L_L R_L s^4 + C_2 C_5 L_L L_L R_L g_m s^4 + C_2 C_5 L_L R_L g_m s^3 + C_2 L_L L_L R_L g_m s^4 + C_2 C_5 L_L R_L g_m s^3 + C_2 L_L R_L g_m s^4 + C_2 C_5 L_L R_L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L_L R_L s \left(-C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \left(C_{L}L_{L}R_{L}s^{2}+L_{L}s+R_{L}\right)\left(-C_{2}C_{5}L_{2}s^{3}-C_{2}C_{5}R_{2}s^{2}+C_{2}L_{2}g_{m}s^{2}+C_{2}R_{2}g_{m}s+C_{2}s-C_{5}s+g_{m}\right)
H(s) = \frac{(C_L L_L L_S + L_L S + L_L) \left(-C_2 C_5 L_2 S - C_2 C_5 L_2 S + C_2 L_2 g_m s + C_2 S - C_5 S + g_m\right)}{2C_2 C_5 C_L L_2 L_L R_2 g_m s^5 + C_2 C_5 C_L L_L R_2 R_2 g_m s^4 + C_2 C_5 C_L L_L R_2 S^4 + 4 C_2 C_5 L_L R_2 S^4 + 4 C_2 C_5 L_L R_2 S^4 + 2 C_2 C_5 L_L R_2 G_m s^3 + C_2 C_5 L_L R_2 G_m 
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( C_L L_L s^2 + 1 \right)}{C_L L_L s^2 + C_L R_L s + 1} \right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R_L \left( C_L L_L s^2 + 1 \right) \left( -C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 R_2 g_m s^2 \right)
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 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1 \right)}{2 C_2 C_5 L_2 R_5 R_L g_m s^3 + C_2 C_5 L_2 R_5 g_m s^2 + C_2 C_5 R_2 R_5 R_L g_m s^2 + C_2 L_2 R_5 g_m s^2 + 2 C_2 L_2 R_L g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_5 g_m s + 2 C_2 R_2 R_L g_m s + C_2 R_2 s + C_2 R_2 s + C_2 R_2 R_5 g_m s + C
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_5s^3 - C_2C_5R_2R_5s^2 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_2R_5s^4 + C_2C_5C_LR_2R_5s^3 + 2C_2C_5L_2R_5g_ms^3 + 2C_2C_5R_2R_5g_ms^2 + 4C_2C_5R_5s^2 + C_2C_LL_2R_5g_ms^3 + C_2C_LR_2s^3 + C_2C_LR_2s^3 + C_2C_LR_2s^2 + C_
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$$H(s) = \frac{-C_2C_5L_2R_5s^3 - C_2C_5R_2R_5s^2 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_5C_LL_2R_5s^4 + C_2C_5C_LR_2s^3 + 2C_2C_5L_2R_5g_ms^3 + 2C_2C_5R_2s^2 + C_2C_LL_2s^3 + C_2C_LR_2s^2 + C_2$$

10.480 INVALID-ORDER-480 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{R_L}{C_1 R_1 s + 1}\right)$

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

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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)
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 $H(s) = -\frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_2 R_5 g_m s + C_2 R_2 s - C_2 R_5 s + C_5 R_2 R_5 s^2 + C_2 R_5 g_m s^2 + C_2 R_5 g_m s^2 + C_2 R_5 g_m s^3 + C_2 R_5 g_m s^3$

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

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

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

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

10.485 INVALID-ORDER-485 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

10.486 INVALID-ORDER-486 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5}{C_5 R_5 s + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5L_LL_2L_2R_5s^5 + 2C_2C_5L_LL_Rg_ss^4 + 4C_2C_5L_LL_Rg_ss^4 + 4C_2C_5L_LL_Rg_ss^4 + 2C_2C_5L_2L_Rg_ss^4 + 2C_2C_5L_2R_5s^3 + 2C_2C_5L_2R_5s^3 + 2C_2C_5L_2R_5s^3 + 2C_2C_5L_2R_5s^3 + 2C_2C_5R_2R_5R_Lg_ms^4 + 2C_2C_5L_2R_5s^4 + 4C_2C_5L_LR_5s^4 + 4$

10.487 INVALID-ORDER-487 $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5C_LL_2L_R_5s^5 + C_2C_5C_LL_2R_5R_Ls^4 + 2C_2C_5C_LL_LR_2R_5s^4 + 4C_2C_5C_LL_LR_2R_5s^4 + 4C_2C_5C_LR_2R_5s^4 + 4C_2C_5C_LL_LR_2R_5s^4 + 4C_2C_$

10.488 INVALID-ORDER-488 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, R_L\right)$

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

10.489 INVALID-ORDER-489 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_2g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_5C_LL_2R_5g_ms^3 + C_2C_5C_LL_2s^3 + C_2C_5C_LR_2s^2 + C_2C_5C_LR$

10.490 INVALID-ORDER-490 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{R_L}{C_L R_L s + 1}\right)$

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

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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{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_2 R_5 g_m s^3 + 2 C_2 C_5 C_L L_2 R_5 g_m s^3 + C_2 C_5 C_L R_2 R_5 g_m s^2 + C_2 C_5 C_L R_2 R_2 g_m s^2 + C_2 C_5 C_L R_2 s^2 + C_2 C_5 C_L 
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_{S}^{2}+1\right)\left(C_{2}C_{5}L_{2}R_{5}g_{m}s^{3}-C_{2}C_{5}L_{2}s^{3}+C_{2}C_{5}R_{2}s^{2}+C_{2}C_{5}R_{2}s^{2}+C_{2}C_{5}R_{2}s^{2}+C_{2}C_{5}R_{5}s^{2}+C_{2}L_{2}g_{m}s^{2}+C_{2}S_{2}g_{m}s+C_{2}s+C_{5}S_{2}g_{m}s-C_{5}s+g_{m}\right)}{s\left(2C_{2}C_{5}C_{L}L_{2}L_{2}g_{m}s^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+2C_{2}C_{5}C_{L}L_{2}S^{3}+2C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}L_{2}S^{3}+C_{2}C_{5}C_{L}
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L_L s \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_2 C_5 R_5 s^2 + C_2 R_5 g_m s^2 + 
H(s) = \frac{L_L s \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_2 C_5 L_2 L_2 L_2 R_5 g_m s^3 + C_2 C_5 L_2 L_2 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_5 R_5 R_5 g_m s^3 + C_2 C_5 R
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{\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 s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 s^2 + C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_2 C_5 R_2 R_2 g_m s^2 + C_2 R_2 g_m s^2 + C
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{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_LR_2R_5R_Lg_ms^4 + C_2C_5L_LL_Rs^4 + C_2C
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)
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(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_LR_5g_ms^5 + 2C_2C_5C_LL_2L_LR_2g_ms^5 + C_2C_5C_LL_2L_Ls^5 + C_2C_5C_LL_2R_5R_Lg_ms^4 + C_2C_5C_LL_LR_2g_ms^4 + C_2C_5C_L
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 s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m \right)}{C_2 C_5 L_2 L_5 g_m s^4 + 2 C_2 C_5 L_2 R_2 g_m s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 R_2 R_2 g_m s^2 + C_2 C_5 R_2 R_2 g_m s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 L_5 g_m s^2 + C_2 R_2 g_m s + C_2 
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_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m}{s\left(C_2C_5C_LL_2L_5g_ms^4 + C_2C_5C_LL_2s^3 + C_2C_5C_LL_5s^3 + C_2C_5C_LL_2s^3 + C_2C_5C_
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 10.500 \quad \text{INVALID-ORDER-500} \ Z(s) = \left( \infty, \ 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_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^3 - C_2C_5R_2s^3 + C_2C_5L_2R_2g_ms^3 + C_2C_5R_2g_ms^3 + C_2C_5L_2R_2g_ms^3 + C_2C
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10.502 INVALID-ORDER-502
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s \left(C_2 C_5 C_L L_2 L_5 g_m s^4 + 2 C_2 C_5 C_L L_2 S^3 + C_2 C_5 C_L L_2 S^3 + C_2 C_5 C_L L_2 S^3 + 2 C_$$

10.503 INVALID-ORDER-503
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2 + 1}\right)$$

10.504 INVALID-ORDER-504
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, L_L s + R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 C_2 L_2 L_2 g_m s^4 + 2 C_2 C_5 C_L L_2 L_2 g_m s^4 + 2 C_2 C_5 C_L L_2 R_2 g_m s^3 + C_2 C_5 C_L R_2 R_2 g_m s^3 + C$$

10.505 INVALID-ORDER-505
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2 + L_Ls + R_L}\right)$$

$$H(s) = \frac{L}{C_2C_5C_LL_2L_5L_LR_Lg_ms^6 + C_2C_5C_LL_2L_LR_Ls^5 + C_2C_5C_LL_5L_LR_2g_ms^5 + C_2C_5C_LL_5L_LR_2g_ms^5 + C_2C_5L_2L_5R_Lg_ms^5 + C_2C_5L_2L_LR_Lg_ms^4 + C_2C_5L_2L_Lg_ms^4 + C_2C_5L_2L_Lg$$

10.506 INVALID-ORDER-506
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

10.507 INVALID-ORDER-507
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + \frac{1}{C_5 s}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_ms^6 + C_2C_5C_LL_2L_5R_Lg_ms^5 + 2C_2C_5C_LL_2L_Lg_ms^5 + C_2C_5C_LL_2L_Ls^5 + C_2C_5C_LL_2L_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5L_Ls^5 + C_2C_5C_LL_5R_Lg_ms^4 + C_2C_5C_LL_5R_Lg_ms^4 + C_2C_5C_LL_2R_Lg_ms^4 +$$

10.508 INVALID-ORDER-508
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_5 R_2 s^3 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + L_5 g_m s - 1 \right)}{2 C_2 C_5 L_2 L_5 R_L g_m s^4 + C_2 C_5 L_5 R_2 R_L g_m s^3 + C_2 C_5 L_5 R_2 R_2 s^3 + 4 C_2 C_5 L_5 R_L s^3 + 2 C_2 L_2 R_L g_m s^2 + C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C$$

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 \begin{aligned} \textbf{10.509} \quad \textbf{INVALID-ORDER-509} \ Z(s) &= \left( \infty, \ 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_5s^4 - C_2C_5L_5R_2s^3 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5R_2g_ms^3 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_ms - 1}{C_2C_5C_LL_2E_5s^5 + C_2C_5C_LL_5R_2s^4 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + C_2C_LL_2S^3 + C_2C_LL_2
```

10.511 INVALID-ORDER-511
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, R_L + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 s^3 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 - C_2 L_5 R_2 g_m s^3 + C_2 C_2 L_2 R_2 g_m s^3 + C_2 C_2 R_2 g_m s^3 + C_$$

10.512 INVALID-ORDER-512
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + \frac{1}{C_L s}\right)$$

$$H(s) = -\frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 s^3 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 L_5 R_2 g_m s^3 + C_2 C_5 L_4 L_5 L_5 g_m s^4 + C_2 C_5 L_4 L_5 L_5 g_m s^4 + C_2 C_5 L_4 L_5 L_5 g_m s^4 + C_2 C_5 L_5 L_5 L_5 g_m s^4 + C_5 L_5 g_m s^4 + C_5 L_5 L_5 g_m s^4 + C_5 L_5$$

10.513 INVALID-ORDER-513
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

10.514 INVALID-ORDER-514
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, L_L s + R_L + \frac{1}{C_L s}\right)$$

10.515 INVALID-ORDER-515
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_Ls^6 + C_2C_5C_LL_5L_LR_2R_Ls^5 + 2C_2C_5L_2L_5L_LR_2g_ms^5 + C_2C_5L_2L_5L_Ls^5 + C_2C_5L_2L_5L_Ls^4 + 2C_2C_5L_5L_LR_2g_ms^4 + C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_5L_5L_2s^4 + 4C_2C_5L_5L_2s^4 + 4C_2C_5L_2s^4 + 4C_2C_5L_2s^4 + 4C_2C_5L_2s^4 + 4C_2C_5L_2s^4 +$$

10.516 INVALID-ORDER-516
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$$

$$H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_Lg_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + 2C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5L_LL_5L_Lg_ms^5 + 2C_2C_5L_2L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_5L_Lg_ms^5 + 2C_2C_5L_2L_5L_Lg_ms^5 + 2C_2C_5L_2L_2L_2g_ms^5 + 2C_2C_5L_2L_2g_ms^5 + 2C_2C_5L_2L_2g_ms^5 + 2C_2C_5L_2L_2g_ms^5 + 2C_2C_5L_2L_2g_ms^5 + 2C_2C_5L_2g_ms^5 + 2C_2$$

10.517 INVALID-ORDER-517
$$Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2 + 1}, \ \frac{R_L\left(C_LL_Ls^2 + 1\right)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$$

$$H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_Lg_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_Ls^5 + 2C_2C_5C_LL_5L_LR_2s^5 + 4C_2C_5C_LL_5L_LR_2s^5 + 4C$$

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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)
```

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 s^2 + C_2 C_$

10.519 INVALID-ORDER-519 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $H(s) = \frac{C_2C_5L_2L_5g_ms^4 + C_2C_5L_2g_ms^3 - C_2C_5L_2s^3 + C$

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

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_4 R_5 R_4 g_m s^3 + C_4 C_5 L_4 R_5 R_5 g_m s^3 + C_4 C_5 L_5 R_5 g_m s^3 + C_5 C_5 L_5 R_5 g_m s^3 + C_5$

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

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

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_2 S^3 + C_2 C_5 R_2 S^2 +$

10.523 INVALID-ORDER-523 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$

10.524 INVALID-ORDER-524 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ L_L s + R_L + \frac{1}{C_L s}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_2 R_5 g_m s^3 + C_2 C_5 C_L L_2 R_5 g_m s^4 + C_2 C_5 C_L L_2 R_5 g_m s^3 + C_2 C$

10.525 INVALID-ORDER-525 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_Lg_ms^6 + C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_Ls^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_LR_2s^5 + C_2C_5C_LL_LR$

10.526 INVALID-ORDER-526 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, L_5 s + R_5 + \frac{1}{C_5 s}, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$

 $H(s) = \frac{(C_L L_L R_L s^2 + C_2 C_5 C_L L_2 L_5 L_2 G_m s^6 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 R_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 R_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 R_5 g_m s^5 + C_2 C_5 C_L R_5 g_m$

- 10.527 INVALID-ORDER-527 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ L_5 s + R_5 + \frac{1}{C_5 s}, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_Lg_ms^6 + C_2C_5C_LL_2L_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_5g_ms^5 + C_2C_5C_LL_2L_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_2R_5g_ms^5 + C_2C_5C_LL_2L_2R_5g_ms^5 + C_2C_5C_LL_2R_5g_ms^5 + C_2C_5C_LL_2R_5g_ms^5$
- 10.528 INVALID-ORDER-528 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_5 s^4 C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_2 L_5 s^3 C_2 L_2 R_5 s^2 + C_2 L_5 R_2 g_m s^3 C_2 L_2 R_5 s^2 + C_2 L_5 R_2 g_m s^3 C_2 L_2 R_5 s^2 + C_2 L_5 R_2 g_m s^2 C_2 L_5 R_2 s^2 + C_2 L_5 R_5 s^2 C_2 R_2 R_5 s C_5 L_5 R_2 R_5 g_m s^3 + C_2 L_2 L_5 R_5 R_L g_m s^3 + C_2 L_2 R_5 R_L$
- 10.529 INVALID-ORDER-529 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{1}{C_L s}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_5s^4 C_2C_5L_5R_2s^3 + C_2L_2L_5s^3 C_2L_2L_5s^3 C_2L_2R_5s^2 + C_2L_5R_2s^2 + C_2L_5R_2s^2 + C_2L_5R_5s^2 C_2R_2s^2 C_2R_2s^2$
- 10.530 INVALID-ORDER-530 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_5 R_L s^5 + C_2 C_5 L_L L_5 R_2 R_5 R_L s^4 + 2 C_2 C_5 L_2 L_5 R_5 R_L g_m s^4 + C_2 C_5 L_2 L_5 R_5 R_L g_m s^3 + C_2 C_5 L_5 R_2 R_5 R_L g_m s^3 + C_2 C_5 L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_2 L_5 R_5 R_L g_m s^4 + C_2 C_L L_2 R_5 R_L g_m s^4 + C_2 C_L L_2 R_5 R_L g_m s^4 + C_2 C_L L_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_2 R_5 R_L g_m s^4 + C_2 C_L L_5 R_5$
- 10.531 INVALID-ORDER-531 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{(C_L R_L s + 1)(C_L R_L$
- 10.532 INVALID-ORDER-532 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{\left(C_L L_L s^2 + 1\right) \left(C_L L_L s^2$
- 10.533 INVALID-ORDER-533 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \frac{L_L s}{C_L L_L s^2 + 1}\right)$
- 10.534 INVALID-ORDER-534 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, L_L s + R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 4C_2C_5C_LL_5L_LR_2S^5 + 2C_2C_5C_LL_5R_2R_5R_Lg_ms^4 + 4C_2C_5C_LL_5R_2R_5R_Lg_ms^4 + 4C_2C_5C_LL_5R_5R_Ls^4 + 4C_2C_5C_LL_5R_5g_ms^4 + 4C_2C_5C_LL_5R_5g_ms^5 + 4C_2C_5C_LL_5R_2R_5g_ms^5 + 4C_2C_5C_LL_5R_5g_ms^5 + 4C_2C_5C_LL_$
- 10.535 INVALID-ORDER-535 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + C_2C_5L_LL_5L_LR_2R_5R_Ls^5 + 2C_2C_5L_2L_5L_LR_5R_Lg_ms^5 + C_2C_5L_2L_5L_LR_5s^5 + C_2C_5L_2L_5L_LR_5s^5 + C_2C_5L_5L_LR_2R_5R_Ls^4 + 2C_2C_5L_5L_LR_2R_5R_Lg_ms^4 + C_2C_5L_5L_LR_5R_Ls^4 + C_2C_5L_LR_5R_Ls^4 + C_2C_5L_LR_5R_$

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10.536 INVALID-ORDER-536 Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \ \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)
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 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_RS_RLg_ms^6 + C_2C_5C_LL_2L_5L_RS_s^6 + 2C_2C_5C_LL_5L_RS_RLg_ms^5 + 2C_2C_5L_LL_5L_RS_s^5 + 4C_2C_5C_LL_5L_RS_s^5 + 4C_2C_5C_LL_5L_RS_s^5 + 4C_2C_5L_LL_5L_RS_s^5 +$

10.537 INVALID-ORDER-537
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2 + L_5s + R_5}, \frac{R_L(C_LL_Ls^2 + 1)}{C_LL_Ls^2 + C_LR_Ls + 1}\right)$$

 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5C_LL_2L_5R_5R_Ls^5 + 2C_2C_5C_LL_5L_Rs^5 + 2C_2C_5C_LL_5L_Rs^5 + 4C_2C_5C_LL_5L_Rs^5 + 4C_2C_5C_L$

10.538 INVALID-ORDER-538
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 g_m s^2 + C_2 L_5 R_2 g_m s^3 + C_2 L_5 R_2 g_m s^3$

10.539 INVALID-ORDER-539
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{1}{C_L s}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2E_5s^4 + C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2E_5g_ms^3 - C_2L_2E_5g_ms^3 - C_2L_2E_5g_ms^3 + C_2L_2E_5g_ms$

10.540 INVALID-ORDER-540
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{R_L}{C_L R_L s + 1}\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_1 q_m s^5 + C_2 C_5 L_4 L_2 L_5 R_4 s^6 + C_2 C_5 L_4 L_5 R_2 R_5 R_4 q_m s^4 + C_2 C_5 L_4 L_5 R_2 R_5 R_4 q_m s^4 + C_2 C_5 L_4 L_5 R_5 R_4 s^4 + C_2 C_5 L_4 L_5 R_5 R_4 s^4 + C_2 C_5 L_4 L_5 R_4 q_m s^4 + C_2 C_5 L_5 R_5 q_m s^4 +$

10.541 INVALID-ORDER-541
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, R_L + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^4 +$

10.542 INVALID-ORDER-542
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + \frac{1}{C_L s}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^4 + C_2 C_5 C_L L_5 L_5 R_5 s^4 + C_2 C_5 C_L L_5 R_5 s^4 + C_2 C_5 C_L$

10.543 INVALID-ORDER-543
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1}\right)$$

 $H(s) = \frac{LLs\left(C_2C_5L_2L_5L_6g_ms^6 + C_2C_5L_LL_5L_Ls^6 + C_2C_5L_Ls^6 + C_2C_5L_$

10.544 INVALID-ORDER-544
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, L_L s + R_L + \frac{1}{C_L s}\right)$$

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

- 10.545 INVALID-ORDER-545 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_5L_LR_2R_5s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5L_LL_5L_LR_5s^5 + C_2C_5L_LL_5L_Rs^5 + C_2C_5L$
- **10.546** INVALID-ORDER-546 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \frac{L_L s}{C_L L_L s^2 + 1} + R_L\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2g_ms^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_LR_$
- 10.547 INVALID-ORDER-547 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5, \ \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 2C_2C_5C_LL_2L_5L_LS^6 + C_2C_5C_LL_2L_5R_5R_Lg_ms^5 + C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_5L_LR_2g_ms^5 + 2C_2C_5C_LL_5L_LR_2g_ms^5 + 2C_2C_5C_LL_5L_LR_2g_ms^5 + 2C_2C_5C_LL_5L_LR_2g_ms^5 + 2C_2C_LR_2g_ms^5 + 2C_2C_2C_LR_2g_ms^5 + 2C_2C_2C_LR_2g_ms^5 + 2C_2C_$
- 10.548 INVALID-ORDER-548 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 C_2 C_5 L_2 R_5 s^4 C_2 C_5 L_2 R_5 s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 R_5 R_2 R_2 g_m s^3 + C_2 C_5 L_5 R_2 R_2 g_m s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 + C_2 C_5 L_5 R_5 g_m s^3 + C_2 C_$
- 10.549 INVALID-ORDER-549 $Z(s) = \left(\infty, \ L_2s + R_2 + \frac{1}{C_2s}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2 + 1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 C_2C_5L_2L_5s^4 C_2C_5L_2R_5s^3 + C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2C_5L_5R_2s^3 + C_2C_5L_2R_5g_ms^2 C_2L_2R_5g_ms^2 C_2L_2R_5g_ms^3 C_2C_5L_2R_5g_ms^3 + C_2C_5R_5g_ms^3 + C_2C_5R_5g$
- 10.550 INVALID-ORDER-550 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L}{C_L R_L s + 1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_Ls^5 + C_2C_5C_LL_2R_5R_Ls^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_2R_Ls^4 + C_2C_5C_LL_5R_5R_Ls^4 + C_2C_5C_LL$
- 10.551 INVALID-ORDER-551 $Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, R_L + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{(C_L R_L s + 1) \left(-C_2 C_5 C_L L_2 L_5 R_5 g_m s^5 + 2 C_2 C_5 C_L L_2 L_5 R_5 g_m s^5 + 2 C_2 C_5 C_L L_2 R_5 R_L g_m s^4 + C_2 C_5 C_L L_2 R_5 R_L g_m s^4 + C_2 C_5 C_L L_5 R_2 R_5 g_m s^4 + 2 C_2 C_5 C_L L_5 R_5 g_m s^4 + 2 C_2$
- 10.552 INVALID-ORDER-552 $Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + \frac{1}{C_L s}\right)$
- $H(s) = -\frac{(C_L L_L s^2 + 1)(-C_2 C_3 C_4 L_2 L_5 L_2 L_5 L_2 L_5 L_2 L_5 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_5 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L_2 L_2 R_5 g_m s^5 + C_2 C_5 C_L L$
- 10.553 INVALID-ORDER-553 $Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_LR_5s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL$

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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(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ L_L s + R_L + \frac{1}{C_L s}\right)
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 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_Lg_ms^6 + C_2C_5C_LL_2L_5R_5g_ms^5 + 2C_2C_5C_LL_2L_5R_5g_ms^5 + 2C_2C_5C_LL_2R_5g_ms^5 + 2C_2C_5C_LL_2R$

10.555 INVALID-ORDER-555
$$Z(s) = \left(\infty, \ L_2 s + R_2 + \frac{1}{C_2 s}, \ \infty, \ \infty, \ \frac{R_5 \left(C_5 L_5 s^2 + 1 \right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \ \frac{L_L R_L s}{C_L L_L R_L s^2 + L_L s + R_L} \right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_5s^6 + C_2C_5C_LL_2L_LR_5R_Ls^5 + C_2C_5C_LL_5L_LR_2R_5s^5 + C_2C_5C_LL_5L_LR_2s^5 + C_2C_5C_LL_5L_LR_2s^5$

10.556 INVALID-ORDER-556
$$Z(s) = \left(\infty, L_2s + R_2 + \frac{1}{C_2s}, \infty, \infty, \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2 + C_5R_5s + 1}, \frac{L_Ls}{C_LL_Ls^2 + 1} + R_L\right)$$

 $H(s) = -\frac{1}{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_5s^6 + 2C_2C_5C_LL_2L_LR_5s^5 + C_2C_5C_LL_5L_LR_2s^5 + 2C_2C_5C_LL_5L_LR_2s^5 + 2C_2C_LL_5L_LR_2s^5 + 2C_2C_5C_LL_5L_LR_2s^5 + 2C_2C_5C_LL_5L_LR_2s^$

10.557 INVALID-ORDER-557
$$Z(s) = \left(\infty, L_2 s + R_2 + \frac{1}{C_2 s}, \infty, \infty, \frac{R_5 \left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1}, \frac{R_L \left(C_L L_L s^2 + 1\right)}{C_L L_L s^2 + C_L R_L s + 1}\right)$$

 $\overline{C_2C_5C_LL_2L_5L_LR_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_5R_Lg_ms^5 + C_2C_5C_LL_2L_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_2R_5R_Lg_ms^5 + C_2C_5C_LL_2R_5R_Lg_ms^5 + C_2C_5C_LL_2R_5R_Lg_ms^5 + C_2C_5C_LL_2R_5R_Lg_ms^5 + C_2C_5C_LL_2R_5R$

10.558 INVALID-ORDER-558
$$Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{1}{C_L s}\right)$$

$$H(s) = \frac{C_2L_2R_2g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5}{C_2C_LL_2R_2g_ms^3 + C_2C_LL_2R_5s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + C_LL_2R_5g_ms^2 + C_LL_2s^2 + C_LL_2R_5g_ms + C_LR_2s + C_LR_2s$$

10.559 INVALID-ORDER-559
$$Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, R_5, \frac{R_L}{C_LR_Ls+1}\right)$$

$$R_L\left(C_2L_2R_2R_5q_ms^2-C_2L_2R_2s^2+C_2L_2R_5s^2+L_2R_5q_ms-L_2s+R_2R_5q_m-R_2+R_5\right)$$

 $H(s) = \frac{R_L \left(C_2 L_2 R_2 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m s - L_2 s + R_2 R_5 g_m s - L_2 s + R_2 R_5 g_m s - R_2 + R_5 \right)}{C_2 C_L L_2 R_2 R_5 g_m s^3 + C_2 C_L L_2 R_5 R_L g_m s^3 + C_2 C_L L_2 R_5 R_L g_m s^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 R_5 g^2 + C_2 L_2 R_5 g^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 R_5 g_m s^$

10.560 INVALID-ORDER-560
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ R_L + \frac{1}{C_Ls}\right)$$

$$(C_L R_L s + 1) \left(C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5 \right)$$

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

10.561 INVALID-ORDER-561
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ L_Ls + \frac{1}{C_Ls}\right)$$

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

10.562 INVALID-ORDER-562
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

$$H(s) = \frac{L_L s \left(C_2 L_2 R_2 g_3 s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_2 C_L L_2 L_L R_2 g_m s^4 + C_2 C_L L_2 L_L R_5 s^4 + 2 C_2 L_2 L_L R_3 g_m s^3 + 4 C_2 L_2 L_L S^3 + C_2 L_2 R_2 g_3 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_L L_2 L_L R_5 g_m s^3 + C_L L_L R_2 R_5 g_m s^3 + C_L R_2 R_5 g_m s^$$

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 \begin{aligned} & \textbf{10.563} \quad \textbf{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{(C_LL_s^2 + C_LR_Ls + 1) \left( C_2L_2R_2R_6g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_6g_m - R_2 + R_5 \right)}{2C_2C_LL_2L_Lg_3s^4 + 4C_2C_LL_Lg_3s^3 + 2C_2C_LL_2R_2g_ms^3 + C_2C_LL_2R_2s^3 + C_2C_LL_2R_2s^3 + C_2C_LL_2R_2s^3 + C_2C_LL_2R_2s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 2C_LL_2R_2g_ms^2 + 4C_2L_2s^2 + 2C_LL_2R_2g_ms^2 + C_LL_2R_2g_ms^2 + C_LL_2R_2g_ms
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10.566 INVALID-ORDER-566 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, R_5, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

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

10.568 INVALID-ORDER-568 $Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5 s}, \ \frac{1}{C_L s}\right)$

 $H(s) = \frac{-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 - C_5L_2s^2 - C_5R_2s + L_2g_ms + R_2g_m + 1}{s\left(C_2C_5C_LL_2R_2s^3 + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + C_2C_LL_2s^2 + C_5C_LL_2s^2 + C_5C_LR_2s + 2C_5L_2g_ms + 2C_5R_2g_m + 4C_5 + C_LL_2g_ms + C_LR_2g_m + C_L\right)}$

10.569 INVALID-ORDER-569 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$

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

10.570 INVALID-ORDER-570 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$

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

10.571 INVALID-ORDER-571 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$

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

10.575 INVALID-ORDER-575 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

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

10.576 INVALID-ORDER-576 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

10.577 INVALID-ORDER-577 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L\right)$

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

10.578 INVALID-ORDER-578 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2s^2 + C_2L_2R_5s^2 - C_5L_2R_5s^2 - C_5L_2R_5s^2 - C_5R_2R_5s + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5}{C_2C_5L_2R_2S_5s^4 + 2C_2C_5L_2R_2S_3s^3 + 4C_2C_5L_2R_5s^3 + C_2C_4L_2R_5s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + C_5C_4L_2R_5s^3 + 2C_5L_2R_5g_ms^2 +$

10.579 INVALID-ORDER-579 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 - C_5 L_2 R_5 s^3 + C_2 C_5 L_2 R_2 R_5 R_L s^3 + C_2 C_5 L_2 R_2 R_5 R_L s^3 + C_2 C_4 L_2 R_5 R_L s^3 + C_5 L_4 R_5 R_L s^3 + C_5 L_5 R_5 R$

10.580 INVALID-ORDER-580 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 R_2 R_5 s^3 - C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 - C_2 L_2 R_5 s^3 - C_2 L_2 R_2 g_m s^2 + C_2 L_2 R_2 s^3 - C_2 L_2 R_2 g_m s^3 + 2 C_2 L_2 R_2 g_m$

10.581 INVALID-ORDER-581 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$

 $(C_LL_Ls^2+1)(C_2C_5L_2R_2R_5s^3-C_2L_2R_2R_5q_ms^2+C_2L_2R_2s^2-C_2L_2R_5s^2)$

 $H(s) = -\frac{(C_L L_L s^2 + 1) \left(C_2 C_5 L_2 R_2 R_5 s^3 - C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 - C_2 L_2 R_5 s^3 + 2 C_2 L_2 L_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 R_5 g_m s^3 + 2 C_2 L_2 R_5 g_m s^3 + 2 C_2$

10.582 INVALID-ORDER-582 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

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

 $H(s) = \frac{L_L s_1 - C_2 C_5 L_2 L_1 R_2 s_5 s_5 + C_2 L_2 L_2 R_5 g_m s_4 - C_2 L_2 L_2 R_5 g_m s_4 + C_2 C_2 R$

10.583 INVALID-ORDER-583 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.584 INVALID-ORDER-584 $Z(s) = \left(\infty, \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$

10.585 INVALID-ORDER-585 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $-\frac{2C_2C_5C_LL_2L_LR_2R_5R_Lg_ms^5 + C_2C_5L_LL_LR_2R_5s^5 + 4C_2C_5L_LL_Rs_5s^4 + 2C_2C_5L_2L_LR_2s^4 + 2C_2C_5L_2L_LR_2s^3 + 4C_2C_5L_2R_2s^3 + 4C_2C_5L_2L_LR_2s^3 + 4C_2C_5L_2L_2L_2s^3 + 4C_2C_$

10.586 INVALID-ORDER-586 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

 $\overline{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}g_{m}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}s^{5} + C_{2}C_{5}L_{L}R_{2}R_{5}R_{L}s^{4} + 2C_{2}C_{5}L_{2}R_{2}R_{5}R_{L}g_{m}s^{3} + C_{2}C_{5}L_{2}R_{2}R_{5}R_{L}s^{3} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{5}g_{m}s^{4} + 2C_{2}C_{L}L_{2}L_{L}R_{2}R_{5}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{5}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}s^{4} + C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}s^$

10.587 INVALID-ORDER-587 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ R_L\right)$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 R_2 F_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 s + C_2 R_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_5 L_2 R_2 R_5 g_m s^3 + 2 C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + 4 C_2 C_5 L_2 R_2 s^3 + 4 C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 + 2 C_5 L_2 R_2 g_m s^2 + C_5 L_2 R_5 g_m s + C_5 R_2 R_5 g_m s + C_5 R_5 R_5 g_m s + C_5 R_5 R_5 R_5 g_m s + C_5 R_5 R_5 g_m s + C_5 R_5 R_5 g_m s + C_5 R_5 R_5 R_5 g_m s + C_5 R_5 R_5 g_m s + C_5 R_5 R_5 g_m s + C_5 R_5 R_5 R_5 g_m s + C_5 R_5 g_m s +$

10.588 INVALID-ORDER-588 $Z(s) = \left(\infty, \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \infty, \infty, R_5 + \frac{1}{C_5 s}, \frac{1}{C_L s}\right)$

 $\frac{C_2C_5L_2R_2S_9ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2S_9ms^2 - C_5L_2s^2 + C_5R_2S_9ms - C_5R_2s + C_$

10.589 INVALID-ORDER-589 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)$

 $R_L \left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 \right)$

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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)
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 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 R_2 S_3 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + L_2 g_m s + L_2 R_2 g_m s^2 + C_2 C_5 L_2 R_2 g_m s^3 + 2 C_2 C_5 L_2 R_2 g_m s^3 + 2 C_2 C_5 L_2 R_2 g_m s^2 + 2 C_5 C_L L_2 R_2 g_m s^2 + C_5 C_L L_2 R_2 g$

10.591 INVALID-ORDER-591
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_5 g_m s^3 + C_2 L_2 R_2 g_m s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + L_2 g_m s + C_5 R_2 R_5 g_m s^2 + C_5 R_5 R_5 g_m s^2 + C_5$

10.592 INVALID-ORDER-592
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 R_2 S_3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 R_5 g_m s^3 + C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 L_2 R_2 g_m s^4 + C_2 C_4 L_2 L_4 R_5 g_m s^4 + C_5 C_4 L_2 L_4 R_5 g_m s^4 + C_5 C_4 L_4 L_4 R_5 g_m s^4 + C_5 C_5 L_4 L_4 R_5 g_m s^4 + C_5 C_5 L_4 L_4 R_5 g_m s^4 + C_5 C_5 L_5 R_5 g_m s^4 + C_5 R_5$

10.593 INVALID-ORDER-593
$$Z(s) = \left(\infty, \ \frac{L_{2s}}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.594 INVALID-ORDER-594
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_2R_Ls^5 + C_2C_5L_2L_LR_2R_Lg_ms^4 + C_2C_5L_2L_LR_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2s$

10.595 INVALID-ORDER-595
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

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

10.596 INVALID-ORDER-596
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

10.597 INVALID-ORDER-597
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1 \right)}{C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 R_2 R_2 g_m s^3 + C_2 C_5 L_2 R_2 S^3 + 4 C_2 C_5 L_2 R_2 S^3 + 4 C_2 C_5 L_2 R_2 g_m s^2 + C_5 L_2 S^2 + C_5 L_2 L_5 g_m s^3 + 2 C_5 L_2 R_2 g_m s^2 + C_5 L_2 S^2$

10.598 INVALID-ORDER-598
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_5L_2s^2 + C$

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 \begin{aligned} \textbf{10.599} \quad \textbf{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{R_L \left( C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2L_5g_ms^3 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2R_2g_ms^3 + C_2C_5L_2R_
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10.600 INVALID-ORDER-600
$$Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ L_5 s + \frac{1}{C_5 s}, \ R_L + \frac{1}{C_L s}\right)$$

$$H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 g_m s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s^4 + C_2 C_5 L_2 L_2 R_2 g_m s^4 + C_2 C_5 L_2 L_2 R_2 g_m s^4 + C_2 C_5 L_2 L_2 R_2 g_m s^2 + C_2 C_L L_2 R_2 g_m s^2 + C_2 C_L L_2 R_2 g_m s^2 + C_5 C_L L_2 R_2 g_m s$$

10.601 INVALID-ORDER-601
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 g_m s^2 + C_5 L_2 S^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s^2 + C_5 L_2 L_2 R_2 g_m s^4 + C_2 C_5 L_2 L_2 L_2 R_2 g_m s^2 + C_5 C_L L_2 R_2 g_m s^2 +$$

10.602 INVALID-ORDER-602
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.603 INVALID-ORDER-603
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

$$H(s) = \frac{\left(C_L L_L s^2 + C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 g^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 S^2 + C_5 L_2 L_5 g_m s^3}{s \left(C_2 C_5 C_L L_2 L_5 R_2 g_m s^4 + C_2 C_5 C_L L_2 L_5 R_2 g_m s^4 + C_2 C_5 C_L L_2 L_2 R_2 g_m s^4 + C_2 C_5 C_L L_2 R_2 g_m s^3 + C_2 C_5 L_2 R_2 g_m s^3 + C_2 C_5 L_2 L_2 R_2 g_m s^$$

10.604 INVALID-ORDER-604
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_RL_s^2+L_Ls+R_L}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5L_2L_5L_Ls^5 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_5R_Ls^4 + C_2C_5L_2L_LR_2s^4 + C_2C_5L_2L_LR_2s$$

10.605 INVALID-ORDER-605
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{(C_L L_L)}{(C_2 C_5 C_L L_2 L_5 L_L R_2 g_m s^6 + C_2 C_5 C_L L_2 L_L R_2 R_L g_m s^5 + C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 L_L L_L R_2 s^5 + 4 C_2 C_5$$

10.606 INVALID-ORDER-606
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_5R_Ls^5 + 2C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2L_2R_2s^5 + 4C_2C_5C_LL_2R_2s^5 + 4C_2C_5C_LL_2$$

10.607 INVALID-ORDER-607
$$Z(s) = \left(\infty, \ \frac{L_2 s}{C_2 L_2 s^2 + 1} + R_2, \ \infty, \ \infty, \ \frac{L_5 s}{C_5 L_5 s^2 + 1}, \ R_L\right)$$

$$H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 s^3 - C_5 L_5 R_2 s^2 + L_2 L_5 g_m s^2 - L_2 s + L_5 R_2 g_m s + L_5 s - R_2 \right)}{2 C_2 C_5 L_2 L_5 R_2 R_2 G_m s^4 + C_2 C_5 L_2 L_5 R_2 S^4 + 4 C_2 C_5 L_2 L_5 R_2 G_m s^3 + C_2 L_2 R_2 G_m s^2 + C_2 L_2 R_2 G_m s^3 + C_2 L_2 R_2 G_m s$$

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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_2s^4 + C_2L_2L_5s^3 - C_2L_2R_2s^2 - C_5L_2L_5s^3 - C_5L_5R_2s^2 + L_2L_5g_ms^2 - L_2s + L_5R_2g_ms + L_5s - R_2}{C_2C_5C_LL_2L_5R_2s^5 + 2C_2C_5L_2L_5s^4 + C_2C_LL_2L_5s^4 + C_2C_LL_2
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R_L \left( -C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 
H(s) = \frac{R_L \left( -C_2 C_5 L_2 L_5 R_2 s^2 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 R_2 g_m s^4 + C_2 C_2 L_2 R_2 g
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)
                                          \frac{\left(C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}L_{5}R_{2}s^{4}-C_{2}L_{2}L_{5}R_{2}g_{m}s^{3}-C_{2}L_{2}L_{5}s^{3}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{L}L_{2}L
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)
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)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L_L s \left( -C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 R_2 g_
                                  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_ms^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + 2C_2C_5C_LL_2L_5R_2g_ms^5 + 4C_2C_5C_LL_2L_5R_2s^5 + 4C_2C_5L_LL_5R_2s^5 + 4C_2C_5L_LL_5R_2g_ms^4 + 4C_2C_5L_5L_5R_2g_ms^4 + 4C_2C_5L_5R_2g_ms^4 + 4C_2C_5L_5R_2g_ms^4 + 4C_2C_5L_5R_2g_ms^4 + 4C_2C_5L_
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{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
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)
```

 $\frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}R_{L}q_{m}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}s^{6} + 4C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{5}s^{6} + C_{2}C_{5}L_{L}L_{5}L_{L}R_{5}s^{6} + C_{2}C_{5}L_{L}L_{5}L_{L}R_{5}s^{6}$

10.616 INVALID-ORDER-616 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

```
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)
```

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

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10.618 INVALID-ORDER-618 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{1}{C_L s}\right)
```

 $H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2g_ms^3 - C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_5L_2S^2 + C_5L_2R_5g_ms^3 + C_5L_2R_5g_ms^2 - C_5L_2s^2 + C_5L_5R_2g_ms^2 + C_5L_2S^2 + C_5L_2R_5g_ms^2 + C_5L_2S^2 + C_5L_2R_5g_ms^2 + C_5L_2R_5g_ms^2$

10.619 INVALID-ORDER-619
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$$

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

10.620 INVALID-ORDER-620
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + C_5 L_2 R_5 g_m s^3 + C_5 L_4 R_5 g_m s^3 + C_5 L_5 R_5 g_m s^3 + C_5 R_5 g_m s^3 + C_5 R_5 R_5 R_5 g_m s^3 + C_5 R_5 R_5 g$

10.621 INVALID-ORDER-621
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + C_5 L_2 R_5 g_m s^3 + C_5 L_2 R_5 g_m s^3 + C_5 L_2 R_5 g_m s^3 + C_5 C_L L_2 R_5 g_m s^3 +$

10.622 INVALID-ORDER-622
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_s^2+1}\right)$$

 $H(s) = \frac{L_L s \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_4 R_2 g_m s^4 + C_2 C_5 L_4 L_4 R_2 g_m s^4 + C_4 C_5 L_4 L_4 R_2 g_m s^4 + C_4 C_5 L_4 L_4 R_2 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 L_4 R_4 R_5 g_m s^4 + C_4 C_5 L_4 R_5 g_m s^4 + C_4 C_5 L_5 R_5 g_m s^4 + C_4 C_5 L_5 R_5 g_m s^4 + C_4 C_5 L_5 R_5 g_m s^4 + C_5 L_5 R$

10.623 INVALID-ORDER-623
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$$

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

10.624 INVALID-ORDER-624
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_2R_Ls^5 + C_2C_5L_LL_LR_2R_Ls^5 + C_2C_5L_LL_LR_2R$

10.625 INVALID-ORDER-625
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_LR_2g_ms^5 + 2C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5L_LL_LR_2s^5 + 4C_2C_5$

- 10.626 INVALID-ORDER-626 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s^5$
- 10.627 INVALID-ORDER-627 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ R_L\right)$
- $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 R_5 g_m s^3 C_2 L_2 L_5 R_2 s^3 + C_2 L_2 L_5 R_2 s^3 C_2 L_2 R_2 R_5 s^3 C_2 L_2 R_2 R_5 s^3 C_5 L_2 L_5 R_2 R_5 s^3 C_5 L_2 L_5 R_2 R_5 s^3 C_5 L_2 L_5 R_2 R_5 R$
- 10.628 INVALID-ORDER-628 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{-C_2C_5L_2L_5R_2R_5s^4 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 C_2L_2R_2s^3 C_5L_2L_5R_5s^3 C_5L_5R_2s^3 C_5L_5R_2s^3 C_5L_5R_2s^3 C_5L_5R_2s^3 C_5L_5R_5s^3 C_5L_5R_2s^3 C_5L_5R_5s^3 C_5L_5R_2s^3 C_5L_5R_5s^3 C_5$
- 10.629 INVALID-ORDER-629 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L}{C_LR_Ls+1}\right)$
- 10.630 INVALID-ORDER-630 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2S^5 + 4C_2C_5C_LL_2L_5R_2S^6 + 4C_2C_5L_2L_5R_2S^6 + 4C_2C_5L_2L_$
- 10.631 INVALID-ORDER-631 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + 4C_2C_5L_LL_2L_5L_LR_5s^6 + C_2C_5L_LL_2L_5R_2R_5s^5 + 2C_2C_5L_2L_5R_2R_5g_ms^4 + 4C_2C_5L_2L_5L_LR_2g_ms^5 + 4C_2C_LL_2L_5L_LR_2g_ms^5 + 4C_2C_LL_2L_5L_LR_2g_ms^5 + 4C_2C_LL_2L_5L_LR_2g_ms^5 + 4C_2C_LL_2L_5R_2g_ms^4 + 4C_2C_LL_2L_5L_LR_2g_ms^5 + 4C_2C_LL_2L_5L_2R_2g_ms^5 + 4C_2C_LL_2L_2L_2L_2R_2g_ms^5 + 4C_2C_LL_2L_2L_2R_2g_ms^5 + 4C_2C_LL_2L_2L_2R_2g_ms^5 + 4C_2C_LL_2L_2L_2R_2g_ms^5 + 4C_2C_LL_2L_2R_2g_ms^5 + 4C_2C_LL_2R_2g_ms^5 + 4C_2C_$
- 10.632 INVALID-ORDER-632 $Z(s) = \left(\infty, \frac{L_2s}{C_2L_2s^2+1} + R_2, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- **10.633** INVALID-ORDER-633 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- 10.634 INVALID-ORDER-634 $Z(s) = \left(\infty, \ \frac{L_{2}s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + 2C_2C_5L_2L_5L_LR_2R_5R_Lgms^5 + C_2C_5L_2L_5L_LR_2R_5s^5 + 4C_2C_5L_2L_5L_LR_5R_Ls^5 + C_2C_LL_2L_5L_LR_2R_5R_Lgms^5 + C_2C_LL_2L_5L_LR_2R_5R_Ls^4 + C_2C_LL_2L_5L_LR_2R_5R_Lgms^5 + C_2C_LL_2L_5L_LR_2R_5R_Ls^4 + C_2C_LL_2L_5L_LR_2R_5R_Lgms^5 + C_2C_LL_2L_2L_2R_5R_Lgms^5 + C_2C_LL_2L_2R_5R_Lgms^5 + C_2C_LL_2L_2R_5R_Lgms^5 + C_2C_LL_2L_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_LL_2R_5R_Lgms^5 + C_2C_L$

- 10.635 INVALID-ORDER-635 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 4C_2C_5L_LL_5L_LR_2R_5g_ms^5 + 4C_2C_5L_2L_5L_LR_2s^5 + 2C_2C_5L_2L_5L_LR_2s^5 + 2C_2C_5L_2L_5L_LR_2s^5 + 2C_2C_5L_2L_5R_2s^6 + 4C_2C_5L_2L_5L_LR_2s^6 + 4C_2C_5L_2L_5L_2s^6 + 4C_2C_5L_2L_2s^6 + 4C_2C_5L_2L_2s^6 + 4C_2C_5L_2L_2s^6 + 4C_2C_5L_2s^6 + 4C_2C_$
- 10.636 INVALID-ORDER-636 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
- 10.637 INVALID-ORDER-637 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_5 L_5 R_2 s^4 + C_2 L_2 L_5 R_3 g_m s^3 + C_2 L_2 R_2 g_m s^3 + C_2 L_2 R_$
- 10.638 INVALID-ORDER-638 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_3s^4 + C_2L_2L_5s^3 + C_2L_2R_2g_ms^3 + C_2L_2R_2s^2 + C_2L_2R_2s^2 + C_2L_2R_3s^2 + C_5L_2L_5R_5g_ms^3 C_5L_2L_5R_2g_ms^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_2R_2g_ms^3 + C_2L_2R_2g_ms^3 + C_2L_2R_2g$
- 10.639 INVALID-ORDER-639 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5L_2L_5R_2R_Lg_ms^4 + C_2C_5L_2L_5R_2R_Lg_ms^4 + C_2C_5L_2L_5R_2S^4 + C_2C_5L$
- **10.640** INVALID-ORDER-640 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$
- 10.641 INVALID-ORDER-641 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_5 L_5 R_2 g_m s^4 + C_2 C_5 L_5 R_5 g_m s^5 + C_5 R_5 g_m s^5 + C_5 C_5 L_5 R_5 g_m s^5 + C_5 R_5 g_m s$
- 10.642 INVALID-ORDER-642 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- 10.643 INVALID-ORDER-643 $Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + 2C_2C_5C_LL_2L_5R_2s^5 + C_2C_5C_LL_2L_5R_2s^5 + 4C_2C_5C_LL_2L_5R_2s^5 +$

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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{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
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 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5L_LL_5L_LR_2R_5g_ms^5 + 2C_2C_5L_2L_5L_LR_2s^5 + C_2C_5L_2L_5L_LR_2s^5 + 4C_2C_5L_2L_5L_LR_2s^5 + 4C_2C_5L_2L_5L_2L_5L_2s^5 + 4C_2C_5L_2L_5L_2s^5 + 4C_2C_5L_2L_2s^5 + 4C_2C_5L_2s^5 +$

10.645 INVALID-ORDER-645
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + 2C_2C_5C_LL_2L_5L_Rg_ms^6 + C_2C_5C_LL_2L_5L_Rg_s^6 + C_2C_5C_LL_2L_5L_Rg_s^6 + 4C_2C_5C_LL_2L_5L_Rg_s^6 + 4C$

10.646 INVALID-ORDER-646
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_2s^6 + C_2C_5C_LL_2L_2s^6 + C_2C_5C_LL_2L_2s^6 + C_2C_5C_LL_2L_2s^6 + C_2C_5C_LL_2L_2s^6$

10.647 INVALID-ORDER-647
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L\right)$$

 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 - C_2 C_5 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 L_2 R_2 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^4$

10.648 INVALID-ORDER-648
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_2S_gms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 - C_2C_5L_2R_2S_s^3 + C_2L_2R_2S_gms^2 - C_2L_2R_2s^2 + C_2L_2R_2S_s^2 + C_2L_2R_2S$

10.649 INVALID-ORDER-649
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_5R_Ls^5 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5L_2L_5R_2R_Lg_ms^4 + C_2C_5L_2L_5R_2s^4 + C$

10.650 INVALID-ORDER-650
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$$

10.651 INVALID-ORDER-651
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 4C_2C_5C_LL_2L_5L_2s^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_5R_2s^5 + C_2C_5C_LL_2L_5R_2s^5 + 2C_2C_5C_LL_2L_5R_2s^5 + 2$

10.652 INVALID-ORDER-652
$$Z(s) = \left(\infty, \ \frac{L_2s}{C_2L_2s^2+1} + R_2, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5C_LL_2L_5L_Rs^6 + C_2C_5L_2L_5L_Rs^6 + C_2C_5L$

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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(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ 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_{2}q_{m}s^{6} + 4C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}s^{6} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}g_{m}s^{5} + 2C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{5}R_{2
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(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_RL_s^2+L_Ls+R_L}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^5 + C_2C_5L_2L_5L_LR_2R_5g_ms^5 + 2C_2C_5L_2L_5L_LR_2s^5 + C_2C_5L_2L_5L_LR_2s^5 + C_2C_5L_2L_5L_Rs^5 + C_2C_5L_2L_5
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(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_2s^6 + 4C_2C_5C_LL_2L_2s^6 + 4C_2C_5C_LL_2s^6 + 4
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(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.657 INVALID-ORDER-657 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                   H(s) = \frac{C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_LL_2R_2g_ms^3 + C_2C_LL_2R_2s^3 + C_2C_LL_2R_5s^3 + C_2C_LR_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + C_LR_2R_5g_ms + C_LR_2s + C_LR_5s + 2R_2g_m + 4C_2R_2s^2 + 4C_
10.658 INVALID-ORDER-658 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ R_5, \ \frac{R_L}{C_LR_Ls+1}\right)
H(s) = \frac{R_L \left( C_2 L_2 R_2 g_3 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 g_m - R_2 + R_5 \right)}{C_2 C_L L_2 R_2 R_5 g_L g_3 s^3 + C_2 C_L L_2 R_5 R_L s^3 + C_2 C_L L_2 R_5 R_L s^3 + C_2 C_L L_2 R_5 R_L s^3 + C_2 C_L R_2 R_5 R_L s^2 + C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + 4 C_2 L_2 R_5 s^2 + 4 C_2 R_2 R_5 s + 4 C_2 R_2 R_5 R_L s + C_L R_2 
10.659 INVALID-ORDER-659 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_2 C_L L_2 R_2 g_m s^3 + 2 C_2 C_L L_2 R_2 s^3 + C_2 C_L L_2 R_2 s^3 + 4 C_2 C_L L_2 R_2 s^3 + 2 C_2 L_2 R_2 g_m s^2 + 4 C_2 L_2 s^2 + 4 C_2 L_2 s^2 + 4 C_2 R_2 
10.660 INVALID-ORDER-660 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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}s^{2}-C_{2}L_{2}R_{5}s^{2}+C_{2}L_{2}R_{5}s^{2}+C_{2}L_{2}R_{5}g_{m}-R_{2}+R_{5}\right)}{2C_{2}C_{L}L_{2}L_{L}R_{2}g_{m}s^{4}+4C_{2}C_{L}L_{2}R_{2}S_{g}s^{3}+C_{2}C_{L}L_{2}R_{5}s^{3}+4C_{2}C_{L}L_{2}R_{5}s^{3}+4C_{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}+2C_{L}L_{2}R_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C_{2}L_{2}s^{2}+4C
10.661 INVALID-ORDER-661 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_2 C_L L_2 L_L R_2 R_5 g_m s^4 + C_2 C_L L_L L_2 R_5 s^4 + C_2 C_L L_L R_2 R_5 s^3 + 2 C_2 L_L L_2 R_2 g_m s^3 + 4 C_2 L_2 L_2 R_3 s^2 + C_2 L_2 R_2 s^2 + C_
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10.662 INVALID-ORDER-662 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_2 C_L L_2 L_L R_2 g_m s^4 + 4C_2 C_L L_2 R_2 R_5 g_m s^3 + 2C_2 C_L L_2 R_2 R_5 s^3 + 4C_2 C_L L_2 R_2 s^3 + C_2 C_L L_2 R_2 s^3 + 4C_2 C_L L_2 R_2 s
10.663 INVALID-ORDER-663 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
10.664 INVALID-ORDER-664 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
10.665 INVALID-ORDER-665 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      H(s) = \frac{R_L \left( C_L L_L s^2 + 1 \right) \left( C_2 L_2 R_5 g_m s^4 - C_2 L_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_2 g_m s^2 - C_2 L_2 R_2 g_m s^2 - C_2 L_2 R_2 g_m s^2 - C_2 L_2 R_2 g_m s^2 + C_2 L_2 R_2 g_m s^3 + C_2 C_L L_2 R_2 R_2 g_m s^3 + C_2 C_L R_
10.666 INVALID-ORDER-666 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \frac{1}{C_5s}, R_L\right)
                                                                                                                                                                                                             H(s) = \frac{R_L \left( -C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1 \right)}{2C_2 C_5 L_2 R_2 g_m s^3 + C_2 C_5 L_2 R_2 s^3 + 4C_2 C_5 L_2 R_L s^3 + 4C_2 C_5 R_2 R_L s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + 2C_5 R_2 R_L g_m s + C_5 R_2 s + 4C_5 R_L s + R_2 g_m + 1}
10.667 INVALID-ORDER-667 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{1}{C_Ls}\right)
                                                                                                                                                                                                   H(s) = \frac{-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1}{s\left(C_2C_5C_LL_2R_2s^3 + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_2C_LL_2R_2g_ms^2 + C_2C_LL_2s^2 + C_2C_LR_2s + C_5C_LR_2s + 2C_5R_2g_m + 4C_5 + C_LR_2g_m + C_LR_2g_
10.668 INVALID-ORDER-668 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^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 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 C_L L_2 R_2 R_L s^4 + 2 C_2 C_5 L_2 R_2 R_L g_m s^3 + C_2 C_5 L_2 R_2 s^3 + 4 C_2 C_5 L_2 R_2 R_L s^3 + 4 C_2 C_5 L_2 R_2 R_L s^3 + C_2 C_L L_2 R_2 R_L g_m s^3 + C_2 C_L L_2 R_2 R_L s^3 + C_2 C_L L_2 R_2 R_L s^3 + C_2 C_L L_2 R_2 R_L s^3 + C_2 C_L R
10.669 INVALID-ORDER-669 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \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 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(2C_2 C_5 C_L L_2 R_2 g_m s^3 + C_2 C_5 C_L L_2 R_2 s^3 + 4C_2 C_5 C_L L_2 R_2 s^3 + 4C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 g_m s^2 + 4C_2 C_5 L_2 s^2 + 4C_2 C_5 L_2 s^2 + C_2 C_L L_2 s
10.670 INVALID-ORDER-670 Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \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 s^3 + C_2 L_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(2C_2 C_5 C_L L_2 L_L R_2 g_m s^4 + 4C_2 C_5 L_L L_2 R_2 s^3 + 4C_2 C_5 L_L R_2 s^3 + 4C_2 C_5 L_2 R_2 g_m s^2 + 4C_5 C_L L_L R_2 g_m
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H(s) = \frac{L_L s \left(-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_2 L_L R_2 s^5 + 2 C_2 C_5 L_2 L_L R_2 g_m s^4 + 4 C_2 C_5 L_L R_2 s^3 + 4 C_2 C_5 L_L R_2 s^3 + C_2 C_L L_L L_R R_2 g_m s^4 + C_2 C_L L_L L_R R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_5 C_L L_L R_2 s^3 + 2 C_5 L_L R_2 g_m s^2 + 4 C_5 L_L s^4 + C_5 C_L L_L R_2 g_m s^2 + C_2 L_2 R_2 g_m s^2 + C_2
10.672 INVALID-ORDER-672 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(2C_2 C_5 C_L L_2 L_L R_2 g_m s^4 + 4C_2 C_5 C_L L_2 R_2 g_m s^4 + 4C_2 C_5 C_L L_2 R_2 g_m s^3 + C_2 C_5 C_L L_2 R_2 s^3 + 4C_2 C_5 C_L L_2 R_2 s^3 + 4C_2 C_5 C_L L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 R_2 g_m s^2 + C_2 C_L L_2 R_2 g_m s^2 + 
10.673 INVALID-ORDER-673 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{L_L R_L s \left(-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s - C_5 R_2 s + R_2 g_m + 1\right)}{C_2 C_5 C_L L_2 L_L R_2 R_L s^5 + 2 C_2 C_5 L_2 L_L R_2 R_L s^4 + C_2 C_5 L_2 L_L R_2 s^4 + 4 C_2 C_5 L_2 L_L R_2 s^4 + 4 C_2 C_5 L_2 L_L R_2 s^4 + C_2 C_5 L_2 L_L R_2 R_L s^3 + C_2 L_2 R_L s^3 + C
10.674 INVALID-ORDER-674 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (C_L L_L R_L s^2 + L_L s + R_L) (-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 L_
10.675 INVALID-ORDER-675 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
                                        10.676 INVALID-ORDER-676 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, R_L\right)
H(s) = \frac{R_L \left( -C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 R_5 s - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5 \right)}{2 C_2 C_5 L_2 R_2 R_5 s^3 + C_2 C_5 L_2 R_2 R_5 s^3 + 4 C_2 C_5 L_2 R_5 R_L s^3 + 4 C_2 C_5 R_2 R_5 R_L s^2 + C_2 L_2 R_2 R_5 g_m s^2 + 2 C_2 L_2 R_2 R_5 s^2 + 4 C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + 4 C_2 L_2
10.677 INVALID-ORDER-677 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{1}{C_Ls}\right)
H(s) = \frac{-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2L_2R_5s^2 + C_2L_2R_5s^2 + C_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_5L_2R_2S^4 + 2C_2C_5L_2R_5s^3 + 4C_2C_5L_2R_5s^3 + 4C_2C_5R_2S^3 + 4C_2C_5R_2S^3 + C_2C_LL_2R_5s^3 + C_2C_LL
10.678 INVALID-ORDER-678 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 S_5 s^3 + C_2 L_2 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 R_2 R_5 s - C_5 R_2 R_5 s + C_2 R_2 R_5 s^2 + C_2 R_2 R_5 s^2 + C_2 R_2 R_5 s^2 + C_2 R_2 R_5 R_2 R_5 s^2 + C_2 R_2 R_5 R
10.679 INVALID-ORDER-679 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (C_L R_L s + 1) \left( -C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_2 L_2 R_
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10.671 INVALID-ORDER-671 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

10.680 INVALID-ORDER-680 $Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^3 + C_2 L_2 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_2 s^3 + C_2 C_2 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 R_5 g_m s^3 + 4$

10.681 INVALID-ORDER-681 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

10.682 INVALID-ORDER-682 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5}{C_5R_5s+1}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5g_ms^5 + 4C_2C_5C_LL_2L_LR_5s^5 + 2C_2C_5C_LL_2R_2R_5R_Lg_ms^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_5R_Ls^3 + 4C_2C_5L_2R_5R_Ls^3 + 4C_2C_5L_2R_5R_Ls^3 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_5R_Ls^3 + 4C_2C_5L_2R_5R_Ls^3 + 4C_2C_5L_2R_5$

10.683 INVALID-ORDER-683 $Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_LR_2R_5R_Ls^5 + 2C_2C_5L_2L_LR_2R_5R_Lg_ms^4 + C_2C_5L_2L_LR_2R_5s^4 + 4C_2C_5L_2L_Rs^3 + 4C_2C_5L_2R_2R_5R_Ls^3 + 4C_2C_5L_2L_Rs^3 + 4C_$

10.684 INVALID-ORDER-684 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $\overline{2C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}R_{L}g_{m}s^{5} + C_{2}C_{5}C_{L}L_{2}L_{L}R_{2}R_{5}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{L}R_{5}R_{L}s^{5} + 4C_{2}C_{5}L_{L}L_{R}R_{5}R_{L}s^{4} + 2C_{2}C_{5}L_{2}L_{L}R_{2}R_{5}g_{m}s^{4} + 4C_{2}C_{5}L_{2}L_{L}R_{2}R_{5}s^{3} + 4C_{2}C_{5}L_{2}L_{L}R_{2}R_{5}s^{3} + 4C_{2}C_{5}L_{L}R_{2}R_{5}s^{3} + 4C_{2}$

10.685 INVALID-ORDER-685 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5}{C_5R_5s+1}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_2R_5s^5 + 4C_2C_5C_LL_2L_LR_5R_Ls^5 + C_2C_5C_LL_2R_2R_5R_Ls^4 + 4C_2C_5C_LL_2R_2R_5R_Ls^4 + 4C_2C_5L_2R_2R_5R_Ls^4 + 4C_2C_5L_2R_2$

10.686 INVALID-ORDER-686 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L\right)$

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

10.687 INVALID-ORDER-687 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$

 $H(s) = \frac{C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5R_2s + C_5R_2s$

10.688 INVALID-ORDER-688 $Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ R_5 + \frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$

 $R_L \left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_5 s^3 + C_2 R_2 R_5 s^3 + C_2 R_2 R_5 s^3 + C_2 R_2 R_5 r_5 r_5 \right)$

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10.690 INVALID-ORDER-690 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 s + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_2 R_5 g_m s^2 + C_2 C_5 L_2 R_2 g_m s^2 + C_2 C_5 L_2
10.691 INVALID-ORDER-691 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L_L s \left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 R_5 g_m s^2 + C_2 R_2 R_5 
H(s) = \frac{L_L s \left( C_2 C_5 L_2 R_2 R_5 g_m s^s - C_2 C_5 L_2 R_5 s^s + C_2 C_5 L_2 R_5 s^s + C_2 C_5 R_2 R_5 s^s + C_2 L_2 R_2 g_m s^s + C_2 L_2 s^s + C_2 R_2 R_5 g_m s^s + C_2 R_2 R_2 R_5 g_m s^s + C_2 R_2 R_2 R_5 g_m s^s + C_2 R_
10.692 INVALID-ORDER-692 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}R_{2}R_{5}g_{m}s^{3}-C_{2}C_{5}L_{2}R_{2}s^{3}+C_{2}C_{5}L_{2}R_{5}s^{3}+C_{2}C_{5}R_{2}R_{5}s^{2}+C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}L_{2}R_{2}s^{3}+C_{2}C_{5}L_{2}R_{5}s^{3}+C_{2}C_{5}R_{2}R_{5}s^{2}+C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s^{2}+C_{2}L_{2}R_{2}s
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 s^3 + C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 R_2 g_m s^3 + C_2 C_5 C_L L_2 R_2 s^3 + C_2 C_5 C_L L_2 R
10.693 INVALID-ORDER-693 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
                                              \overline{C_2C_5C_LL_2L_LR_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_LR_2R_Ls^5 + C_2C_5C_LL_2L_LR_2R_5R_Ls^4 + C_2C_5L_2L_LR_2R_5g_ms^4 + 2C_2C_5L_2L_LR_2s^4 + C_2C_5L_2L_LR_2s^4 + C_2C_5L_2L_2R_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2L_2s^4 + C_2C_5L_2L_2L
10.694 INVALID-ORDER-694 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)
H(s) = \frac{(C_2C_5C_LL_2L_LR_2R_5g_ms^5 + 2C_2C_5C_LL_2L_LR_2g^5 + C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5C_LL_2L_Rs^5 + 4C_2C_5C_LL_LR_2s^5 + 4C_2C_5C_LL_2L_LR_2s^5 + 4C_2C_5C_LL_2L_2s^5 + 4C_2C_5C_LL_2s^5 + 4C_2C
10.695 INVALID-ORDER-695 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)
10.696 INVALID-ORDER-696 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \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 s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1 \right)}{C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 g_m s^3 + C_2 C_5 L_2 R_2 s^3 + 4 C_2 C_5 L_2 
10.697 INVALID-ORDER-697 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)
H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5s^2 - C_5R_2s + R_2g_m + 1}{s\left(C_2C_5C_LL_2L_5R_2g_ms^4 + C_2C_5C_LL_2R_2s^3 + C_2C_5L_2R_2s^3 + C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5L_2s^2 + 4C_2C_5L_2s^2 + C_2C_LL_2s^2 + C_2C_LL_2s^2 + C_5C_LL_2s^2 + C_5C_
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10.689 INVALID-ORDER-689 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$

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10.698 INVALID-ORDER-698 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_5s + \frac{1}{C_5s}, \frac{R_L}{C_LR_Ls+1}\right)
10.699 INVALID-ORDER-699 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \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 s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s \left(C_2 C_5 C_L L_2 L_5 R_2 g_m s^4 + C_2 C_5 C_L L_2 R_2 R_2 g_m s^3 + C_2 C_5 C_L L_2 R_2 R_2 s^3 + 4 C_2 C_5 C_L L_2 R_2 s^3 + 4 C_2 C_5 C_L L_2 R_2 g_m s^2 + 4 C_2 C_5 L_2 R_2 g_m s^2 + C_2 C_L L_2 R_2 g_m s^2 
10.700 INVALID-ORDER-700 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \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 s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_2 R_2 s + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1}{s \left(C_2 C_5 C_L L_2 L_5 R_2 g_m s^4 + C_2 C_5 C_L L_2 L_2 S^4 + 2 C_2 C_5 L_2 L_2 R_2 g_m s^4 + 4 C_2 C_5 C_L L_2 R_2 g_m s^4 + 4 C_2 C_5 C_L L_2 R_2 s^3 + 4 C_2 C_5 L_2 L_2 R_2 s^3 + 4 C_2 C_5 L_2 R_2 g_m s^2 + 4 C_2 C_5 L_2 R_2 g_m s^2 + C_2 C_L L_2 R_2 g_m s^2 + 
10.701 INVALID-ORDER-701 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s+\frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L_{LS}\left(C_{2}C_{5}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{5}L_{2}L_{5}s^{4}-C_{2}C_{5}L_{2}R_{2}s^{3}+C_{2}C_{5}L_{5}R_{2}s^{3}+C_{2}L_{2}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}R_{2}g_{m}s^{2}+C_{2}L_{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_{
10.702 INVALID-ORDER-702 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)
                                      \frac{\left(C_{L}L_{L}s^{2}+C_{L}R_{L}s+1\right)\left(C_{2}C_{5}L_{2}L_{5}R_{2}g_{m}s^{4}+C_{2}C_{5}L_{2}L_{5}s^{4}-C_{2}C_{5}L_{2}R_{2}s^{3}+C_{2}L_{5}R_{2}g_{m}s^{2}+C_{2}L_{2}s^{2}+C_{2}L_{2}R_{2}g_{m}s^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{2}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}C_{5}L_{5}L_{5}S^{4}+C_{2}
10.703 INVALID-ORDER-703 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)
H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_LR_2R_Ls^5 + C_2C_5L_2L_5L_Rg_ms^5 + C_2C_5L_2L_5L_Ls^5 + C_2C_5L_2L_5R_Ls^6 + C_2C_5L_2L
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10.704 INVALID-ORDER-704
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

 $H(s) = \frac{(C_L L_L R_L s^5 + C_2 C_5 C_L L_2 L_5 L_L R_2 g_m s^6 + C_2 C_5 C_L L_2 L_L R_2 R_L g_m s^5 + C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 C_L L_2 L_L R_2 s^5 + 4 C_2 C_5 L_2 L_L R_2 s^5 + 4 C_2 C_5 L_2 L_L R_2 s^5 + 4 C_2 C_5 L_L L_L R_2$

10.705 INVALID-ORDER-705
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2s^5 + C$

10.706 INVALID-ORDER-706
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, R_L\right)$$

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

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10.707 INVALID-ORDER-707 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{1}{C_Ls}\right)
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 $H(s) = \frac{-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2}{C_2C_5C_LL_2L_5R_2s^5 + 2C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5s^4 + 4C_2C_5L_2L_5s^4 + C_2C_LL_2L_5s^4 + C_2C_LL_2R_2s^3 + C_2C_LL_2R_2s^3 + 2C_2L_2R_2s^3 + 2C_2L_2R_2s^3 + 2C_2L_2R_2s^3 + 2C_5L_5R_2s^3 + 2C_5L_5R_2s^3$

10.708 INVALID-ORDER-708 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$

10.709 INVALID-ORDER-709 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{(C_L R_L s + 1) \left(-C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_4 L_5 R_2 g_m s^4 + C_2 C_5 L_5 R_2 g_m s^4 + C_2 C$

10.710 INVALID-ORDER-710 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(-C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 + C_2 R_2 g_m s^3 + C_2 L_2 L_2 R_2 s^2 + C_2 R_2 g_m s^4 + C_2 C_2 L_2 L_2 R_2 g_m s^4 + C_2 C_2 R_2$

10.711 INVALID-ORDER-711 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$

 $H(s) = \frac{L_L s \left(-C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 + C_2 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 - C_5 L_5 R_2 s^2 - C_5 L_5 R_2 s^4 + C_2 C_5 L_4 L_5 L_4 R_2 s^4 + C_4 L_5 L_4 R_2 s^4 + C_4 L_5 L_4 R_2 s^4 + C_4 L_5 L_4 R_2 s^4 + C_5 L_5 L_5 R_2 s^4 + C_5 L_5$

10.712 INVALID-ORDER-712 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + 2C_2C_5C_LL_2L_5R_2g_ms^5 + 4C_2C_5C_LL_2L_5R_2s^5 + 4C_2C_5C_LL_2L_5R_2s^5$

10.713 INVALID-ORDER-713 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + 2C_2C_5L_2L_5L_LR_2R_Lgms^5 + C_2C_5L_2L_5L_LR_2s^5 + 4C_2C_5L_2L_5L_LR_2s^5 + 4C_2C_5L_2L_5L_LR_2s^4 + 4C_2C_5L_5L_LR_2s^4 + 4C_2C_$

10.714 INVALID-ORDER-714 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_5L_LR_2s^6 + 4C_2C_5L_LL_5L_LR_2s^6 + 4C_2C_5L_LL_5L_LR_$

10.715 INVALID-ORDER-715 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1}, \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$

 $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_LR_2s^5 + 4C_2C_5C_LL$

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10.716 INVALID-ORDER-716 Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L\right)
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 $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_$

10.717 INVALID-ORDER-717
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2R_2s^3 + C_2C_5L_2R_2s$

10.718 INVALID-ORDER-718
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s+R_5+\frac{1}{C_5s}, \ \frac{R_L}{C_LR_Ls+1}\right)$$

10.719 INVALID-ORDER-719
$$Z(s) = \left(\infty, \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, R_L + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{(C_L R_L s + 1) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 S_3 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5$

10.720 INVALID-ORDER-720
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + \frac{1}{C_Ls}\right)$$

 $H(s) = \frac{\left(C_L L_L s^2 + 1\right) \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 R_2 S_3 + C_2 C_5 L_2 R_2 s^3 + C_2$

10.721 INVALID-ORDER-721
$$Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, \frac{L_Ls}{C_LL_Ls^2+1}\right)$$

10.722 INVALID-ORDER-722 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, L_5s + R_5 + \frac{1}{C_5s}, L_Ls + R_L + \frac{1}{C_Ls}\right)$

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

10.723 INVALID-ORDER-723
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + C_2C_5C_LL_2L_LR_2R_5s + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_L$

10.724 INVALID-ORDER-724
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

 $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL_2s$

- 10.725 INVALID-ORDER-725 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ L_5s + R_5 + \frac{1}{C_5s}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_LR_2g_ms^5 + C_2C_5C_LL_2L_LR_2s^5 + C_2C_5C_LL_2L_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2L_2s^5 + C_2C_5C_LL_2s^5 + C_2C_5C_LL$
- 10.726 INVALID-ORDER-726 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, R_L\right)$

 $H(s) = \frac{R_L \left(-C_2 C_5 L_2 L_5 R_2 R_5 s^4 + C_2 L_2 L_5 R_2 R_5 g_m s^3 - C_2 L_2 L_5 R_2 s^3 + C_2 L_2 L_5 R_2 s^3 + C_2 L_2 R_2 R_5 s^2 + C_2 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 s^2 - C_5 L_5 R_2 R_5 r_3 + C_2 L_2 L_5 R_2 R_5 R_2 R_5$

10.727 INVALID-ORDER-727 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \frac{1}{C_Ls}\right)$

 $H(s) = \frac{-C_2C_5L_2L_5R_2R_5s^4 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 + C_2L_2L_5R_2s^3 + C_2L_2R_2s^3 +$

10.728 INVALID-ORDER-728 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L}{C_LR_Ls+1}\right)$

 $H(s) = \frac{R_L \left(S_L + S_L +$

10.729 INVALID-ORDER-729 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ R_L + \frac{1}{C_Ls}\right)$

 $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2R_5s^5 + 4C_2C_5C_LL_2L_5R_2R_5g_ms^4 + 4C_2C_5L_2L_5R_2R_5g_ms^4 + 4C_2C_5L_2L_5R_5g_ms^4 + 4C_2C_5L_5R_5g_ms^4 + 4C_2C_5L_2L_5R_5g_ms^4 + 4C_2$

- 10.730 INVALID-ORDER-730 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ L_Ls + \frac{1}{C_Ls}\right)$
- 10.731 INVALID-ORDER-731 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

- 10.732 INVALID-ORDER-732 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, L_Ls + R_L + \frac{1}{C_Ls}\right)$
- 10.733 INVALID-ORDER-733 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^6 + 2C_2C_5L_2L_5L_LR_2R_5R_Lg_ms^5 + C_2C_5L_2L_5L_LR_2R_5s^5 + 4C_2C_5L_2L_5L_LR_2R_5R_Ls^4 + 4C_2C_5L_5L_LR_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_5R_Ls^4 + 4C_2C_5L_2R_2R_5R_Ls^4 + 4C_2C_5L_2R_5R$

- 10.734 INVALID-ORDER-734 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- 10.735 INVALID-ORDER-735 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5}, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
- $H(s) = -\frac{1}{2C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2R_5s^6 + 4C_2C_5C_LL_2L_5L_LR_5R_Ls^6 + 4C_2C_5C_LL_2L_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_LL_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_LR_2R_5R_Ls^5 + 4C_2C_5L_LR_2R_5R_Ls^5 + 4$
- 10.736 INVALID-ORDER-736 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 s_3 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^3 + C_2 L_2 L_5 R_3 s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_2 s^2 + C_2$
- 10.737 INVALID-ORDER-737 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \frac{L_5s}{C_5L_5s^2+1} + R_5, \frac{1}{C_Ls}\right)$
- $\frac{C_2C_5L_2L_5R_2g_ms^4 C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_2g_ms^2 C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2L_2R_$
- 10.738 INVALID-ORDER-738 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2L_5R_2R_Ls^4 + C_2C_5L_2L_5R_2R_2g_ms^4 + 2C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5$
- 10.739 INVALID-ORDER-739 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{\left(C_L R_L s + 1\right) \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^5 + C_2 C$
- 10.740 INVALID-ORDER-740 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + \frac{1}{C_Ls}\right)$
- 10.741 INVALID-ORDER-741 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_RR_2R_5g_ms^6 + C_2C_5C_LL_2L_5L_RR_2s^6 + C_2C_5C_LL_2L_5L_RR_2s^6 + C_2C_5C_LL_5L_RR_2s^5 + 2C_2C_5L_2L_5L_RR_2g_ms^5 + 4C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_5L_RR_2s^4 + C_2C_5L_RR_2s^4 + C_2C_5L_RR_$
- 10.742 INVALID-ORDER-742 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ L_Ls + R_L + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + 2C_2C_5C_LL_2L_5R_2s^5 + C_2C_5C_LL_2L_5R_2s^5 + 4C_2C_5C_LL_2L_5R_2s^5 +$

- 10.743 INVALID-ORDER-743 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_LR_Ls}{C_LL_RL_s^2+L_Ls+R_L}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5R_Lg_ms^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5C_LL_2L_5L_LR_2R_Ls^6 + C_2C_5L_LL_5L_LR_2R_5R_Ls^5 + C_2C_5L_2L_5L_LR_2R_Lg_ms^5 + C_2C_5L_2L_5L_LR_2s^5 + C_2C_5L_2L_5L_RL_2s^5 + C_2C_5L_2L_2L_2s^5 + C_2C_5L_2L_2L_2s^5 + C_2C_5L_2L_2s^5 + C_2C_5L_2s^5 + C_2C_5L_2s$
- 10.744 INVALID-ORDER-744 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$
- 10.745 INVALID-ORDER-745 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{L_5s}{C_5L_5s^2+1} + R_5, \ \frac{R_L\left(C_LL_Ls^2+1\right)}{C_LL_Ls^2+C_LR_Ls+1}\right)$
- 10.746 INVALID-ORDER-746 $Z(s) = \left(\infty, \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \infty, \infty, \infty, \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, R_L\right)$
- $H(s) = \frac{R_L \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 R_2 R_5 s^3 + C_2 C_5 L_2 R_2 g_m s^2 C_2 L_2 R_2 g_m s^2 C_2 L_2 R_2 g_m s^4 C_2 C_5 L_2 R_2 g_m s^4 + C_2$
- 10.747 INVALID-ORDER-747 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{1}{C_Ls}\right)$
- $H(s) = \frac{C_2C_5L_2L_5R_2S_9ms^4 C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2R_2S_5s^4 + C_2C_5L_2R_2S_5$
- 10.748 INVALID-ORDER-748 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L}{C_LR_Ls+1}\right)$
- $H(s) = \frac{1}{C_2C_5C_LL_2L_5R_2R_5R_Lg_ms^5 + C_2C_5C_LL_2L_5R_2R_Ls^5 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5C_LL_2R_2R_5R_Ls^4 + C_2C_5L_2L_5R_2R_2g_ms^4 + C_2C_5L_2L_5R_2R_2g_ms^4 + C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_2s$
- 10.749 INVALID-ORDER-749 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ R_L + \frac{1}{C_Ls}\right)$
- 10.750 INVALID-ORDER-750 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + \frac{1}{C_Ls}\right)$
- $H(s) = \frac{1}{2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + 4C_2C_5C_LL_2L_5L_Ls^6 + C_2C_5C_LL_2L_5R_2g_ms^5 + C_2C_5C_LL_2L_5R_2s^5 + C_2C_$
- 10.751 INVALID-ORDER-751 $Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1}\right)$

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10.752 INVALID-ORDER-752 Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ L_Ls + R_L + \frac{1}{C_Ls}\right)
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 $H(s) = \frac{1}{2C_{2}C_{5}C_{L}L_{2}L_{5}L_{L}R_{2}g_{m}s^{6} + 4C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}R_{5}g_{m}s^{5} + 2C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + 2C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_{5}R_{2}s^{5} + 4C_{2}C_{5}C_{L}L_{2}L_$

10.753 INVALID-ORDER-753
$$Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_LR_Ls}{C_LL_LR_Ls^2+L_Ls+R_L}\right)$$

10.754 INVALID-ORDER-754
$$Z(s) = \left(\infty, \ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{L_Ls}{C_LL_Ls^2+1} + R_L\right)$$

$$H(s) = \frac{1}{C_2C_5C_LL_2L_5L_LR_2R_5g_ms^6 + 2C_2C_5C_LL_2L_5L_LR_2g_ms^6 + C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_LR_2s^6 + 4C_2C_5C_LL_2L_5L_Rs^6 + 4C_2C_5C_LL_2L_5L_2L_5L_2L_5L_2L_5L_2$$

10.755 INVALID-ORDER-755
$$Z(s) = \left(\infty, \ \frac{R_2(C_2L_2s^2+1)}{C_2L_2s^2+C_2R_2s+1}, \ \infty, \ \infty, \ \frac{R_5(C_5L_5s^2+1)}{C_5L_5s^2+C_5R_5s+1}, \ \frac{R_L(C_LL_Ls^2+1)}{C_LL_Ls^2+C_LR_Ls+1}\right)$$

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