# Filter Summary Report: TIA,simple,Z2,Z3,Z5

Generated by MacAnalog-Symbolix

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## Contents

# 1 Examined $H(z)$ for TIA simple Z2 Z3 Z5: $\frac{Z_3(Z_2Z_5g_m-Z_2+Z_5)}{2Z_2Z_3g_m+Z_2Z_5g_m+Z_2+4Z_3+Z_5}$

$$H(z) = \frac{Z_3\left(Z_2Z_5g_m - Z_2 + Z_5\right)}{2Z_2Z_3g_m + Z_2Z_5g_m + Z_2 + 4Z_3 + Z_5}$$

# 2 HP

# 3 BP

## 3.1 BP-1 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3s\left(R_2R_5g_m - R_2 + R_5\right)}{C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + C_3L_3R_5s^2 + 2L_3R_2g_ms + 4L_3s + R_2R_5g_m + R_2 + R_5}$$

**Parameters:**

Q: $\frac{C_3\sqrt{\frac{1}{C_3L_3}}(R_2R_5g_m+R_2+R_5)}{2(R_2g_m+2)}$
wo: $\sqrt{\frac{1}{C_3L_3}}$
bandwidth: $\frac{2(R_2g_m+2)}{C_3(R_2R_5g_m+R_2+R_5)}$
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 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(R_2R_5g_m - R_2 + R_5\right)}{C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_3s^2 + C_3L_3R_3R_5s^2 + 2L_3R_2R_3g_ms + L_3R_2R_5g_ms + L_3R_2s + 4L_3R_3s + L_3R_5s + R_2R_3R_5g_m + R_2R_3 + R_3R_5}$$

**Parameters:**

Q: $\frac{C_3R_3\sqrt{\frac{1}{C_3L_3}}(R_2R_5g_m+R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
wo: $\sqrt{\frac{1}{C_3L_3}}$
bandwidth: $\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_3R_3(R_2R_5g_m+R_2+R_5)}$
K-LP: 0
K-HP: 0
K-BP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
Qz: 0
Wz: None

# 4 LP

# 5 BS

### 5.1 BS-1 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2R_2 g_m + 4}$$

**Parameters:**

Q: $\frac{2L_3\sqrt{\frac{1}{C_3 L_3}}(R_2 g_m+2)}{R_2 R_5 g_m+R_2+R_5}$
wo: $\sqrt{\frac{1}{C_3 L_3}}$
bandwidth: $\frac{R_2 R_5 g_m+R_2+R_5}{2L_3(R_2 g_m+2)}$
K-LP: $\frac{R_2 R_5 g_m-R_2+R_5}{2(R_2 g_m+2)}$
K-HP: $\frac{R_2 R_5 g_m-R_2+R_5}{2(R_2 g_m+2)}$
K-BP: 0
Qz: None
Wz: $\sqrt{\frac{1}{C_3 L_3}}$

### 5.2 BS-2 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2 + 1\right)\left(R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 L_3 R_2 R_3 g_m s^2 + C_3 L_3 R_2 R_5 g_m s^2 + C_3 L_3 R_2 s^2 + 4C_3 L_3 R_3 s^2 + C_3 L_3 R_5 s^2 + C_3 R_2 R_3 R_5 g_m s + C_3 R_2 R_3 s + C_3 R_3 R_5 s + 2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{L_3\sqrt{\frac{1}{C_3 L_3}}(2R_2 R_3 g_m+R_2 R_5 g_m+R_2+4R_3+R_5)}{R_3(R_2 R_5 g_m+R_2+R_5)}$
wo: $\sqrt{\frac{1}{C_3 L_3}}$
bandwidth: $\frac{R_3(R_2 R_5 g_m+R_2+R_5)}{L_3(2R_2 R_3 g_m+R_2 R_5 g_m+R_2+4R_3+R_5)}$
K-LP: $\frac{R_3(R_2 R_5 g_m-R_2+R_5)}{2R_2 R_3 g_m+R_2 R_5 g_m+R_2+4R_3+R_5}$
K-HP: $\frac{R_3(R_2 R_5 g_m-R_2+R_5)}{2R_2 R_3 g_m+R_2 R_5 g_m+R_2+4R_3+R_5}$
K-BP: 0
Qz: None
Wz: $\sqrt{\frac{1}{C_3 L_3}}$

## 6 GE

### 6.1 GE-1 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

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

**Parameters:**

Q: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(R_2 g_m+1)}{2R_2 R_3 g_m+R_2+4R_3}$
wo: $\sqrt{\frac{1}{C_5 L_5}}$
bandwidth: $\frac{2R_2 R_3 g_m+R_2+4R_3}{L_5(R_2 g_m+1)}$
K-LP: $R_3$
K-HP: $R_3$
K-BP: $-\frac{R_2 R_3}{2R_2 R_3 g_m+R_2+4R_3}$
Qz: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(-R_2 g_m-1)}{R_2}$
Wz: $\sqrt{\frac{1}{C_5 L_5}}$

### 6.2 GE-2 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

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

**Parameters:**

Q: $\frac{C_5\sqrt{\frac{1}{C_5 L_5}}(2R_2 R_3 g_m + R_2 + 4R_3)}{R_2 g_m + 1}$
wo: $\sqrt{\frac{1}{C_5 L_5}}$
bandwidth: $\frac{R_2 g_m + 1}{C_5(2R_2 R_3 g_m + R_2 + 4R_3)}$
K-LP: $-\frac{R_2 R_3}{2R_2 R_3 g_m + R_2 + 4R_3}$
K-HP: $-\frac{R_2 R_3}{2R_2 R_3 g_m + R_2 + 4R_3}$
K-BP: $R_3$
Qz: $-\frac{C_5 R_2\sqrt{\frac{1}{C_5 L_5}}}{R_2 g_m + 1}$
Wz: $\sqrt{\frac{1}{C_5 L_5}}$

### 6.3 GE-3 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

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

**Parameters:**

Q: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(R_2 g_m + 1)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$
wo: $\sqrt{\frac{1}{C_5 L_5}}$
bandwidth: $\frac{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}{L_5(R_2 g_m + 1)}$
K-LP: $R_3$
K-HP: $R_3$
K-BP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$
Qz: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(R_2 g_m + 1)}{R_2 R_5 g_m - R_2 + R_5}$
Wz: $\sqrt{\frac{1}{C_5 L_5}}$

### 6.4 GE-4 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

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

**Parameters:**

Q: $\frac{C_5 R_5\sqrt{\frac{1}{C_5 L_5}}(2R_2 R_3 g_m + R_2 + 4R_3)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$
wo: $\sqrt{\frac{1}{C_5 L_5}}$
bandwidth: $\frac{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}{C_5 R_5(2R_2 R_3 g_m + R_2 + 4R_3)}$
K-LP: $-\frac{R_2 R_3}{2R_2 R_3 g_m + R_2 + 4R_3}$
K-HP: $-\frac{R_2 R_3}{2R_2 R_3 g_m + R_2 + 4R_3}$
K-BP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$
Qz: $-\frac{C_5 R_2 R_5\sqrt{\frac{1}{C_5 L_5}}}{R_2 R_5 g_m - R_2 + R_5}$
Wz: $\sqrt{\frac{1}{C_5 L_5}}$

### 6.5 GE-5 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

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

**Parameters:**

Q: $\frac{C_5\sqrt{\frac{1}{C_5 L_5}}(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}{R_2 g_m + 1}$

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

bandwidth: $\frac{R_2 g_m + 1}{C_5(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}$

K-LP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-HP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-BP: $R_3$

Qz: $\frac{C_5\sqrt{\frac{1}{C_5 L_5}}(R_2 R_5 g_m - R_2 + R_5)}{R_2 g_m + 1}$

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

### 6.6 GE-6 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

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

**Parameters:**

Q: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}{R_5(2R_2 R_3 g_m + R_2 + 4R_3)}$

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

bandwidth: $\frac{R_5(2R_2 R_3 g_m + R_2 + 4R_3)}{L_5(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}$

K-LP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-HP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-BP: $-\frac{R_2 R_3}{2R_2 R_3 g_m + R_2 + 4R_3}$

Qz: $\frac{L_5\sqrt{\frac{1}{C_5 L_5}}(-R_2 R_5 g_m + R_2 - R_5)}{R_2 R_5}$

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

### 6.7 GE-7 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + 2C_3 R_2 R_3 g_m s + C_3 R_2 R_5 g_m s + C_3 R_2 s + 4C_3 R_3 s + C_3 R_5 s + 2R_2 g_m + 4}$$

**Parameters:**

Q: $\frac{2L_3\sqrt{\frac{1}{C_3 L_3}}(R_2 g_m + 2)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

wo: $\sqrt{\frac{1}{C_3 L_3}}$

bandwidth: $\frac{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}{2L_3(R_2 g_m + 2)}$

K-LP: $\frac{R_2 R_5 g_m - R_2 + R_5}{2(R_2 g_m + 2)}$

K-HP: $\frac{R_2 R_5 g_m - R_2 + R_5}{2(R_2 g_m + 2)}$

K-BP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

Qz: $\frac{L_3\sqrt{\frac{1}{C_3 L_3}}}{R_3}$

Wz: $\sqrt{\frac{1}{C_3 L_3}}$

### 6.8 GE-8 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(R_2 R_5 g_m - R_2 + R_5\right)\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{2C_3 L_3 R_2 R_3 g_m s^2 + C_3 L_3 R_2 R_5 g_m s^2 + C_3 L_3 R_2 s^2 + 4C_3 L_3 R_3 s^2 + C_3 L_3 R_5 s^2 + 2L_3 R_2 g_m s + 4L_3 s + 2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{C_3\sqrt{\frac{1}{C_3 L_3}}(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}{2(R_2 g_m + 2)}$

wo: $\sqrt{\frac{1}{C_3 L_3}}$

bandwidth: $\frac{2(R_2 g_m + 2)}{C_3(2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5)}$

K-LP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-HP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

K-BP: $\frac{R_2 R_5 g_m - R_2 + R_5}{2(R_2 g_m + 2)}$

Qz: $C_3 R_3\sqrt{\frac{1}{C_3 L_3}}$

Wz: $\sqrt{\frac{1}{C_3 L_3}}$

### 6.9 GE-9 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2 L_2 R_3 g_m s^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 + 4C_2 R_3 s + C_2 R_5 s + 2R_3 g_m + R_5 g_m + 1}$$

**Parameters:**

Q: $\frac{L_2\sqrt{\frac{1}{C_2 L_2}}(2R_3 g_m + R_5 g_m + 1)}{4R_3 + R_5}$

wo: $\sqrt{\frac{1}{C_2 L_2}}$

bandwidth: $\frac{4R_3 + R_5}{L_2(2R_3 g_m + R_5 g_m + 1)}$

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

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

K-BP: $\frac{R_3 R_5}{4R_3 + R_5}$

Qz: $\frac{L_2\sqrt{\frac{1}{C_2 L_2}}(R_5 g_m - 1)}{R_5}$

Wz: $\sqrt{\frac{1}{C_2 L_2}}$

### 6.10 GE-10 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2 L_2 R_3 g_m s^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 + 2C_2 R_2 R_3 g_m s + C_2 R_2 R_5 g_m s + C_2 R_2 s + 4C_2 R_3 s + C_2 R_5 s + 2R_3 g_m + R_5 g_m + 1}$$

**Parameters:**

Q: $\frac{L_2\sqrt{\frac{1}{C_2 L_2}}(2R_3 g_m + R_5 g_m + 1)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

wo: $\sqrt{\frac{1}{C_2 L_2}}$

bandwidth: $\frac{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}{L_2(2R_3 g_m + R_5 g_m + 1)}$

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

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

K-BP: $\frac{R_3(R_2 R_5 g_m - R_2 + R_5)}{2R_2 R_3 g_m + R_2 R_5 g_m + R_2 + 4R_3 + R_5}$

Qz: $\frac{L_2\sqrt{\frac{1}{C_2 L_2}}(R_5 g_m - 1)}{R_2 R_5 g_m - R_2 + R_5}$

Wz: $\sqrt{\frac{1}{C_2 L_2}}$

### 6.11 GE-11 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5\right)}{2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 2L_2R_3g_ms + L_2R_5g_ms + L_2s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{C_2\sqrt{\frac{1}{C_2L_2}}(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}{2R_3g_m+R_5g_m+1}$
wo: $\sqrt{\frac{1}{C_2L_2}}$
bandwidth: $\frac{2R_3g_m+R_5g_m+1}{C_2(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-BP: $\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$
Qz: $\frac{C_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m-R_2+R_5)}{R_5g_m-1}$
Wz: $\sqrt{\frac{1}{C_2L_2}}$

### 6.12 GE-12 $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{L_2\sqrt{\frac{1}{C_2L_2}}(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}{R_2(4R_3+R_5)}$
wo: $\sqrt{\frac{1}{C_2L_2}}$
bandwidth: $\frac{R_2(4R_3+R_5)}{L_2(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-BP: $\frac{R_3R_5}{4R_3+R_5}$
Qz: $\frac{L_2\sqrt{\frac{1}{C_2L_2}}(R_2R_5g_m-R_2+R_5)}{R_2R_5}$
Wz: $\sqrt{\frac{1}{C_2L_2}}$

# 7 AP

# 8 INVALID-NUMER

### 8.1 INVALID-NUMER-1 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_3C_5R_2R_5s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5R_2R_5g_ms + 4C_5R_5s + 2R_2g_m + 4}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_3C_5R_2R_5\sqrt{\frac{R_2g_m+2}{C_3C_5R_2R_5}}}{C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}$
wo: $\sqrt{2}\sqrt{\frac{R_2g_m+2}{C_3C_5R_2R_5}}$
bandwidth: $\frac{C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}{C_3C_5R_2R_5}$
K-LP: $\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$
K-HP: 0
K-BP: $-\frac{C_5R_2R_5}{C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}$
Qz: 0

Wz: None

## 8.2 INVALID-NUMER-2 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5R_2s + R_2g_m + 1\right)}{C_3C_5R_2R_3s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**Parameters:**

Q: $\frac{C_3C_5R_2R_3\sqrt{\frac{R_2g_m+1}{C_3C_5R_2R_3}}}{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
wo: $\sqrt{\frac{R_2g_m+1}{C_3C_5R_2R_3}}$
bandwidth: $\frac{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}{C_3C_5R_2R_3}$
K-LP: $R_3$
K-HP: 0
K-BP: $-\frac{C_5R_2R_3}{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
Qz: 0
Wz: None

## 8.3 INVALID-NUMER-3 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_3C_5R_2R_3R_5s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{C_3C_5R_2R_3R_5\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_3C_5R_2R_3R_5}}}{C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
wo: $\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_3C_5R_2R_3R_5}}$
bandwidth: $\frac{C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}{C_3C_5R_2R_3R_5}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: 0
K-BP: $-\frac{C_5R_2R_3R_5}{C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
Qz: 0
Wz: None

## 8.4 INVALID-NUMER-4 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

**Parameters:**

Q: $\frac{C_3C_5R_3\sqrt{\frac{R_2g_m+1}{C_3C_5R_3(R_2R_5g_m+R_2+R_5)}}(R_2R_5g_m+R_2+R_5)}{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}$
wo: $\sqrt{\frac{R_2g_m+1}{C_3C_5R_3(R_2R_5g_m+R_2+R_5)}}$
bandwidth: $\frac{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}{C_3C_5R_3(R_2R_5g_m+R_2+R_5)}$
K-LP: $R_3$
K-HP: 0
K-BP: $\frac{C_5R_3(R_2R_5g_m-R_2+R_5)}{C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}$
Qz: 0
Wz: None

## 8.5 INVALID-NUMER-5 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 s - C_5 s + g_m\right)}{4C_2C_5R_3s^2 + C_2 s + 2C_5R_3g_m s + C_5 s + g_m}$$

**Parameters:**

Q: $\frac{2C_2C_5R_3\sqrt{\frac{g_m}{C_2C_5R_3}}}{C_2+2C_5R_3g_m+C_5}$
wo: $\frac{\sqrt{\frac{g_m}{C_2C_5R_3}}}{2}$
bandwidth: $\frac{C_2+2C_5R_3g_m+C_5}{4C_2C_5R_3}$
K-LP: $R_3$
K-HP: 0
K-BP: $\frac{R_3(C_2-C_5)}{C_2+2C_5R_3g_m+C_5}$
Qz: 0
Wz: None

## 8.6 INVALID-NUMER-6 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{4C_2C_5R_3R_5s^2 + 4C_2R_3s + C_2R_5s + 2C_5R_3R_5g_m s + C_5R_5s + 2R_3g_m + R_5g_m + 1}$$

**Parameters:**

Q: $\frac{2C_2C_5R_3R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_5R_3R_5}}}{4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}$
wo: $\frac{\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_5R_3R_5}}}{2}$
bandwidth: $\frac{4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}{4C_2C_5R_3R_5}$
K-LP: $\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$
K-HP: 0
K-BP: $\frac{R_3R_5(C_2-C_5)}{4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}$
Qz: 0
Wz: None

## 8.7 INVALID-NUMER-7 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2R_5s + R_5g_m - 1}{C_2C_3R_5s^2 + 4C_2s + C_3R_5g_m s + C_3s + 2g_m}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_2C_3R_5\sqrt{\frac{g_m}{C_2C_3R_5}}}{4C_2+C_3R_5g_m+C_3}$
wo: $\sqrt{2}\sqrt{\frac{g_m}{C_2C_3R_5}}$
bandwidth: $\frac{4C_2+C_3R_5g_m+C_3}{C_2C_3R_5}$
K-LP: $\frac{R_5g_m-1}{2g_m}$
K-HP: 0
K-BP: $\frac{C_2R_5}{4C_2+C_3R_5g_m+C_3}$
Qz: 0
Wz: None

## 8.8 INVALID-NUMER-8 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_3R_5s^2 + 4C_2C_5R_5s^2 + 4C_2s + C_3C_5R_5s^2 + C_3R_5g_m s + C_3s + 2C_5R_5g_m s + 2g_m}$$

**Parameters:**

Q: $\frac{\sqrt{2}R_5\sqrt{\frac{g_m}{R_5(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{4C_2+C_3R_5g_m+C_3+2C_5R_5g_m}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{R_5(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{4C_2+C_3R_5g_m+C_3+2C_5R_5g_m}{R_5(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $\frac{R_5g_m-1}{2g_m}$
K-HP: 0
K-BP: $\frac{R_5(C_2-C_5)}{4C_2+C_3R_5g_m+C_3+2C_5R_5g_m}$
Qz: 0
Wz: None

## 8.9 INVALID-NUMER-9 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_5s + R_5g_m - 1\right)}{C_2C_3R_3R_5s^2 + 4C_2R_3s + C_2R_5s + C_3R_3R_5g_ms + C_3R_3s + 2R_3g_m + R_5g_m + 1}$$

**Parameters:**

Q: $\frac{C_2C_3R_3R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_3R_3R_5}}}{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3}$
wo: $\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_3R_3R_5}}$
bandwidth: $\frac{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3}{C_2C_3R_3R_5}$
K-LP: $\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$
K-HP: 0
K-BP: $\frac{C_2R_3R_5}{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3}$
Qz: 0
Wz: None

## 8.10 INVALID-NUMER-10 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2s - C_5s + g_m\right)}{C_2C_3R_3s^2 + 4C_2C_5R_3s^2 + C_2s + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5s + g_m}$$

**Parameters:**

Q: $\frac{R_3\sqrt{\frac{g_m}{R_3(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{C_2+C_3R_3g_m+2C_5R_3g_m+C_5}$
wo: $\sqrt{\frac{g_m}{R_3(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{C_2+C_3R_3g_m+2C_5R_3g_m+C_5}{R_3(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $R_3$
K-HP: 0
K-BP: $\frac{R_3(C_2-C_5)}{C_2+C_3R_3g_m+2C_5R_3g_m+C_5}$
Qz: 0
Wz: None

## 8.11 INVALID-NUMER-11 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{C_2C_3R_3R_5s^2 + 4C_2C_5R_3R_5s^2 + 4C_2R_3s + C_2R_5s + C_3C_5R_3R_5s^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5R_3R_5g_ms + C_5R_5s + 2R_3g_m + R_5g_m + 1}$$

**Parameters:**

Q: $\frac{R_3R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5}$
wo: $\sqrt{\frac{2R_3g_m+R_5g_m+1}{R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5}{R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$
K-HP: 0
K-BP: $\frac{R_3R_5(C_2-C_5)}{4C_2R_3+C_2R_5+C_3R_3R_5g_m+C_3R_3+2C_5R_3R_5g_m+C_5R_5}$
Qz: 0
Wz: None

## 8.12 INVALID-NUMER-12 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{4C_2C_5R_2R_3s^2 + C_2R_2s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**Parameters:**

Q: $\frac{2C_2C_5R_2R_3\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_3}}}{C_2R_2+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
wo: $\frac{\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_3}}}{2}$
bandwidth: $\frac{C_2R_2+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}{4C_2C_5R_2R_3}$
K-LP: $R_3$
K-HP: 0
K-BP: $\frac{R_2R_3(C_2-C_5)}{C_2R_2+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
Qz: 0
Wz: None

## 8.13 INVALID-NUMER-13 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{2C_2C_5R_2R_3R_5\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_2C_5R_2R_3R_5}}}{4C_2R_2R_3+C_2R_2R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
wo: $\frac{\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_2C_5R_2R_3R_5}}}{2}$
bandwidth: $\frac{4C_2R_2R_3+C_2R_2R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}{4C_2C_5R_2R_3R_5}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: 0
K-BP: $\frac{R_2R_3R_5(C_2-C_5)}{4C_2R_2R_3+C_2R_2R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
Qz: 0
Wz: None

## 8.14 INVALID-NUMER-14 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3R_2R_5s^2 + 4C_2R_2s + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2R_2g_m + 4}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_2C_3R_2R_5\sqrt{\frac{R_2g_m+2}{C_2C_3R_2R_5}}}{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5}$
wo: $\sqrt{2}\sqrt{\frac{R_2g_m+2}{C_2C_3R_2R_5}}$
bandwidth: $\frac{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5}{C_2C_3R_2R_5}$
K-LP: $\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$
K-HP: 0
K-BP: $\frac{C_2R_2R_5}{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5}$
Qz: 0
Wz: None

## 8.15 INVALID-NUMER-15 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3R_2R_5s^2 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + C_3C_5R_2R_5s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5R_2R_5g_ms + 4C_5R_5s + 2R_2g_m + 4}$$

**Parameters:**

Q: $\frac{\sqrt{2}R_2R_5\sqrt{\frac{R_2g_m+2}{R_2R_5(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}$

wo: $\sqrt{2}\sqrt{\frac{R_2 g_m+2}{R_2R_5(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}{R_2R_5(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$
K-HP: 0
K-BP: $\frac{R_2R_5(C_2-C_5)}{4C_2R_2+C_3R_2R_5g_m+C_3R_2+C_3R_5+2C_5R_2R_5g_m+4C_5R_5}$
Qz: 0
Wz: None

## 8.16 INVALID-NUMER-16 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{C_2C_3R_2R_3R_5\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_2C_3R_2R_3R_5}}}{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5}$
wo: $\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{C_2C_3R_2R_3R_5}}$
bandwidth: $\frac{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5}{C_2C_3R_2R_3R_5}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: 0
K-BP: $\frac{C_2R_2R_3R_5}{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5}$
Qz: 0
Wz: None

## 8.17 INVALID-NUMER-17 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3R_2R_3s^2 + 4C_2C_5R_2R_3s^2 + C_2R_2s + C_3C_5R_2R_3s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**Parameters:**

Q: $\frac{R_2R_3\sqrt{\frac{R_2g_m+1}{R_2R_3(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{C_2R_2+C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
wo: $\sqrt{\frac{R_2g_m+1}{R_2R_3(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{C_2R_2+C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}{R_2R_3(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $R_3$
K-HP: 0
K-BP: $\frac{R_2R_3(C_2-C_5)}{C_2R_2+C_3R_2R_3g_m+C_3R_3+2C_5R_2R_3g_m+C_5R_2+4C_5R_3}$
Qz: 0
Wz: None

## 8.18 INVALID-NUMER-18 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3R_2R_3R_5s^2 + 4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + C_3C_5R_2R_3R_5s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**Parameters:**

Q: $\frac{R_2R_3R_5\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{R_2R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}}(C_2C_3+4C_2C_5+C_3C_5)}{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
wo: $\sqrt{\frac{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}{R_2R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}}$
bandwidth: $\frac{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}{R_2R_3R_5(C_2C_3+4C_2C_5+C_3C_5)}$
K-LP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$
K-HP: 0
K-BP: $\frac{R_2R_3R_5(C_2-C_5)}{4C_2R_2R_3+C_2R_2R_5+C_3R_2R_3R_5g_m+C_3R_2R_3+C_3R_3R_5+2C_5R_2R_3R_5g_m+C_5R_2R_5+4C_5R_3R_5}$
Qz: 0
Wz: None

### 8.19 INVALID-NUMER-19 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1}{C_2 C_3 R_2 R_5 g_m s^2 + C_2 C_3 R_2 s^2 + C_2 C_3 R_5 s^2 + 2 C_2 R_2 g_m s + 4 C_2 s + C_3 R_5 g_m s + C_3 s + 2 g_m}$$

**Parameters:**

Q: $\frac{\sqrt{2} C_2 C_3 \sqrt{\frac{g_m}{C_2 C_3 (R_2 R_5 g_m + R_2 + R_5)}} (R_2 R_5 g_m + R_2 + R_5)}{2 C_2 R_2 g_m + 4 C_2 + C_3 R_5 g_m + C_3}$
wo: $\sqrt{2} \sqrt{\frac{g_m}{C_2 C_3 (R_2 R_5 g_m + R_2 + R_5)}}$
bandwidth: $\frac{2 C_2 R_2 g_m + 4 C_2 + C_3 R_5 g_m + C_3}{C_2 C_3 (R_2 R_5 g_m + R_2 + R_5)}$
K-LP: $\frac{R_5 g_m - 1}{2 g_m}$
K-HP: 0
K-BP: $\frac{C_2 (R_2 R_5 g_m - R_2 + R_5)}{2 C_2 R_2 g_m + 4 C_2 + C_3 R_5 g_m + C_3}$
Qz: 0
Wz: None

### 8.20 INVALID-NUMER-20 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{C_2 C_3 R_2 R_3 R_5 g_m s^2 + C_2 C_3 R_2 R_3 s^2 + C_2 C_3 R_3 R_5 s^2 + 2 C_2 R_2 R_3 g_m s + C_2 R_2 R_5 g_m s + C_2 R_2 s + 4 C_2 R_3 s + C_2 R_5 s + C_3 R_3 R_5 g_m s + C_3 R_3 s + 2 R_3 g_m + R_5 g_m + 1}$$

**Parameters:**

Q: $\frac{C_2 C_3 R_3 \sqrt{\frac{2 R_3 g_m + R_5 g_m + 1}{C_2 C_3 R_3 (R_2 R_5 g_m + R_2 + R_5)}} (R_2 R_5 g_m + R_2 + R_5)}{2 C_2 R_2 R_3 g_m + C_2 R_2 R_5 g_m + C_2 R_2 + 4 C_2 R_3 + C_2 R_5 + C_3 R_3 R_5 g_m + C_3 R_3}$
wo: $\sqrt{\frac{2 R_3 g_m + R_5 g_m + 1}{C_2 C_3 R_3 (R_2 R_5 g_m + R_2 + R_5)}}$
bandwidth: $\frac{2 C_2 R_2 R_3 g_m + C_2 R_2 R_5 g_m + C_2 R_2 + 4 C_2 R_3 + C_2 R_5 + C_3 R_3 R_5 g_m + C_3 R_3}{C_2 C_3 R_3 (R_2 R_5 g_m + R_2 + R_5)}$
K-LP: $\frac{R_3 (R_5 g_m - 1)}{2 R_3 g_m + R_5 g_m + 1}$
K-HP: 0
K-BP: $\frac{C_2 R_3 (R_2 R_5 g_m - R_2 + R_5)}{2 C_2 R_2 R_3 g_m + C_2 R_2 R_5 g_m + C_2 R_2 + 4 C_2 R_3 + C_2 R_5 + C_3 R_3 R_5 g_m + C_3 R_3}$
Qz: 0
Wz: None

## 9 INVALID-WZ

### 9.1 INVALID-WZ-1 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 R_3 s + 1\right) \left(C_5 R_2 R_5 s - R_2 R_5 g_m + R_2 - R_5\right)}{2 C_3 C_5 R_2 R_3 R_5 g_m s^2 + C_3 C_5 R_2 R_5 s^2 + 4 C_3 C_5 R_3 R_5 s^2 + 2 C_3 R_2 R_3 g_m s + C_3 R_2 R_5 g_m s + C_3 R_2 s + 4 C_3 R_3 s + C_3 R_5 s + 2 C_5 R_2 R_5 g_m s + 4 C_5 R_5 s + 2 R_2 g_m + 4}$$

**Parameters:**

Q: $\frac{\sqrt{2} C_3 C_5 R_5 \sqrt{\frac{R_2 g_m + 2}{C_3 C_5 R_5 (2 R_2 R_3 g_m + R_2 + 4 R_3)}} (2 R_2 R_3 g_m + R_2 + 4 R_3)}{2 C_3 R_2 R_3 g_m + C_3 R_2 R_5 g_m + C_3 R_2 + 4 C_3 R_3 + C_3 R_5 + 2 C_5 R_2 R_5 g_m + 4 C_5 R_5}$
wo: $\sqrt{2} \sqrt{\frac{R_2 g_m + 2}{C_3 C_5 R_5 (2 R_2 R_3 g_m + R_2 + 4 R_3)}}$
bandwidth: $\frac{2 C_3 R_2 R_3 g_m + C_3 R_2 R_5 g_m + C_3 R_2 + 4 C_3 R_3 + C_3 R_5 + 2 C_5 R_2 R_5 g_m + 4 C_5 R_5}{C_3 C_5 R_5 (2 R_2 R_3 g_m + R_2 + 4 R_3)}$
K-LP: $\frac{R_2 R_5 g_m - R_2 + R_5}{2 (R_2 g_m + 2)}$
K-HP: $-\frac{R_2 R_3}{2 R_2 R_3 g_m + R_2 + 4 R_3}$
K-BP: $\frac{C_3 R_2 R_3 R_5 g_m - C_3 R_2 R_3 + C_3 R_3 R_5 - C_5 R_2 R_5}{2 C_3 R_2 R_3 g_m + C_3 R_2 R_5 g_m + C_3 R_2 + 4 C_3 R_3 + C_3 R_5 + 2 C_5 R_2 R_5 g_m + 4 C_5 R_5}$
Qz: $-\frac{\sqrt{2} C_3 C_5 R_2 R_3 R_5 \sqrt{\frac{R_2 g_m + 2}{C_3 C_5 R_5 (2 R_2 R_3 g_m + R_2 + 4 R_3)}}}{C_3 R_2 R_3 R_5 g_m - C_3 R_2 R_3 + C_3 R_3 R_5 - C_5 R_2 R_5}$
Wz: $\sqrt{\frac{-R_2 R_5 g_m + R_2 - R_5}{C_3 C_5 R_2 R_3 R_5}}$

## 9.2 INVALID-WZ-2 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5R_5s^2 + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2s + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

**Parameters:**

Q: $\frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(4R_3+R_5)}}(4R_3+R_5)}{C_2+2C_5R_3g_m+C_5R_5g_m+C_5}$
wo: $\sqrt{\frac{g_m}{C_2C_5(4R_3+R_5)}}$
bandwidth: $\frac{C_2+2C_5R_3g_m+C_5R_5g_m+C_5}{C_2C_5(4R_3+R_5)}$
K-LP: $R_3$
K-HP: $\frac{R_3R_5}{4R_3+R_5}$
K-BP: $\frac{R_3(C_2+C_5R_5g_m-C_5)}{C_2+2C_5R_3g_m+C_5R_5g_m+C_5}$
Qz: $\frac{C_2C_5R_5\sqrt{\frac{g_m}{C_2C_5(4R_3+R_5)}}}{C_2+C_5R_5g_m-C_5}$
Wz: $\sqrt{\frac{g_m}{C_2C_5R_5}}$

## 9.3 INVALID-WZ-3 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)\left(C_2R_5s + R_5g_m - 1\right)}{4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2s + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2g_m}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_2C_3\sqrt{\frac{g_m}{C_2C_3(4R_3+R_5)}}(4R_3+R_5)}{4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}$
wo: $\sqrt{2}\sqrt{\frac{g_m}{C_2C_3(4R_3+R_5)}}$
bandwidth: $\frac{4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}{C_2C_3(4R_3+R_5)}$
K-LP: $\frac{R_5g_m-1}{2g_m}$
K-HP: $\frac{R_3R_5}{4R_3+R_5}$
K-BP: $\frac{C_2R_5+C_3R_3R_5g_m-C_3R_3}{4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}$
Qz: $\frac{\sqrt{2}C_2C_3R_3R_5\sqrt{\frac{g_m}{C_2C_3(4R_3+R_5)}}}{C_2R_5+C_3R_3R_5g_m-C_3R_3}$
Wz: $\sqrt{\frac{R_5g_m-1}{C_2C_3R_3R_5}}$

## 9.4 INVALID-WZ-4 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

**Parameters:**

Q: $\frac{C_2C_5R_2\sqrt{\frac{R_2g_m+1}{C_2C_5R_2(4R_3+R_5)}}(4R_3+R_5)}{C_2R_2+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}$
wo: $\sqrt{\frac{R_2g_m+1}{C_2C_5R_2(4R_3+R_5)}}$
bandwidth: $\frac{C_2R_2+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}{C_2C_5R_2(4R_3+R_5)}$
K-LP: $R_3$
K-HP: $\frac{R_3R_5}{4R_3+R_5}$
K-BP: $\frac{R_3(C_2R_2+C_5R_2R_5g_m-C_5R_2+C_5R_5)}{C_2R_2+2C_5R_2R_3g_m+C_5R_2R_5g_m+C_5R_2+4C_5R_3+C_5R_5}$
Qz: $\frac{C_2C_5R_2R_5\sqrt{\frac{R_2g_m+1}{C_2C_5R_2(4R_3+R_5)}}}{C_2R_2+C_5R_2R_5g_m-C_5R_2+C_5R_5}$
Wz: $\sqrt{\frac{R_2g_m+1}{C_2C_5R_2R_5}}$

## 9.5 INVALID-WZ-5 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\,(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5)}{4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2R_2s + 2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2R_2g_m + 4}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_2C_3R_2\sqrt{\frac{R_2g_m+2}{C_2C_3R_2(4R_3+R_5)}}(4R_3+R_5)}{4C_2R_2+2C_3R_2R_3g_m+C_3R_2R_5g_m+C_3R_2+4C_3R_3+C_3R_5}$

wo: $\sqrt{2}\sqrt{\frac{R_2g_m+2}{C_2C_3R_2(4R_3+R_5)}}$

bandwidth: $\frac{4C_2R_2+2C_3R_2R_3g_m+C_3R_2R_5g_m+C_3R_2+4C_3R_3+C_3R_5}{C_2C_3R_2(4R_3+R_5)}$

K-LP: $\frac{R_2R_5g_m-R_2+R_5}{2(R_2g_m+2)}$

K-HP: $\frac{R_3R_5}{4R_3+R_5}$

K-BP: $\frac{C_2R_2R_5+C_3R_2R_3R_5g_m-C_3R_2R_3+C_3R_3R_5}{4C_2R_2+2C_3R_2R_3g_m+C_3R_2R_5g_m+C_3R_2+4C_3R_3+C_3R_5}$

Qz: $\frac{\sqrt{2}C_2C_3R_2R_3R_5\sqrt{\frac{R_2g_m+2}{C_2C_3R_2(4R_3+R_5)}}}{C_2R_2R_5+C_3R_2R_3R_5g_m-C_3R_2R_3+C_3R_3R_5}$

Wz: $\sqrt{\frac{R_2R_5g_m-R_2+R_5}{C_2C_3R_2R_3R_5}}$

## 9.6 INVALID-WZ-6 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2s},\ R_3,\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + 2C_5R_3g_ms + C_5s + g_m}$$

**Parameters:**

Q: $\frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2+4R_3)}}(2R_2R_3g_m+R_2+4R_3)}{C_2R_2g_m+C_2+2C_5R_3g_m+C_5}$

wo: $\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2+4R_3)}}$

bandwidth: $\frac{C_2R_2g_m+C_2+2C_5R_3g_m+C_5}{C_2C_5(2R_2R_3g_m+R_2+4R_3)}$

K-LP: $R_3$

K-HP: $-\frac{R_2R_3}{2R_2R_3g_m+R_2+4R_3}$

K-BP: $\frac{R_3(C_2R_2g_m+C_2-C_5)}{C_2R_2g_m+C_2+2C_5R_3g_m+C_5}$

Qz: $-\frac{C_2C_5R_2\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2+4R_3)}}}{C_2R_2g_m+C_2-C_5}$

Wz: $\sqrt{-\frac{g_m}{C_2C_5R_2}}$

## 9.7 INVALID-WZ-7 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2s},\ R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{2C_2C_5R_2R_3R_5g_ms^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_5R_3R_5g_ms + C_5R_5s + 2R_3g_m + R_5g_m + 1}$$

**Parameters:**

Q: $\frac{C_2C_5R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_5R_5(2R_2R_3g_m+R_2+4R_3)}}(2R_2R_3g_m+R_2+4R_3)}{2C_2R_2R_3g_m+C_2R_2R_5g_m+C_2R_2+4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}$

wo: $\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_5R_5(2R_2R_3g_m+R_2+4R_3)}}$

bandwidth: $\frac{2C_2R_2R_3g_m+C_2R_2R_5g_m+C_2R_2+4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}{C_2C_5R_5(2R_2R_3g_m+R_2+4R_3)}$

K-LP: $\frac{R_3(R_5g_m-1)}{2R_3g_m+R_5g_m+1}$

K-HP: $-\frac{R_2R_3}{2R_2R_3g_m+R_2+4R_3}$

K-BP: $\frac{R_3(C_2R_2R_5g_m-C_2R_2+C_2R_5-C_5R_5)}{2C_2R_2R_3g_m+C_2R_2R_5g_m+C_2R_2+4C_2R_3+C_2R_5+2C_5R_3R_5g_m+C_5R_5}$

Qz: $-\frac{C_2C_5R_2R_5\sqrt{\frac{2R_3g_m+R_5g_m+1}{C_2C_5R_5(2R_2R_3g_m+R_2+4R_3)}}}{C_2R_2R_5g_m-C_2R_2+C_2R_5-C_5R_5}$

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

### 9.8 INVALID-WZ-8 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

**Parameters:**

Q: $\frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}{C_2R_2g_m+C_2+2C_5R_3g_m+C_5R_5g_m+C_5}$

wo: $\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}$

bandwidth: $\frac{C_2R_2g_m+C_2+2C_5R_3g_m+C_5R_5g_m+C_5}{C_2C_5(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}$

K-LP: $R_3$

K-HP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$

K-BP: $\frac{R_3(C_2R_2g_m+C_2+C_5R_5g_m-C_5)}{C_2R_2g_m+C_2+2C_5R_3g_m+C_5R_5g_m+C_5}$

Qz: $\frac{C_2C_5\sqrt{\frac{g_m}{C_2C_5(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}(R_2R_5g_m-R_2+R_5)}{C_2R_2g_m+C_2+C_5R_5g_m-C_5}$

Wz: $\sqrt{\frac{g_m}{C_2C_5(R_2R_5g_m-R_2+R_5)}}$

### 9.9 INVALID-WZ-9 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2R_2g_ms + 4C_2s + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2g_m}$$

**Parameters:**

Q: $\frac{\sqrt{2}C_2C_3\sqrt{\frac{g_m}{C_2C_3(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}{2C_2R_2g_m+4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}$

wo: $\sqrt{2}\sqrt{\frac{g_m}{C_2C_3(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}$

bandwidth: $\frac{2C_2R_2g_m+4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}{C_2C_3(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}$

K-LP: $\frac{R_5g_m-1}{2g_m}$

K-HP: $\frac{R_3(R_2R_5g_m-R_2+R_5)}{2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5}$

K-BP: $\frac{C_2R_2R_5g_m-C_2R_2+C_2R_5+C_3R_3R_5g_m-C_3R_3}{2C_2R_2g_m+4C_2+2C_3R_3g_m+C_3R_5g_m+C_3}$

Qz: $\frac{\sqrt{2}C_2C_3R_3\sqrt{\frac{g_m}{C_2C_3(2R_2R_3g_m+R_2R_5g_m+R_2+4R_3+R_5)}}(R_2R_5g_m-R_2+R_5)}{C_2R_2R_5g_m-C_2R_2+C_2R_5+C_3R_3R_5g_m-C_3R_3}$

Wz: $\sqrt{\frac{R_5g_m-1}{C_2C_3R_3(R_2R_5g_m-R_2+R_5)}}$

## 10 INVALID-ORDER

### 10.1 INVALID-ORDER-1 $Z(s) = (\infty,\ R_2,\ R_3,\ \infty,\ R_5,\ \infty)$

$$H(s) = \frac{R_3\left(R_2R_5g_m - R_2 + R_5\right)}{2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

### 10.2 INVALID-ORDER-2 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5R_2s + R_2g_m + 1\right)}{2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

### 10.3 INVALID-ORDER-3 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

### 10.4 INVALID-ORDER-4 $Z(s) = \left(\infty,\ R_2,\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{2C_5 R_2 R_3 g_m s + C_5 R_2 R_5 g_m s + C_5 R_2 s + 4C_5 R_3 s + C_5 R_5 s + R_2 g_m + 1}$$

### 10.5 INVALID-ORDER-5 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_2 R_5 g_m - R_2 + R_5}{C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2R_2 g_m + 4}$$

### 10.6 INVALID-ORDER-6 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_5 R_2 s + R_2 g_m + 1}{s\left(C_3 C_5 R_2 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.7 INVALID-ORDER-7 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1}{s\left(C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.8 INVALID-ORDER-8 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

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

### 10.9 INVALID-ORDER-9 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{-C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2}{C_3 C_5 L_5 R_2 s^3 + C_3 L_5 R_2 g_m s^2 + C_3 L_5 s^2 + C_3 R_2 s + 2C_5 L_5 R_2 g_m s^2 + 4C_5 L_5 s^2 + 2R_2 g_m + 4}$$

### 10.10 INVALID-ORDER-10 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1}{s\left(C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.11 INVALID-ORDER-11 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

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

### 10.12 INVALID-ORDER-12 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

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

### 10.13 INVALID-ORDER-13 $Z(s) = \left(\infty,\ R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

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

### 10.14 INVALID-ORDER-14 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(R_2R_5g_m - R_2 + R_5\right)}{C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

### 10.15 INVALID-ORDER-15 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3s^2 + C_3R_2R_3g_ms + C_3R_3s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

### 10.16 INVALID-ORDER-16 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{C_3C_5L_5R_2R_3s^3 + C_3L_5R_2R_3g_ms^2 + C_3L_5R_3s^2 + C_3R_2R_3s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_5R_2g_ms + L_5s + 2R_2R_3g_m + R_2 + 4R_3}$$

### 10.17 INVALID-ORDER-17 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3R_2R_3g_ms + C_3R_3s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

### 10.18 INVALID-ORDER-18 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{C_3C_5L_5R_2R_3R_5s^3 + C_3L_5R_2R_3R_5g_ms^2 + C_3L_5R_2R_3s^2 + C_3L_5R_3R_5s^2 + C_3R_2R_3R_5s + 2C_5L_5R_2R_3R_5g_ms^2 + C_5L_5R_2R_5s^2 + 4C_5L_5R_3R_5s^2 + 2L_5R_2R_3g_ms + L_5R_2R_5g_ms + L_5R_2s + 4L_5R_3s + L_5R_5s + 2R_2R_3R_5g_m + R_2R_5 + 4R_3R_5}$$

### 10.19 INVALID-ORDER-19 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5\right)}{C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3L_5R_2R_3g_ms^2 + C_3L_5R_3s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2R_5g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + 2R_2R_3g_m + R_2R_5g_m + R_2}$$

### 10.20 INVALID-ORDER-20 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5R_2R_3R_5s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2R_5g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + C_5L_5R_5s^2 + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R}$$

### 10.21 INVALID-ORDER-21 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3R_3s + 1\right)\left(R_2R_5g_m - R_2 + R_5\right)}{2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2R_2g_m + 4}$$

### 10.22 INVALID-ORDER-22 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3R_3s + 1\right)\left(-C_5R_2s + R_2g_m + 1\right)}{s\left(2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.23 INVALID-ORDER-23 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_5 L_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + 4C_3 C_5 R_3 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.24 INVALID-ORDER-24 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

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

### 10.25 INVALID-ORDER-25 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

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

### 10.26 INVALID-ORDER-26 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + 2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + 4C_3 C_5 R_3 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.27 INVALID-ORDER-27 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

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

### 10.28 INVALID-ORDER-28 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

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

### 10.29 INVALID-ORDER-29 $Z(s) = \left(\infty,\ R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

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

### 10.30 INVALID-ORDER-30 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(-C_5 R_2 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 R_2 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.31 INVALID-ORDER-31 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 R_2 R_5 s - R_2 R_5 g_m + R_2 - R_5\right)}{2C_3 C_5 L_3 R_2 R_5 g_m s^3 + 4C_3 C_5 L_3 R_5 s^3 + C_3 C_5 R_2 R_5 s^2 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2C_5 R_2 R_5 g_m s + 4C_5 R_5 s + 2R_2 g_m + 4}$$

### 10.32 INVALID-ORDER-32 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.33 INVALID-ORDER-33 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + C_3 C_5 R_2 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.34 INVALID-ORDER-34 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 s^2 - L_5 R_2 g_m s - L_5 s + R_2\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_5 R_2 s^3 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 L_5 R_2 g_m s^2 + C_3 L_5 s^2 + C_3 R_2 s + 2C_5 L_5 R_2 g_m s^2 + 4C_5 L_5 s^2 + 2R_2 g_m + 4}$$

### 10.35 INVALID-ORDER-35 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.36 INVALID-ORDER-36 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 R_5 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5 R_5 s + R_2 R_5\right)}{2C_3 C_5 L_3 L_5 R_2 R_5 g_m s^4 + 4C_3 C_5 L_3 L_5 R_5 s^4 + C_3 C_5 L_5 R_2 R_5 s^3 + 2C_3 L_3 L_5 R_2 g_m s^3 + 4C_3 L_3 L_5 s^3 + 2C_3 L_3 R_2 R_5 g_m s^2 + 4C_3 L_3 R_5 s^2 + C_3 L_5 R_2 R_5 g_m s^2 + C_3 L_5 R_2 s^2 + C_3 L_5 R_5 s^2 + C_3 R_2 R_5 s + 2C_5 L_5 R_2 R_5 g_m s^2 + 4C_5 L_5 R_5 s^2 + 2L_5 R_2 g_m s + 4L_5 s + 2R_2 R_5 g_m + 4R$$

### 10.37 INVALID-ORDER-37 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_5 R_2 R_5 g_m s^3 + C_3 C_5 L_5 R_2 s^3 + C_3 C_5 L_5 R_5 s^3 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 L_5 R_2 g_m s^2 + C_3 L_5 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2C_5 L_5 R_2 g_m s^2 + 4C_5 L_5 s^2 + 2R_2 g_m + 4}$$

### 10.38 INVALID-ORDER-38 $Z(s) = \left(\infty,\ R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + 2C_3 C_5 L_3 R_2 R_5 g_m s^3 + 4C_3 C_5 L_3 R_5 s^3 + C_3 C_5 L_5 R_2 R_5 g_m s^3 + C_3 C_5 L_5 R_2 s^3 + C_3 C_5 L_5 R_5 s^3 + C_3 C_5 R_2 R_5 s^2 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2C_5 L_5 R_2 g_m s^2 + 4C_5 L_5 s^2 + 2C_5 R_2 R_5 g_m s + 4C_5 R$$

### 10.39 INVALID-ORDER-39 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(-C_5 R_2 s + R_2 g_m + 1\right)}{C_3 C_5 L_3 R_2 s^3 + C_3 L_3 R_2 g_m s^2 + C_3 L_3 s^2 + 2C_5 L_3 R_2 g_m s^2 + 4C_5 L_3 s^2 + C_5 R_2 s + R_2 g_m + 1}$$

### 10.40 INVALID-ORDER-40 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(-C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_3 C_5 L_3 R_2 R_5 s^3 + C_3 L_3 R_2 R_5 g_m s^2 + C_3 L_3 R_2 s^2 + C_3 L_3 R_5 s^2 + 2C_5 L_3 R_2 R_5 g_m s^2 + 4C_5 L_3 R_5 s^2 + C_5 R_2 R_5 s + 2L_3 R_2 g_m s + 4L_3 s + R_2 R_5 g_m + R_2 + R_5}$$

### 10.41 INVALID-ORDER-41 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_3 C_5 L_3 R_2 R_5 g_m s^3 + C_3 C_5 L_3 R_2 s^3 + C_3 C_5 L_3 R_5 s^3 + C_3 L_3 R_2 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 R_2 g_m s^2 + 4 C_5 L_3 s^2 + C_5 R_2 R_5 g_m s + C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1}$$

### 10.42 INVALID-ORDER-42 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{C_3 C_5 L_3 L_5 R_2 g_m s^4 + C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_3 R_2 s^3 + C_3 L_3 R_2 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 R_2 g_m s^2 + 4 C_5 L_3 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 s + R_2 g_m + 1}$$

### 10.43 INVALID-ORDER-43 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_5 L_5 R_2 s^2 + L_5 R_2 g_m s + L_5 s - R_2\right)}{C_3 C_5 L_3 L_5 R_2 s^4 + C_3 L_3 L_5 R_2 g_m s^3 + C_3 L_3 L_5 s^3 + C_3 L_3 R_2 s^2 + 2 C_5 L_3 L_5 R_2 g_m s^3 + 4 C_5 L_3 L_5 s^3 + C_5 L_5 R_2 s^2 + 2 L_3 R_2 g_m s + 4 L_3 s + L_5 R_2 g_m s + L_5 s + R_2}$$

### 10.44 INVALID-ORDER-44 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_3 C_5 L_3 L_5 R_2 g_m s^4 + C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_3 R_2 R_5 g_m s^3 + C_3 C_5 L_3 R_2 s^3 + C_3 C_5 L_3 R_5 s^3 + C_3 L_3 R_2 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 R_2 g_m s^2 + 4 C_5 L_3 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s + C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1}$$

### 10.45 INVALID-ORDER-45 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_5 L_5 R_2 R_5 s^2 + L_5 R_2 R_5 g_m s - L_5 R_2 s + L_5 R_5 s - R_2 R_5\right)}{C_3 C_5 L_3 L_5 R_2 R_5 s^4 + C_3 L_3 L_5 R_2 R_5 g_m s^3 + C_3 L_3 L_5 R_2 s^3 + C_3 L_3 L_5 R_5 s^3 + C_3 L_3 R_2 R_5 s^2 + 2 C_5 L_3 L_5 R_2 R_5 g_m s^3 + 4 C_5 L_3 L_5 R_5 s^3 + C_5 L_5 R_2 R_5 s^2 + 2 L_3 L_5 R_2 g_m s^2 + 4 L_3 L_5 s^2 + 2 L_3 R_2 R_5 g_m s + 4 L_3 R_5 s + L_5 R_2 R_5 g_m s + L_5 R_2 s + L_5 R_5 s + R_2 R_5}$$

### 10.46 INVALID-ORDER-46 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_3 C_5 L_3 L_5 R_2 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_2 s^4 + C_3 C_5 L_3 L_5 R_5 s^4 + C_3 L_3 L_5 R_2 g_m s^3 + C_3 L_3 L_5 s^3 + C_3 L_3 R_2 R_5 g_m s^2 + C_3 L_3 R_2 s^2 + C_3 L_3 R_5 s^2 + 2 C_5 L_3 L_5 R_2 g_m s^3 + 4 C_5 L_3 L_5 s^3 + C_5 L_5 R_2 R_5 g_m s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + 2 L_3 R_2 g_m s + 4 L_3 s + L_5 R_2 g_m s + L_5 s + R_2 R$$

### 10.47 INVALID-ORDER-47 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_3 C_5 L_3 L_5 R_2 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_2 s^4 + C_3 C_5 L_3 L_5 R_5 s^4 + C_3 C_5 L_3 R_2 R_5 s^3 + C_3 L_3 R_2 R_5 g_m s^2 + C_3 L_3 R_2 s^2 + C_3 L_3 R_5 s^2 + 2 C_5 L_3 L_5 R_2 g_m s^3 + 4 C_5 L_3 L_5 s^3 + 2 C_5 L_3 R_2 R_5 g_m s^2 + 4 C_5 L_3 R_5 s^2 + C_5 L_5 R_2 R_5 g_m s^2 + C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + C_5 R_2 R_5 s + 2 L_3 R_2 g_m s$$

### 10.48 INVALID-ORDER-48 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_5 R_2 s + R_2 g_m + 1\right)}{s\left(2 C_3 C_5 L_3 R_2 g_m s^2 + 4 C_3 C_5 L_3 s^2 + 2 C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 s + 4 C_3 C_5 R_3 s + C_3 R_2 g_m + C_3 + 2 C_5 R_2 g_m + 4 C_5\right)}$$

### 10.49 INVALID-ORDER-49 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 R_2 R_5 s - R_2 R_5 g_m + R_2 - R_5\right)}{2 C_3 C_5 L_3 R_2 R_5 g_m s^3 + 4 C_3 C_5 L_3 R_5 s^3 + 2 C_3 C_5 R_2 R_3 R_5 g_m s^2 + C_3 C_5 R_2 R_5 s^2 + 4 C_3 C_5 R_3 R_5 s^2 + 2 C_3 L_3 R_2 g_m s^2 + 4 C_3 L_3 s^2 + 2 C_3 R_2 R_3 g_m s + C_3 R_2 R_5 g_m s + C_3 R_2 s + 4 C_3 R_3 s + C_3 R_5 s + 2 C_5 R_2 R_5 g_m s + 4 C_5 R_5 s + 2 R_2 g_m + 4}$$

### 10.50 INVALID-ORDER-50 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + 2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + 4C_3 C_5 R_3 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.51 INVALID-ORDER-51 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + 2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 s + 4C_3 C_5 R_3 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.52 INVALID-ORDER-52 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 s^2 - L_5 R_2 g_m s - L_5 s + R_2\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + 2C_3 C_5 L_5 R_2 R_3 g_m s^3 + C_3 C_5 L_5 R_2 s^3 + 4C_3 C_5 L_5 R_3 s^3 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 L_5 R_2 g_m s^2 + C_3 L_5 s^2 + 2C_3 R_2 R_3 g_m s + C_3 R_2 s + 4C_3 R_3 s + 2C_5 L_5 R_2 g_m s^2 + 4C_5 L_5 s^2 + 2R_2 g_m + 4}$$

### 10.53 INVALID-ORDER-53 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{s\left(2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + 2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + 4C_3 C_5 R_3 s + C_3 C_5 R_5 s + C_3 R_2 g_m + C_3 + 2C_5 R_2 g_m + 4C_5\right)}$$

### 10.54 INVALID-ORDER-54 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 R_5 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5 R_5 s + R_2 R_5\right)}{2C_3 C_5 L_3 L_5 R_2 R_5 g_m s^4 + 4C_3 C_5 L_3 L_5 R_5 s^4 + 2C_3 C_5 L_5 R_2 R_3 R_5 g_m s^3 + C_3 C_5 L_5 R_2 R_5 s^3 + 4C_3 C_5 L_5 R_3 R_5 s^3 + 2C_3 L_3 L_5 R_2 g_m s^3 + 4C_3 L_3 L_5 s^3 + 2C_3 L_3 R_2 R_5 g_m s^2 + 4C_3 L_3 R_5 s^2 + 2C_3 L_5 R_2 R_3 g_m s^2 + C_3 L_5 R_2 R_5 g_m s^2 + C_3 L_5 R_2 s^2 + 4C_3 L_5 R_3 s^2 + C_3 L_5 R_5 s^2 + 2C_3$$

### 10.55 INVALID-ORDER-55 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + 2C_3 C_5 L_5 R_2 R_3 g_m s^3 + C_3 C_5 L_5 R_2 R_5 g_m s^3 + C_3 C_5 L_5 R_2 s^3 + 4C_3 C_5 L_5 R_3 s^3 + C_3 C_5 L_5 R_5 s^3 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 L_5 R_2 g_m s^2 + C_3 L_5 s^2 + 2C_3 R_2 R_3 g_m s + C_3 R_2 R_5 g_m s + C_3 R_2 s + 4C_3 R_3 s + C_3 R_5 s + 2C_5 L_5 R_2 g_m s$$

### 10.56 INVALID-ORDER-56 $Z(s) = \left(\infty,\ R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 - C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_3 C_5 L_3 L_5 R_2 g_m s^4 + 4C_3 C_5 L_3 L_5 s^4 + 2C_3 C_5 L_3 R_2 R_5 g_m s^3 + 4C_3 C_5 L_3 R_5 s^3 + 2C_3 C_5 L_5 R_2 R_3 g_m s^3 + C_3 C_5 L_5 R_2 R_5 g_m s^3 + C_3 C_5 L_5 R_2 s^3 + 4C_3 C_5 L_5 R_3 s^3 + C_3 C_5 L_5 R_5 s^3 + 2C_3 C_5 R_2 R_3 R_5 g_m s^2 + C_3 C_5 R_2 R_5 s^2 + 4C_3 C_5 R_3 R_5 s^2 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + 2C_3 L$$

### 10.57 INVALID-ORDER-57 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_5 R_2 s + R_2 g_m + 1\right)}{C_3 C_5 L_3 R_2 R_3 s^3 + C_3 L_3 R_2 R_3 g_m s^2 + C_3 L_3 R_3 s^2 + 2C_5 L_3 R_2 R_3 g_m s^2 + C_5 L_3 R_2 s^2 + 4C_5 L_3 R_3 s^2 + C_5 R_2 R_3 s + L_3 R_2 g_m s + L_3 s + R_2 R_3 g_m + R_3}$$

### 10.58 INVALID-ORDER-58 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_5 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_3 C_5 L_3 R_2 R_3 R_5 s^3 + C_3 L_3 R_2 R_3 R_5 g_m s^2 + C_3 L_3 R_2 R_3 s^2 + C_3 L_3 R_3 R_5 s^2 + 2C_5 L_3 R_2 R_3 R_5 g_m s^2 + C_5 L_3 R_2 R_5 s^2 + 4C_5 L_3 R_3 R_5 s^2 + C_5 R_2 R_3 R_5 s + 2L_3 R_2 R_3 g_m s + L_3 R_2 R_5 g_m s + L_3 R_2 s + 4L_3 R_3 s + L_3 R_5 s + R_2 R_3 R_5 g_m + R_2 R_3 + R_3 R_5}$$

### 10.59 INVALID-ORDER-59 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_3s^3 + C_3C_5L_3R_3R_5s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + 2C_5L_3R_2R_3g_ms^2 + C_5L_3R_2R_5g_ms^2 + C_5L_3R_2s^2 + 4C_5L_3R_3s^2 + C_5L_3R_5s^2 + C_5R_2R_3R_5g_ms + C_5R_2R_3s + C_5R_3R_5s + L_3R_2g_ms + L_3s + R_2R_3g_m + R_3}$$

### 10.60 INVALID-ORDER-60 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3R_2R_3s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + C_5L_3L_5R_2g_ms^3 + C_5L_3L_5s^3 + 2C_5L_3R_2R_3g_ms^2 + C_5L_3R_2s^2 + 4C_5L_3R_3s^2 + C_5L_5R_2R_3g_ms^2 + C_5L_5R_3s^2 + C_5R_2R_3s + L_3R_2g_ms + L_3s + R_2R_3g_m + R_3}$$

### 10.61 INVALID-ORDER-61 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(-C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{C_3C_5L_3L_5R_2R_3s^4 + C_3L_3L_5R_2R_3g_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3R_2R_3s^2 + 2C_5L_3L_5R_2R_3g_ms^3 + C_5L_3L_5R_2s^3 + 4C_5L_3L_5R_3s^3 + C_5L_5R_2R_3s^2 + L_3L_5R_2g_ms^2 + L_3L_5s^2 + 2L_3R_2R_3g_ms + L_3R_2s + 4L_3R_3s + L_5R_2R_3g_ms + L_5R_3s + R_2R_3}$$

### 10.62 INVALID-ORDER-62 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_3s^3 + C_3C_5L_3R_3R_5s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + C_5L_3L_5R_2g_ms^3 + C_5L_3L_5s^3 + 2C_5L_3R_2R_3g_ms^2 + C_5L_3R_2R_5g_ms^2 + C_5L_3R_2s^2 + 4C_5L_3R_3s^2 + C_5L_3R_5s^2 + C_5L_5R_2R_3g_ms^2 + C_5L_5R_3s^2 + C_5R_2R_3R_5g_ms + C_5R_2R_3s + C_5R_3R_5s + L_3R_2g_ms + L_3s + R_2R_3g_m + R_3}$$

### 10.63 INVALID-ORDER-63 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(-C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{C_3C_5L_3L_5R_2R_3R_5s^4 + C_3L_3L_5R_2R_3R_5g_ms^3 + C_3L_3L_5R_2R_3s^3 + C_3L_3L_5R_3R_5s^3 + C_3L_3R_2R_3R_5s^2 + 2C_5L_3L_5R_2R_3R_5g_ms^3 + C_5L_3L_5R_2R_5s^3 + 4C_5L_3L_5R_3R_5s^3 + C_5L_5R_2R_3R_5s^2 + 2L_3L_5R_2R_3g_ms^2 + L_3L_5R_2R_5g_ms^2 + L_3L_5R_2s^2 + 4L_3L_5R_3s^2 + L_3L_5R_5s^2 + L_5R_2R_3g_ms^2 + L_5R_2R_3s^2 + L_5R_3R_5s^2 + R_2R_3s + R_3R_5s}$$

### 10.64 INVALID-ORDER-64 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R\right.}{C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_3s^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3L_3L_5R_2R_3g_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_3s^2 + C_3L_3R_3R_5s^2 + 2C_5L_3L_5R_2R_3g_ms^3 + C_5L_3L_5R_2R_5g_ms^3 + C_5L_3L_5R_2s^3 + 4C_5L_3L_5R_3s^3 + C_5L_3L_5R_5s^3 + C_5L_5R_2$$

### 10.65 INVALID-ORDER-65 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2\right.}{C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_3s^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3R_2R_3R_5s^3 + C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_3s^2 + C_3L_3R_3R_5s^2 + 2C_5L_3L_5R_2R_3g_ms^3 + C_5L_3L_5R_2R_5g_ms^3 + C_5L_3L_5R_2s^3 + 4C_5L_3L_5R_3s^3 + C_5L_3L_5R_5s^3 + 2C_5L_3R_2R_3R_5g_ms^2 + C$$

### 10.66 INVALID-ORDER-66 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(-C_5R_2s + R_2g_m + 1\right)\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

### 10.67 INVALID-ORDER-67 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_5R_2R_5s - R_2R_5g_m + R_2 - R_5\right)}{2C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_5s^3 + 4C_3C_5L_3R_3R_5s^3 + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + 4C_3L_3R_3s^2 + C_3L_3R_5s^2 + 2C_5L_3R_2R_5g_ms^2 + 4C_5L_3R_5s^2 + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2L_3R_2g_ms + 4L_3s + 2R_2R_3g_m + R_2$$

### 10.68 INVALID-ORDER-68 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{2C_3C_5L_3R_2R_3g_m s^3 + C_3C_5L_3R_2R_5g_m s^3 + C_3C_5L_3R_2 s^3 + 4C_3C_5L_3R_3 s^3 + C_3C_5L_3R_5 s^3 + C_3L_3R_2g_m s^2 + C_3L_3 s^2 + 2C_5L_3R_2g_m s^2 + 4C_5L_3 s^2 + 2C_5R_2R_3g_m s + C_5R_2R_5g_m s + C_5R_2 s + 4C_5R_3 s + C_5R_5 s + R_2g_m + 1}$$

### 10.69 INVALID-ORDER-69 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + R_2 g_m + 1\right)}{C_3C_5L_3L_5R_2g_m s^4 + C_3C_5L_3L_5 s^4 + 2C_3C_5L_3R_2R_3g_m s^3 + C_3C_5L_3R_2 s^3 + 4C_3C_5L_3R_3 s^3 + C_3L_3R_2g_m s^2 + C_3L_3 s^2 + 2C_5L_3R_2g_m s^2 + 4C_5L_3 s^2 + C_5L_5R_2g_m s^2 + C_5L_5 s^2 + 2C_5R_2R_3g_m s + C_5R_2 s + 4C_5R_3 s + R_2g_m + 1}$$

### 10.70 INVALID-ORDER-70 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 s^2 - L_5 R_2 g_m s - L_5 s + R_2\right)}{2C_3C_5L_3L_5R_2R_3g_m s^4 + C_3C_5L_3L_5R_2 s^4 + 4C_3C_5L_3L_5R_3 s^4 + C_3L_3L_5R_2g_m s^3 + C_3L_3L_5 s^3 + 2C_3L_3R_2R_3g_m s^2 + C_3L_3R_2 s^2 + 4C_3L_3R_3 s^2 + 2C_5L_3L_5R_2g_m s^3 + 4C_5L_3L_5 s^3 + 2C_5L_5R_2R_3g_m s^2 + C_5L_5R_2 s^2 + 4C_5L_5R_3 s^2 + 2L_3R_2g_m s + 4L_3 s + L_5R_2g_m s + L_5}$$

### 10.71 INVALID-ORDER-71 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + R_2 g_m + 1\right)}{C_3C_5L_3L_5R_2g_m s^4 + C_3C_5L_3L_5 s^4 + 2C_3C_5L_3R_2R_3g_m s^3 + C_3C_5L_3R_2R_5g_m s^3 + C_3C_5L_3R_2 s^3 + 4C_3C_5L_3R_3 s^3 + C_3C_5L_3R_5 s^3 + C_3L_3R_2g_m s^2 + C_3L_3 s^2 + 2C_5L_3R_2g_m s^2 + 4C_5L_3 s^2 + C_5L_5R_2g_m s^2 + C_5L_5 s^2 + 2C_5R_2R_3g_m s + C_5R_2R_5g_m s + C_5R_2 s + 4C_5R_3 s +}$$

### 10.72 INVALID-ORDER-72 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 R_5 s^2 - L_5 R_2 R_5 g_m s + L_5 R_2 s - L_5}{2C_3C_5L_3L_5R_2R_3R_5g_m s^4 + C_3C_5L_3L_5R_2R_5 s^4 + 4C_3C_5L_3L_5R_3R_5 s^4 + 2C_3L_3L_5R_2R_3g_m s^3 + C_3L_3L_5R_2R_5g_m s^3 + C_3L_3L_5R_2 s^3 + 4C_3L_3L_5R_3 s^3 + C_3L_3L_5R_5 s^3 + 2C_3L_3R_2R_3R_5g_m s^2 + C_3L_3R_2R_5 s^2 + 4C_3L_3R_3R_5 s^2 + 2C_5L_3L_5R_2R_5g_m s^3 + 4C_5L_3L_5R_5 s^3 +}$$

### 10.73 INVALID-ORDER-73 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L_5 R_5 s^2 + L_5 R_2 g_m s + L_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_3C_5L_3L_5R_2R_3g_m s^4 + C_3C_5L_3L_5R_2R_5g_m s^4 + C_3C_5L_3L_5R_2 s^4 + 4C_3C_5L_3L_5R_3 s^4 + C_3C_5L_3L_5R_5 s^4 + C_3L_3L_5R_2g_m s^3 + C_3L_3L_5 s^3 + 2C_3L_3R_2R_3g_m s^2 + C_3L_3R_2R_5g_m s^2 + C_3L_3R_2 s^2 + 4C_3L_3R_3 s^2 + C_3L_3R_5 s^2 + 2C_5L_3L_5R_2g_m s^3 + 4C_5L_3L_5 s^3 + 2C_5L_5R_2R}$$

### 10.74 INVALID-ORDER-74 $Z(s) = \left(\infty,\ R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_5 L_5 R_2 R_5 g_m s^2 - C_5 L_5 R_2 s^2 + C_5 L}{2C_3C_5L_3L_5R_2R_3g_m s^4 + C_3C_5L_3L_5R_2R_5g_m s^4 + C_3C_5L_3L_5R_2 s^4 + 4C_3C_5L_3L_5R_3 s^4 + C_3C_5L_3L_5R_5 s^4 + 2C_3C_5L_3R_2R_3R_5g_m s^3 + C_3C_5L_3R_2R_5 s^3 + 4C_3C_5L_3R_3R_5 s^3 + 2C_3L_3R_2R_3g_m s^2 + C_3L_3R_2R_5g_m s^2 + C_3L_3R_2 s^2 + 4C_3L_3R_3 s^2 + C_3L_3R_5 s^2 + 2C_5L_3L_5R_2}$$

### 10.75 INVALID-ORDER-75 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2 + 1\right)\left(-C_5 R_2 s + R_2 g_m + 1\right)}{2C_3C_5L_3R_2R_3g_m s^3 + C_3C_5L_3R_2 s^3 + 4C_3C_5L_3R_3 s^3 + C_3C_5R_2R_3 s^2 + C_3L_3R_2g_m s^2 + C_3L_3 s^2 + C_3R_2R_3g_m s + C_3R_3 s + 2C_5R_2R_3g_m s + C_5R_2 s + 4C_5R_3 s + R_2g_m + 1}$$

### 10.76 INVALID-ORDER-76 $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3 L_3 s^2 + 1\right)\left(C_5 R_2 R_5 s - R_2 R_5 g_m + R_2 - R_5\right)}{2C_3C_5L_3R_2R_3R_5g_m s^3 + C_3C_5L_3R_2R_5 s^3 + 4C_3C_5L_3R_3R_5 s^3 + C_3C_5R_2R_3R_5 s^2 + 2C_3L_3R_2R_3g_m s^2 + C_3L_3R_2R_5g_m s^2 + C_3L_3R_2 s^2 + 4C_3L_3R_3 s^2 + C_3L_3R_5 s^2 + C_3R_2R_3R_5g_m s + C_3R_2R_3 s + C_3R_3R_5 s + 2C_5R_2R_3R_5g_m s + C_5R_2R_5 s + 4C_5R_3R_5 s + 2R_2R_3g_m}$$

**10.77 INVALID-ORDER-77** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_3R_5s^3 + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2}$$

**10.78 INVALID-ORDER-78** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3s^2 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + C_3R_2R_3g_ms + C_3R_3s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R}$$

**10.79 INVALID-ORDER-79** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2s^2 - L_5R_2g_ms - L_5s + R_2\right)}{2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2s^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_5R_2R_3s^3 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2s^2 + 4C_3L_3R_3s^2 + C_3L_5R_2R_3g_ms^2 + C_3L_5R_3s^2 + C_3R_2R_3s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_5R_2g}$$

**10.80 INVALID-ORDER-80** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_3R_5s^3 + C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + C_3R_2R_3g_ms +}$$

**10.81 INVALID-ORDER-81** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2R_5s^2 - L_5R_2R_5g_ms + L_5R_2s - L_5R_5s +\right.}{2C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_5s^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_5R_2R_3R_5s^3 + 2C_3L_3L_5R_2R_3g_ms^3 + C_3L_3L_5R_2R_5g_ms^3 + C_3L_3L_5R_2s^3 + 4C_3L_3L_5R_3s^3 + C_3L_3L_5R_5s^3 + 2C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_5s^2 + 4C_3L_3R_3R_5s^2 + C_3L_5R_2R_3R_5g_ms}$$

**10.82 INVALID-ORDER-82** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R\right.}{2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2R_5g_ms^4 + C_3C_5L_3L_5R_2s^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + 4C_3L_3R_3s}$$

**10.83 INVALID-ORDER-83** $Z(s) = \left(\infty,\ R_2,\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_5L_5R_2R_5g_ms^2 - C_5L_5\right.}{2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2R_5g_ms^4 + C_3C_5L_3L_5R_2s^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_5s^3 + 4C_3C_5L_3R_3R_5s^3 + C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5R_2R_3R_5s^2 + 2C_3L_3R_2R}$$

**10.84 INVALID-ORDER-84** $Z(s) = \left(\infty,\ \frac{1}{C_2s},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_5s + R_5g_m - 1\right)}{4C_2R_3s + C_2R_5s + 2R_3g_m + R_5g_m + 1}$$

**10.85 INVALID-ORDER-85** $Z(s) = \left(\infty,\ \frac{1}{C_2s},\ R_3,\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5s^3 + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2s + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5s + g_m}$$

**10.86 INVALID-ORDER-86** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

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

**10.87 INVALID-ORDER-87** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 L_5 s^3 + 4C_2 C_5 R_3 s^2 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + 2C_5 R_3 g_m s + C_5 R_5 g_m s + C_5 s + g_m}$$

**10.88 INVALID-ORDER-88** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{4C_2 C_5 L_5 R_3 R_5 s^3 + 4C_2 L_5 R_3 s^2 + C_2 L_5 R_5 s^2 + 4C_2 R_3 R_5 s + 2C_5 L_5 R_3 R_5 g_m s^2 + C_5 L_5 R_5 s^2 + 2L_5 R_3 g_m s + L_5 R_5 g_m s + L_5 s + 2R_3 R_5 g_m + R_5}$$

**10.89 INVALID-ORDER-89** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4C_2 C_5 L_5 R_3 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + 4C_2 R_3 s + C_2 R_5 s + 2C_5 L_5 R_3 g_m s^2 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + L_5 g_m s + 2R_3 g_m + R_5 g_m + 1}$$

**10.90 INVALID-ORDER-90** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2 C_5 L_5 R_3 s^3 + C_2 C_5 L_5 R_5 s^3 + 4C_2 C_5 R_3 R_5 s^2 + 4C_2 R_3 s + C_2 R_5 s + 2C_5 L_5 R_3 g_m s^2 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + 2C_5 R_3 R_5 g_m s + C_5 R_5 s + 2R_3 g_m + R_5 g_m + 1}$$

**10.91 INVALID-ORDER-91** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 s - C_5 s + g_m}{s\left(C_2 C_3 s + 4C_2 C_5 s + C_3 C_5 s + C_3 g_m + 2C_5 g_m\right)}$$

**10.92 INVALID-ORDER-92** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m}{s\left(C_2 C_3 C_5 R_5 s^2 + C_2 C_3 s + 4C_2 C_5 s + C_3 C_5 R_5 g_m s + C_3 C_5 s + C_3 g_m + 2C_5 g_m\right)}$$

**10.93 INVALID-ORDER-93** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

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

**10.94 INVALID-ORDER-94** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

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

**10.95 INVALID-ORDER-95** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m}{s\left(C_2 C_3 C_5 L_5 s^3 + C_2 C_3 C_5 R_5 s^2 + C_2 C_3 s + 4 C_2 C_5 s + C_3 C_5 L_5 g_m s^2 + C_3 C_5 R_5 g_m s + C_3 C_5 s + C_3 g_m + 2 C_5 g_m\right)}$$

**10.96 INVALID-ORDER-96** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5}{C_2 C_3 L_5 R_5 s^3 + 4 C_2 C_5 L_5 R_5 s^3 + 4 C_2 L_5 s^2 + 4 C_2 R_5 s + C_3 C_5 L_5 R_5 s^3 + C_3 L_5 R_5 g_m s^2 + C_3 L_5 s^2 + C_3 R_5 s + 2 C_5 L_5 R_5 g_m s^2 + 2 L_5 g_m s + 2 R_5 g_m}$$

**10.97 INVALID-ORDER-97** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1}{C_2 C_3 C_5 L_5 R_5 s^4 + C_2 C_3 L_5 s^3 + C_2 C_3 R_5 s^2 + 4 C_2 C_5 L_5 s^3 + 4 C_2 s + C_3 C_5 L_5 R_5 g_m s^3 + C_3 C_5 L_5 s^3 + C_3 L_5 g_m s^2 + C_3 R_5 g_m s + C_3 s + 2 C_5 L_5 g_m s^2 + 2 g_m}$$

**10.98 INVALID-ORDER-98** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1}{C_2 C_3 C_5 L_5 R_5 s^4 + C_2 C_3 R_5 s^2 + 4 C_2 C_5 L_5 s^3 + 4 C_2 C_5 R_5 s^2 + 4 C_2 s + C_3 C_5 L_5 R_5 g_m s^3 + C_3 C_5 L_5 s^3 + C_3 C_5 R_5 s^2 + C_3 R_5 g_m s + C_3 s + 2 C_5 L_5 g_m s^2 + 2 C_5 R_5 g_m s + 2 g_m}$$

**10.99 INVALID-ORDER-99** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 R_3 R_5 s^3 + C_2 C_3 R_3 s^2 + 4 C_2 C_5 R_3 s^2 + C_2 C_5 R_5 s^2 + C_2 s + C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_3 s^2 + C_3 R_3 g_m s + 2 C_5 R_3 g_m s + C_5 R_5 g_m s + C_5 s + g_m}$$

**10.100 INVALID-ORDER-100** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

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

**10.101 INVALID-ORDER-101** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

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

**10.102 INVALID-ORDER-102** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_5 R_3 s^4 + C_2 C_3 C_5 R_3 R_5 s^3 + C_2 C_3 R_3 s^2 + C_2 C_5 L_5 s^3 + 4 C_2 C_5 R_3 s^2 + C_2 C_5 R_5 s^2 + C_2 s + C_3 C_5 L_5 R_3 g_m s^3 + C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_3 s^2 + C_3 R_3 g_m s + C_5 L_5 g_m s^2 + 2 C_5 R_3 g_m s + C_5 R_5 g_m s + C_5 s + g_m}$$

**10.103 INVALID-ORDER-103** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s + 1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{C_2 C_3 L_5 R_3 R_5 s^3 + 4 C_2 C_5 L_5 R_3 R_5 s^3 + 4 C_2 L_5 R_3 s^2 + C_2 L_5 R_5 s^2 + 4 C_2 R_3 R_5 s + C_3 C_5 L_5 R_3 R_5 s^3 + C_3 L_5 R_3 R_5 g_m s^2 + C_3 L_5 R_3 s^2 + C_3 R_3 R_5 s + 2 C_5 L_5 R_3 R_5 g_m s^2 + C_5 L_5 R_5 s^2 + 2 L_5 R_3 g_m s + L_5 R_5 g_m s + L_5 s + 2 R_3 R_5 g_m + R_5}$$

**10.104 INVALID-ORDER-104** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_5s^3 + C_2L_5s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1\right)}{C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_5R_3s^3 + C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + C_2L_5s^2 + 4C_2R_3s + C_2R_5s + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3L_5R_3g_ms^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5R_5g_ms^2 + C_5L_5s^2 + L_5g_ms + 2R_3g_m + R_5g_m}$$

**10.105 INVALID-ORDER-105** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_5s^3 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1\right)}{C_2C_3C_5L_5R_3R_5s^4 + C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 4C_2C_5R_3R_5s^2 + 4C_2R_3s + C_2R_5s + C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_3R_5s^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5R_5g_ms^2 + C_5L_5s^2 + 2C_5R_3R_5g_ms + C_5R_5s + 2R_3g_m}$$

**10.106 INVALID-ORDER-106** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)(C_2s - C_5s + g_m)}{s\left(4C_2C_3C_5R_3s^2 + C_2C_3s + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.107 INVALID-ORDER-107** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)(C_2R_5s - C_5R_5s + R_5g_m - 1)}{4C_2C_3C_5R_3R_5s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2C_5R_5s^2 + 4C_2s + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2C_5R_5g_ms + 2g_m}$$

**10.108 INVALID-ORDER-108** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)\left(C_2C_5R_5s^2 + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{s\left(4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3s + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.109 INVALID-ORDER-109** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)\left(C_2C_5L_5s^3 + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{s\left(C_2C_3C_5L_5s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3s + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.110 INVALID-ORDER-110** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)\left(C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1\right)}{4C_2C_3C_5L_5R_3s^4 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

**10.111 INVALID-ORDER-111** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s + 1)\left(C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_2C_3C_5L_5s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3s + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.112 INVALID-ORDER-112** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s + 1)\left(-C_2L_5R_5s^2 + C_5L_5R_5s^2 - L_5R_5g_ms + L_5s + R_5\right)}{4C_2C_3C_5L_5R_3R_5s^4 + 4C_2C_3L_5R_3s^3 + C_2C_3L_5R_5s^3 + 4C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_5s^3 + 4C_2L_5s^2 + 4C_2R_5s + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_5s^3 + 2C_3L_5R_3g_ms^2 + C_3L_5R_5g_ms^2 + C_3L_5s^2 + 2C_3R_3R_5g_ms + C_3R_5s + 2C_5L_5R_5g_ms^2 + 2L_5g_ms + 2R_5g_m}$$

### 10.113 INVALID-ORDER-113 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

### 10.114 INVALID-ORDER-114 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3C_5R_3R_5s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2C_5R_5s^2 + 4C_2s + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2C_5L_5g_ms^2 + 2C_5R_5g}$$

### 10.115 INVALID-ORDER-115 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 R_5 s + R_5 g_m - 1\right)}{4C_2C_3L_3s^3 + C_2C_3R_5s^2 + 4C_2s + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2g_m}$$

### 10.116 INVALID-ORDER-116 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 s - C_5 s + g_m\right)}{s\left(4C_2C_3C_5L_3s^3 + C_2C_3s + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.117 INVALID-ORDER-117 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3R_5s^4 + 4C_2C_3L_3s^3 + C_2C_3R_5s^2 + 4C_2C_5R_5s^2 + 4C_2s + 2C_3C_5L_3R_5g_ms^3 + C_3C_5R_5s^2 + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2C_5R_5g_ms + 2g_m}$$

### 10.118 INVALID-ORDER-118 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(4C_2C_3C_5L_3s^3 + C_2C_3C_5R_5s^2 + C_2C_3s + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.119 INVALID-ORDER-119 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5s^3 + C_2C_3s + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5L_5g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.120 INVALID-ORDER-120 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{4C_2C_3C_5L_3L_5s^5 + 4C_2C_3L_3s^3 + C_2C_3L_5s^3 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + C_3C_5L_5s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^2 + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

### 10.121 INVALID-ORDER-121 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5s^3 + C_2C_3C_5R_5s^2 + C_2C_3s + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5L_5g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.122 INVALID-ORDER-122** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(-C_2 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5\right)}{4C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_5s^3 + C_2C_3L_5R_5s^3 + 4C_2C_5L_5R_5s^3 + 4C_2L_5s^2 + 4C_2R_5s + 2C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_5R_5s^3 + 2C_3L_3L_5g_ms^3 + 2C_3L_3R_5g_ms^2 + C_3L_5R_5g_ms^2 + C_3L_5s^2 + C_3R_5s + 2C_5L_5R_5g_ms^2 + 2L_5g_ms + 2R_5g_m}$$

**10.123 INVALID-ORDER-123** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3L_5s^5 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3L_3s^3 + C_2C_3L_5s^3 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^2 + C_3R_5g_ms + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

**10.124 INVALID-ORDER-124** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_5s^4 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3L_3s^3 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2C_5R_5s^2 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_5g_ms^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5R_5s^2 + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2C_5L_5g_ms^2 + 2C_5R_5g}$$

**10.125 INVALID-ORDER-125** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_5s^3 + 4C_2L_3s^2 + C_2R_5s + C_3L_3R_5g_ms^2 + C_3L_3s^2 + 2L_3g_ms + R_5g_m + 1}$$

**10.126 INVALID-ORDER-126** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 s - C_5 s + g_m\right)}{C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + C_2s + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + C_5s + g_m}$$

**10.127 INVALID-ORDER-127** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_5s^3 + 4C_2C_5L_3R_5s^3 + 4C_2L_3s^2 + C_2R_5s + C_3C_5L_3R_5s^3 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + 2C_5L_3R_5g_ms^2 + C_5R_5s + 2L_3g_ms + R_5g_m + 1}$$

**10.128 INVALID-ORDER-128** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2C_3C_5L_3R_5s^4 + C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + C_2C_5R_5s^2 + C_2s + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + C_5R_5g_ms + C_5s + g_m}$$

**10.129 INVALID-ORDER-129** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2C_3C_5L_3L_5s^5 + C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + C_2C_5L_5s^3 + C_2s + C_3C_5L_3L_5g_ms^4 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + C_5L_5g_ms^2 + C_5s + g_m}$$

**10.130 INVALID-ORDER-130** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2C_3L_3L_5s^4 + 4C_2C_5L_3L_5s^4 + 4C_2L_3s^2 + C_2L_5s^2 + C_3C_5L_3L_5s^4 + C_3L_3L_5g_ms^3 + C_3L_3s^2 + 2C_5L_3L_5g_ms^3 + C_5L_5s^2 + 2L_3g_ms + L_5g_ms + 1}$$

### 10.131 INVALID-ORDER-131 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_3 s^3 + 4 C_2 C_5 L_3 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2 C_5 L_3 g_m s^2 + C_5 L_5 g_m s^2 + C_5 R_5 g_m s + C_5 s + g_m}$$

### 10.132 INVALID-ORDER-132 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{C_2 C_3 L_3 L_5 R_5 s^4 + 4 C_2 C_5 L_3 L_5 R_5 s^4 + 4 C_2 L_3 L_5 s^3 + 4 C_2 L_3 R_5 s^2 + C_2 L_5 R_5 s^2 + C_3 C_5 L_3 L_5 R_5 s^4 + C_3 L_3 L_5 R_5 g_m s^3 + C_3 L_3 L_5 s^3 + C_3 L_3 R_5 s^2 + 2 C_5 L_3 L_5 R_5 g_m s^3 + C_5 L_5 R_5 s^2 + 2 L_3 L_5 g_m s^2 + 2 L_3 R_5 g_m s + L_5 R_5 g_m s + L_5 s + R_5}$$

### 10.133 INVALID-ORDER-133 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_5 s^3 + 4 C_2 C_5 L_3 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + 4 C_2 L_3 s^2 + C_2 L_5 s^2 + C_2 R_5 s + C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 s^4 + C_3 L_3 L_5 g_m s^3 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 L_5 g_m s^3 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + 2 L_3 g_m s + L_5 g_m s + R_5}$$

### 10.134 INVALID-ORDER-134 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_3 R_5 s^3 + 4 C_2 C_5 L_3 L_5 s^4 + 4 C_2 C_5 L_3 R_5 s^3 + C_2 C_5 L_5 R_5 s^3 + 4 C_2 L_3 s^2 + C_2 R_5 s + C_3 C_5 L_3 L_5 R_5 g_m s^4 + C_3 C_5 L_3 L_5 s^4 + C_3 C_5 L_3 R_5 s^3 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 L_5 g_m s^3 + 2 C_5 L_3 R_5 g_m s^2 + C_5 L_5 R_5 g_m s^2 + C_5 L_5 s^2 + C_5 R_5 s + 2 L_3 g_m}$$

### 10.135 INVALID-ORDER-135 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_2 R_5 s + R_5 g_m - 1\right)\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{4 C_2 C_3 L_3 s^3 + 4 C_2 C_3 R_3 s^2 + C_2 C_3 R_5 s^2 + 4 C_2 s + 2 C_3 L_3 g_m s^2 + 2 C_3 R_3 g_m s + C_3 R_5 g_m s + C_3 s + 2 g_m}$$

### 10.136 INVALID-ORDER-136 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_2 s - C_5 s + g_m\right)\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)}{s\left(4 C_2 C_3 C_5 L_3 s^3 + 4 C_2 C_3 C_5 R_3 s^2 + C_2 C_3 s + 4 C_2 C_5 s + 2 C_3 C_5 L_3 g_m s^2 + 2 C_3 C_5 R_3 g_m s + C_3 C_5 s + C_3 g_m + 2 C_5 g_m\right)}$$

### 10.137 INVALID-ORDER-137 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{4 C_2 C_3 C_5 L_3 R_5 s^4 + 4 C_2 C_3 C_5 R_3 R_5 s^3 + 4 C_2 C_3 L_3 s^3 + 4 C_2 C_3 R_3 s^2 + C_2 C_3 R_5 s^2 + 4 C_2 C_5 R_5 s^2 + 4 C_2 s + 2 C_3 C_5 L_3 R_5 g_m s^3 + 2 C_3 C_5 R_3 R_5 g_m s^2 + C_3 C_5 R_5 s^2 + 2 C_3 L_3 g_m s^2 + 2 C_3 R_3 g_m s + C_3 R_5 g_m s + C_3 s + 2 C_5 R_5 g_m s + 2 g_m}$$

### 10.138 INVALID-ORDER-138 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(4 C_2 C_3 C_5 L_3 s^3 + 4 C_2 C_3 C_5 R_3 s^2 + C_2 C_3 C_5 R_5 s^2 + C_2 C_3 s + 4 C_2 C_5 s + 2 C_3 C_5 L_3 g_m s^2 + 2 C_3 C_5 R_3 g_m s + C_3 C_5 R_5 g_m s + C_3 C_5 s + C_3 g_m + 2 C_5 g_m\right)}$$

### 10.139 INVALID-ORDER-139 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(4 C_2 C_3 C_5 L_3 s^3 + C_2 C_3 C_5 L_5 s^3 + 4 C_2 C_3 C_5 R_3 s^2 + C_2 C_3 s + 4 C_2 C_5 s + 2 C_3 C_5 L_3 g_m s^2 + C_3 C_5 L_5 g_m s^2 + 2 C_3 C_5 R_3 g_m s + C_3 C_5 s + C_3 g_m + 2 C_5 g_m\right)}$$

### 10.140 INVALID-ORDER-140 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{4C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_5R_3s^4 + 4C_2C_3L_3s^3 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

### 10.141 INVALID-ORDER-141 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3s + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.142 INVALID-ORDER-142 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_2 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5\right)}{4C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3C_5L_5R_3R_5s^4 + 4C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_5s^3 + 4C_2C_3L_5R_3s^3 + C_2C_3L_5R_5s^3 + 4C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_5s^3 + 4C_2L_5s^2 + 4C_2R_5s + 2C_3C_5L_3L_5R_5g_ms^4 + 2C_3C_5L_5R_3R_5g_ms^3 + C_3C_5L_5R_5s^3 + 2C_3L_3L_5g_ms^3 + 2C_3L_3R_5g_ms^2}$$

### 10.143 INVALID-ORDER-143 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3L_3s^3 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + 2C_3L_3g_ms^2 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C_3R_5g_ms + C_3$$

### 10.144 INVALID-ORDER-144 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_5s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3C_5R_3R_5s^3 + 4C_2C_3L_3s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 4C_2C_5L_5s^3 + 4C_2C_5R_5s^2 + 4C_2s + 2C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_5g_ms^3 + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5$$

### 10.145 INVALID-ORDER-145 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_3R_5s^3 + 4C_2L_3R_3s^2 + C_2L_3R_5s^2 + C_2R_3R_5s + C_3L_3R_3R_5g_ms^2 + C_3L_3R_3s^2 + 2L_3R_3g_ms + L_3R_5g_ms + L_3s + R_3R_5g_m + R_3}$$

### 10.146 INVALID-ORDER-146 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 s - C_5 s + g_m\right)}{C_2C_3L_3R_3s^3 + 4C_2C_5L_3R_3s^3 + C_2L_3s^2 + C_2R_3s + C_3C_5L_3R_3s^3 + C_3L_3R_3g_ms^2 + 2C_5L_3R_3g_ms^2 + C_5L_3s^2 + C_5R_3s + L_3g_ms + R_3g_m}$$

### 10.147 INVALID-ORDER-147 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_3R_5s^3 + 4C_2C_5L_3R_3R_5s^3 + 4C_2L_3R_3s^2 + C_2L_3R_5s^2 + C_2R_3R_5s + C_3C_5L_3R_3R_5s^3 + C_3L_3R_3R_5g_ms^2 + C_3L_3R_3s^2 + 2C_5L_3R_3R_5g_ms^2 + C_5L_3R_5s^2 + C_5R_3R_5s + 2L_3R_3g_ms + L_3R_5g_ms + L_3s + R_3R_5g_m + R_3}$$

### 10.148 INVALID-ORDER-148 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2C_3C_5L_3R_3R_5s^4 + C_2C_3L_3R_3s^3 + 4C_2C_5L_3R_3s^3 + C_2C_5L_3R_5s^3 + C_2C_5R_3R_5s^2 + C_2L_3s^2 + C_2R_3s + C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_3s^3 + C_3L_3R_3g_ms^2 + 2C_5L_3R_3g_ms^2 + C_5L_3R_5g_ms^2 + C_5L_3s^2 + C_5R_3R_5g_ms + C_5R_3s + L_3g_ms + R_3g_m}$$

### 10.149 INVALID-ORDER-149 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 L_5 R_3 s^5 + C_2 C_3 L_3 R_3 s^3 + C_2 C_5 L_3 L_5 s^4 + 4 C_2 C_5 L_3 R_3 s^3 + C_2 C_5 L_5 R_3 s^3 + C_2 L_3 s^2 + C_2 R_3 s + C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_3 s^3 + C_3 L_3 R_3 g_m s^2 + C_5 L_3 L_5 g_m s^3 + 2 C_5 L_3 R_3 g_m s^2 + C_5 L_3 s^2 + C_5 L_5 R_3 g_m s^2 + C_5 R_3 s + L_3 g_m s + R_3 g_m}$$

### 10.150 INVALID-ORDER-150 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2 C_3 L_3 L_5 R_3 s^4 + 4 C_2 C_5 L_3 L_5 R_3 s^4 + C_2 L_3 L_5 s^3 + 4 C_2 L_3 R_3 s^2 + C_2 L_5 R_3 s^2 + C_3 C_5 L_3 L_5 R_3 s^4 + C_3 L_3 L_5 R_3 g_m s^3 + C_3 L_3 R_3 s^2 + 2 C_5 L_3 L_5 R_3 g_m s^3 + C_5 L_3 L_5 s^3 + C_5 L_5 R_3 s^2 + L_3 L_5 g_m s^2 + 2 L_3 R_3 g_m s + L_3 s + L_5 R_3 g_m s + R_3}$$

### 10.151 INVALID-ORDER-151 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 L_5 R_3 s^5 + C_2 C_3 C_5 L_3 R_3 R_5 s^4 + C_2 C_3 L_3 R_3 s^3 + C_2 C_5 L_3 L_5 s^4 + 4 C_2 C_5 L_3 R_3 s^3 + C_2 C_5 L_3 R_5 s^3 + C_2 C_5 L_5 R_3 s^3 + C_2 C_5 R_3 R_5 s^2 + C_2 L_3 s^2 + C_2 R_3 s + C_3 C_5 L_3 L_5 R_3 g_m s^4 + C_3 C_5 L_3 R_3 R_5 g_m s^3 + C_3 C_5 L_3 R_3 s^3 + C_3 L_3 R_3 g_m s^2 + C_5 L_3 L_5 g_m s^3 + 2 C_5 L_3 R_3 g_m$$

### 10.152 INVALID-ORDER-152 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5 g_m s - L_5 s - R_5\right)}{C_2 C_3 L_3 L_5 R_3 R_5 s^4 + 4 C_2 C_5 L_3 L_5 R_3 R_5 s^4 + 4 C_2 L_3 L_5 R_3 s^3 + C_2 L_3 L_5 R_5 s^3 + 4 C_2 L_3 R_3 R_5 s^2 + C_2 L_5 R_3 R_5 s^2 + C_3 C_5 L_3 L_5 R_3 R_5 s^4 + C_3 L_3 L_5 R_3 R_5 g_m s^3 + C_3 L_3 L_5 R_3 s^3 + C_3 L_3 R_3 R_5 s^2 + 2 C_5 L_3 L_5 R_3 R_5 g_m s^3 + C_5 L_3 L_5 R_5 s^3 + C_5 L_5 R_3 R_5 s^2 + 2 L_3 L_5 R_3 g_m s^2 + L_3 L_5$$

### 10.153 INVALID-ORDER-153 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_3 L_5 R_3 R_5 s^5 + C_2 C_3 L_3 L_5 R_3 s^4 + C_2 C_3 L_3 R_3 R_5 s^3 + 4 C_2 C_5 L_3 L_5 R_3 s^4 + C_2 C_5 L_3 L_5 R_5 s^4 + C_2 C_5 L_5 R_3 R_5 s^3 + C_2 L_3 L_5 s^3 + 4 C_2 L_3 R_3 s^2 + C_2 L_3 R_5 s^2 + C_2 L_5 R_3 s^2 + C_2 R_3 R_5 s + C_3 C_5 L_3 L_5 R_3 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_3 s^4 + C_3 L_3 L_5 R_3 g_m s^3 + C_3 L_3 R_3 R_5 g_m s^2$$

### 10.154 INVALID-ORDER-154 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s \left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_3 L_5 R_3 R_5 s^5 + C_2 C_3 L_3 R_3 R_5 s^3 + 4 C_2 C_5 L_3 L_5 R_3 s^4 + C_2 C_5 L_3 L_5 R_5 s^4 + 4 C_2 C_5 L_3 R_3 R_5 s^3 + C_2 C_5 L_5 R_3 R_5 s^3 + 4 C_2 L_3 R_3 s^2 + C_2 L_3 R_5 s^2 + C_2 R_3 R_5 s + C_3 C_5 L_3 L_5 R_3 R_5 g_m s^4 + C_3 C_5 L_3 L_5 R_3 s^4 + C_3 C_5 L_3 R_3 R_5 s^3 + C_3 L_3 R_3 R_5 g_m s^2 + C_3 L_3 R_3 s^2 + 2 C_5 L_3 L_5$$

### 10.155 INVALID-ORDER-155 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_2 R_5 s + R_5 g_m - 1\right)\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{4 C_2 C_3 L_3 R_3 s^3 + C_2 C_3 L_3 R_5 s^3 + 4 C_2 L_3 s^2 + 4 C_2 R_3 s + C_2 R_5 s + 2 C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2 L_3 g_m s + 2 R_3 g_m + R_5 g_m + 1}$$

### 10.156 INVALID-ORDER-156 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_2 s - C_5 s + g_m\right)\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)}{4 C_2 C_3 C_5 L_3 R_3 s^4 + C_2 C_3 L_3 s^3 + 4 C_2 C_5 L_3 s^3 + 4 C_2 C_5 R_3 s^2 + C_2 s + 2 C_3 C_5 L_3 R_3 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2 C_5 L_3 g_m s^2 + 2 C_5 R_3 g_m s + C_5 s + g_m}$$

### 10.157 INVALID-ORDER-157 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{4 C_2 C_3 C_5 L_3 R_3 R_5 s^4 + 4 C_2 C_3 L_3 R_3 s^3 + C_2 C_3 L_3 R_5 s^3 + 4 C_2 C_5 L_3 R_5 s^3 + 4 C_2 C_5 R_3 R_5 s^2 + 4 C_2 L_3 s^2 + 4 C_2 R_3 s + C_2 R_5 s + 2 C_3 C_5 L_3 R_3 R_5 g_m s^3 + C_3 C_5 L_3 R_5 s^3 + 2 C_3 L_3 R_3 g_m s^2 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 R_5 g_m s^2 + 2 C_5 R_3 R_5 g_m s + C_5 R_5 s + 2 L_3 g_m s + 2 R_3 g$$

### 10.158 INVALID-ORDER-158 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

### 10.159 INVALID-ORDER-159 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2s + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5s + g_m}$$

### 10.160 INVALID-ORDER-160 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + 4C_2C_5L_3L_5s^4 + 4C_2C_5L_5R_3s^3 + 4C_2L_3s^2 + C_2L_5s^2 + 4C_2R_3s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5s^4 + C_3L_3L_5g_ms^3 + 2C_3L_3R_3g_ms^2 + C_3L_3s^2 + 2C_5L_3L_5g_ms^3 + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 + 2L_3g_ms + L_5g$$

### 10.161 INVALID-ORDER-161 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_3s^3 + 4C_2C_5L_3s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2s + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5R_5$$

### 10.162 INVALID-ORDER-162 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(-C_2 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R\right.}{4C_2C_3C_5L_3L_5R_3R_5s^5 + 4C_2C_3L_3L_5R_3s^4 + C_2C_3L_3L_5R_5s^4 + 4C_2C_3L_3R_3R_5s^3 + 4C_2C_5L_3L_5R_5s^4 + 4C_2C_5L_5R_3R_5s^3 + 4C_2L_3L_5s^3 + 4C_2L_3R_5s^2 + 4C_2L_5R_3s^2 + C_2L_5R_5s^2 + 4C_2R_3R_5s + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5s^4 + 2C_3L_3L_5R_3g_ms^3 + C_3L$$

### 10.163 INVALID-ORDER-163 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 + L_5 g_m s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 4C_2C_5L_3L_5s^4 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 4C_2L_3s^2 + C_2L_5s^2 + 4C_2R_3s + C_2R_5s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5s^4 + C_3L_3L_5g_ms^3 + 2C$$

### 10.164 INVALID-ORDER-164 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 R_3 s^2 + L_3 s + R_3\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 -\right.}{4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3C_5L_3R_3R_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 4C_2C_5L_3L_5s^4 + 4C_2C_5L_3R_5s^3 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 4C_2C_5R_3R_5s^2 + 4C_2L_3s^2 + 4C_2R_3s + C_2R_5s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3$$

### 10.165 INVALID-ORDER-165 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2 + 1\right)\left(C_2 R_5 s + R_5 g_m - 1\right)}{4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_3R_5s^2 + 4C_2R_3s + C_2R_5s + 2C_3L_3R_3g_ms^2 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + C_3R_3R_5g_ms + C_3R_3s + 2R_3g_m + R_5g_m + 1}$$

### 10.166 INVALID-ORDER-166 $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2 + 1\right)\left(C_2 s - C_5 s + g_m\right)}{4C_2C_3C_5L_3R_3s^4 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + 4C_2C_5R_3s^2 + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3s^2 + C_3L_3g_ms^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5s + g_m}$$

**10.167 INVALID-ORDER-167** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{4C_2C_3C_5L_3R_3R_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_3R_5s^2 + 4C_2C_5R_3R_5s^2 + 4C_2R_3s + C_2R_5s + 2C_3C_5L_3R_3R_5g_ms^3 + C_3C_5L_3R_5s^3 + C_3C_5R_3R_5s^2 + 2C_3L_3R_3g_ms^2 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5R_3R_5g_ms + C_5R_5s + 2R_3}$$

**10.168 INVALID-ORDER-168** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5+\frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 R_5 s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3R_5g_ms^2 + C_3C_5R_3s^2 + C_3L_3g_ms^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

**10.169 INVALID-ORDER-169** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s+\frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_5 s^3 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2s + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5L_5R_3g_ms^3 + C_3C_5R_3s^2 + C_3L_3g_ms^2 + C_3R_3g_ms + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5s + g_m}$$

**10.170 INVALID-ORDER-170** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_5R_3s^3 + 4C_2C_5L_5R_3s^3 + C_2L_5s^2 + 4C_2R_3s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_5R_3s^3 + C_3L_3L_5g_ms^3 + 2C_3L_3R_3g_ms^2 + C_3L_3s^2 + C_3L_5R_3g_ms^2 + C_3R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 + L_5}$$

**10.171 INVALID-ORDER-171** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s+R_5+\frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2s + C_3C_5L_3L_5g_ms^4 + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3R_5g_ms^3 + C_3C_5L_3s^3 + C_3C_5L_5R_3g_ms^3 + C_3C_5\ldots}$$

**10.172 INVALID-ORDER-172** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3 L_3 s^2+1\right)\left(-C_2 L_5 R_5 s^2 + C_5 L_5 R_5 s^2 - L_5 R_5 g_m s + L_5 s + R_5\right)}{4C_2C_3C_5L_3L_5R_3R_5s^5 + 4C_2C_3L_3L_5R_3s^4 + C_2C_3L_3L_5R_5s^4 + 4C_2C_3L_3R_3R_5s^3 + C_2C_3L_5R_3R_5s^3 + 4C_2C_5L_5R_3R_5s^3 + 4C_2L_5R_3s^2 + C_2L_5R_5s^2 + 4C_2R_3R_5s + 2C_3C_5L_3L_5R_3R_5g_ms^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_5R_3R_5s^3 + 2C_3L_3L_5R_3g_ms^3 + C_3L_3L_5R_5g_ms^3\ldots}$$

**10.173 INVALID-ORDER-173** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5\ldots\right.}{4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3L_5R_3s^3 + C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + C_2L_5s^2 + 4C_2R_3s + C_2R_5s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3\ldots}$$

**10.174 INVALID-ORDER-174** $Z(s) = \left(\infty,\ \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_5 R_5 s^3 + C_2 R_5 s + C_5 L_5\ldots\right.}{4C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3C_5L_3R_3R_5s^4 + C_2C_3C_5L_5R_3R_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3L_5R_3s^3 + C_2C_3R_3R_5s^2 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 4C_2C_5R_3R_5s^2 + 4C_2R_3s + C_2R_5s + 2C_3C_5L_3L_5R_3g_ms^4 + C_3C_5L_3L_5R_5g_ms^4 + C_3C_5L_3L_5\ldots}$$

**10.175 INVALID-ORDER-175** $Z(s) = \left(\infty,\ \frac{R_2}{C_2 R_2 s+1},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2 R_2 R_5 s + R_2 R_5 g_m - R_2 + R_5\right)}{4C_2R_2R_3s + C_2R_2R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**10.176 INVALID-ORDER-176** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**10.177 INVALID-ORDER-177** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_5L_5R_2R_3s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_5R_2g_ms + L_5s + 2R_2R_3g_m + R_2 + 4R_3}$$

**10.178 INVALID-ORDER-178** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

**10.179 INVALID-ORDER-179** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{4C_2C_5L_5R_2R_3R_5s^3 + 4C_2L_5R_2R_3s^2 + C_2L_5R_2R_5s^2 + 4C_2R_2R_3R_5s + 2C_5L_5R_2R_3R_5g_ms^2 + C_5L_5R_2R_5s^2 + 4C_5L_5R_3R_5s^2 + 2L_5R_2R_3g_ms + L_5R_2R_5g_ms + L_5R_2s + 4L_5R_3s + L_5R_5s + 2R_2R_3R_5g_m + R_2R_5 + 4R_3R_5}$$

**10.180 INVALID-ORDER-180** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2R_5g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**10.181 INVALID-ORDER-181** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3,\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2R_5g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + C_5L_5R_5s^2 + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**10.182 INVALID-ORDER-182** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2R_2s - C_5R_2s + R_2g_m + 1}{s\left(C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.183 INVALID-ORDER-183** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5R_2R_5g_ms + C_3C_5R_2s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.184 INVALID-ORDER-184** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1}{s\left(C_2C_3C_5L_5R_2s^3 + C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.185 INVALID-ORDER-185** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2}{C_2C_3L_5R_2s^3 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + C_3C_5L_5R_2s^3 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + C_3R_2s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2R_2g_m + 4}$$

**10.186 INVALID-ORDER-186** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_2C_3C_5L_5R_2s^3 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2R_5g_ms + C_3C_5R_2s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.187 INVALID-ORDER-187** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5}{C_2C_3L_5R_2R_5s^3 + 4C_2C_5L_5R_2R_5s^3 + 4C_2L_5R_2s^2 + 4C_2R_2R_5s + C_3C_5L_5R_2R_5s^3 + C_3L_5R_2R_5g_ms^2 + C_3L_5R_2s^2 + C_3L_5R_5s^2 + C_3R_2R_5s + 2C_5L_5R_2R_5g_ms^2 + 4C_5L_5R_5s^2 + 2L_5R_2g_ms + 4L_5s + 2R_2R_5g_m + 4R_5}$$

**10.188 INVALID-ORDER-188** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_5R_2s^3 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + C_3C_5L_5R_5s^3 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2R_2g_m + 4}$$

**10.189 INVALID-ORDER-189** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2R_5s^3 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3C_5L_5R_2R_5s^4 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + C_3C_5L_5R_5s^3 + C_3C_5R_2R_5s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2C_5R_2R_5g_ms + 4C_5R_5s + 2R_2g_m + 4}$$

**10.190 INVALID-ORDER-190** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_3C_5R_2R_3R_5s^3 + C_2C_3R_2R_3s^2 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

**10.191 INVALID-ORDER-191** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_5R_2R_3s^4 + C_2C_3R_2R_3s^2 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2R_2s + C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3s^2 + C_3R_2R_3g_ms + C_3R_3s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**10.192 INVALID-ORDER-192** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{C_2C_3L_5R_2R_3s^3 + 4C_2C_5L_5R_2R_3s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + C_3C_5L_5R_2R_3s^3 + C_3L_5R_2R_3g_ms^2 + C_3L_5R_3s^2 + C_3R_2R_3s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_5R_2g_ms + L_5s + 2R_2R_3g_m + R_2 + 4R_3}$$

**10.193 INVALID-ORDER-193** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3R_2R_3s^2 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_3s^3 + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_3s^2 + C_3C_5R_3R_5s^2 + C_3R_2R_3g_ms + C_3R_3s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C$$

### 10.194 INVALID-ORDER-194 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{C_2C_3L_5R_2R_3R_5s^3 + 4C_2C_5L_5R_2R_3R_5s^3 + 4C_2L_5R_2R_3s^2 + C_2L_5R_2R_5s^2 + 4C_2R_2R_3R_5s + C_3C_5L_5R_2R_3R_5s^3 + C_3L_5R_2R_3R_5g_ms^2 + C_3L_5R_2R_3s^2 + C_3L_5R_3R_5s^2 + C_3R_2R_3R_5s + 2C_5L_5R_2R_3R_5g_ms^2 + C_5L_5R_2R_5s^2 + 4C_5L_5R_3R_5s^2 + 2L_5R_2R_3g_ms + L_5R_2$$

### 10.195 INVALID-ORDER-195 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m -\right.}{C_2C_3C_5L_5R_2R_3R_5s^4 + C_2C_3L_5R_2R_3s^3 + C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3L_5R_2R_3g_ms^2 + C_3L_5R_3s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s +$$

### 10.196 INVALID-ORDER-196 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5s^3 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 + R\right.}{C_2C_3C_5L_5R_2R_3R_5s^4 + C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_3s^3 + C_3C_5L_5R_3R_5s^3 + C_3C_5R_2R_3R_5s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2C_5L_5R_2R$$

### 10.197 INVALID-ORDER-197 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5R_2R_3s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.198 INVALID-ORDER-198 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5R_2R_3R_5s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_5s^2 + 4C_3C_5R_3R_5s^2 + 2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2C_5R_2R_5g_ms + 4C_5R_5s + 2R_2g_m + 4$$

### 10.199 INVALID-ORDER-199 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5R_2R_3g_ms + C_3C_5R_2R_5g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.200 INVALID-ORDER-200 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{s\left(C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.201 INVALID-ORDER-201 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_5R_2s^3 + 4C_2C_3R_2R_3s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_2s^3 + 4C_3C_5L_5R_3s^3 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + 2C_3R_2R_3g_ms + C_3R_2s + 4C_3R_3s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2R_2g_m + 4$$

### 10.202 INVALID-ORDER-202 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2R_5g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.203 INVALID-ORDER-203** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{4C_2C_3C_5L_5R_2R_3R_5s^4 + 4C_2C_3L_5R_2R_3s^3 + C_2C_3L_5R_2R_5s^3 + 4C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_5s^3 + 4C_2L_5R_2s^2 + 4C_2R_2R_5s + 2C_3C_5L_5R_2R_3R_5g_ms^3 + C_3C_5L_5R_2R_5s^3 + 4C_3C_5L_5R_3R_5s^3 + 2C_3L_5R_2R_3g_ms^2 + C_3L_5R_2R_5g_ms^2 + C_3L_5R_2s^2 + 4C_3L_5R_3s^2 +}$$

**10.204 INVALID-ORDER-204** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_5R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + 4C_3C_5L_5R_3s^3 + C_3C_5L_5R_5s^3 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + 2C_3R_2R_3g_ms + C_3R_2}$$

**10.205 INVALID-ORDER-205** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2R_5s^3 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m -\right.}{4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + 4C_3C_5L_5R_3s^3 + C_3C_5L_5R_5s^3 + 2C_3C_5R_2R_3R_5g_ms^2 + C$$

**10.206 INVALID-ORDER-206** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3L_3R_2s^3 + C_2C_3R_2R_5s^2 + 4C_2R_2s + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2R_2g_m + 4}$$

**10.207 INVALID-ORDER-207** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.208 INVALID-ORDER-208** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3L_3R_2s^3 + C_2C_3R_2R_5s^2 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5L_3R_2R_5g_ms^3 + 4C_3C_5L_3R_5s^3 + C_3C_5R_2R_5s^2 + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5R_2R_5g_ms + 4C_5R_5s + 2R_2g_m + 4}$$

**10.209 INVALID-ORDER-209** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5R_2R_5g_ms + C_3C_5R_2s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.210 INVALID-ORDER-210** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.211 INVALID-ORDER-211** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3L_3R_2s^3 + C_2C_3L_5R_2s^3 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_5R_2s^3 + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + C_3R_2s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 2R_2g_m + 4}$$

### 10.212 INVALID-ORDER-212 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2R_5g_ms + C_3C_5R_2s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.213 INVALID-ORDER-213 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{4C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_5s^3 + C_2C_3L_5R_2R_5s^3 + 4C_2C_5L_5R_2R_5s^3 + 4C_2L_5R_2s^2 + 4C_2R_2R_5s + 2C_3C_5L_3L_5R_2R_5g_ms^4 + 4C_3C_5L_3L_5R_5s^4 + C_3C_5L_5R_2R_5s^3 + 2C_3L_3L_5R_2g_ms^3 + 4C_3L_3L_5s^3 + 2C_3L_3R_2R_5g_ms^2 + 4C_3L_3R_5s^2 +}$$

### 10.214 INVALID-ORDER-214 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_3L_5R_2s^5 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3L_3R_2s^3 + C_2C_3L_5R_2s^3 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + C_3C_5L_5R_5s^3 + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3L_5R_2g_ms^2 + C_3L}$$

### 10.215 INVALID-ORDER-215 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2R_5s^3 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m\right.}{4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_5s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3L_3R_2s^3 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_5g_ms^3 + 4C_3C_5L_3R_5s^3 + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + C}$$

### 10.216 INVALID-ORDER-216 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_3R_2R_5s^3 + 4C_2L_3R_2s^2 + C_2R_2R_5s + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + C_3L_3R_5s^2 + 2L_3R_2g_ms + 4L_3s + R_2R_5g_m + R_2 + R_5}$$

### 10.217 INVALID-ORDER-217 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2R_2s + C_3C_5L_3R_2s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + C_5R_2s + R_2g_m + 1}$$

### 10.218 INVALID-ORDER-218 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3R_2R_5s^3 + 4C_2L_3R_2s^2 + C_2R_2R_5s + C_3C_5L_3R_2R_5s^3 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + C_3L_3R_5s^2 + 2C_5L_3R_2R_5g_ms^2 + 4C_5L_3R_5s^2 + C_5R_2R_5s + 2L_3R_2g_ms + 4L_3s + R_2R_5g_m + R_2 + R_5}$$

### 10.219 INVALID-ORDER-219 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + C_3C_5L_3R_5s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + C_5R_2R_5g_ms + C_5R_2s + C_5R_5s + R_2g_m + 1}$$

### 10.220 INVALID-ORDER-220 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_3L_5R_2s^5 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5L_5R_2s^3 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3R_2s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2s + R_2g_m + 1}$$

### 10.221 INVALID-ORDER-221 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{C_2C_3L_3L_5R_2s^4 + 4C_2C_5L_3L_5R_2s^4 + 4C_2L_3R_2s^2 + C_2L_5R_2s^2 + C_3C_5L_3L_5R_2s^4 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + C_3L_3R_2s^2 + 2C_5L_3L_5R_2g_ms^3 + 4C_5L_3L_5s^3 + C_5L_5R_2s^2 + 2L_3R_2g_ms + 4L_3s + L_5R_2g_ms + L_5s + R_2}$$

### 10.222 INVALID-ORDER-222 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_3C_5L_3L_5R_2s^5 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + C_3C_5L_3R_5s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 +$$

### 10.223 INVALID-ORDER-223 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5R_2s + L_5R_5s - R_2R_5\right)}{C_2C_3L_3L_5R_2R_5s^4 + 4C_2C_5L_3L_5R_2R_5s^4 + 4C_2L_3L_5R_2s^3 + 4C_2L_3R_2R_5s^2 + C_2L_5R_2R_5s^2 + C_3C_5L_3L_5R_2R_5s^4 + C_3L_3L_5R_2R_5g_ms^3 + C_3L_3L_5R_2s^3 + C_3L_3L_5R_5s^3 + C_3L_3R_2R_5s^2 + 2C_5L_3L_5R_2R_5g_ms^3 + 4C_5L_3L_5R_5s^3 + C_5L_5R_2R_5s^2 + 2L_3L_5R_2g_ms^2 + 4L_3L$$

### 10.224 INVALID-ORDER-224 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + L_5R_2g_ms + L_5s + R_2R_5g_m\right.}{C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3L_3L_5R_2s^4 + C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3L_5R_2s^4 + C_2C_5L_5R_2R_5s^3 + 4C_2L_3R_2s^2 + C_2L_5R_2s^2 + C_2R_2R_5s + C_3C_5L_3L_5R_2R_5g_ms^4 + C_3C_5L_3L_5R_2s^4 + C_3C_5L_3L_5R_5s^4 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2$$

### 10.225 INVALID-ORDER-225 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_5R_2R_5s^3 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 - C_5R_2R_5s + R_2R_5g_m - R_2 +\right.}{C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3R_2R_5s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2L_3R_2s^2 + C_2R_2R_5s + C_3C_5L_3L_5R_2R_5g_ms^4 + C_3C_5L_3L_5R_2s^4 + C_3C_5L_3L_5R_5s^4 + C_3C_5L_3R_2R_5s^3 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + C_3L_3R_5s^2 + 2C_5L_3L_5$$

### 10.226 INVALID-ORDER-226 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3L_3R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2R_2s + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + 2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2R_2g_m + 4}$$

### 10.227 INVALID-ORDER-227 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

### 10.228 INVALID-ORDER-228 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 4C_2C_3L_3R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5L_3R_2R_5g_ms^3 + 4C_3C_5L_3R_5s^3 + 2C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R_2R_5s^2 + 4C_3C_5R_3R_5s^2 + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + 2C_3R_2R_3g_ms$$

### 10.229 INVALID-ORDER-229 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2R_5g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.230 INVALID-ORDER-230** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.231 INVALID-ORDER-231** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + 4C_2C_3L_3R_2s^3 + C_2C_3L_5R_2s^3 + 4C_2C_3R_2R_3s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_2s^3 + 4C_3C_5L_5R_3s^3 + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3L_5R_2g_ms^2 +}$$

**10.232 INVALID-ORDER-232** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3R_2s + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2R_5g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3C_5R_5s + C_3R_2g_m + C_3 +\right.}$$

**10.233 INVALID-ORDER-233** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)(C}{4C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_5R_2R_3R_5s^4 + 4C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_5s^3 + 4C_2C_3L_5R_2R_3s^3 + C_2C_3L_5R_2R_5s^3 + 4C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_5s^3 + 4C_2L_5R_2s^2 + 4C_2R_2R_5s + 2C_3C_5L_3L_5R_2R_5g_ms^4 + 4C_3C_5L_3L_5R_5s^4 + 2C_3C_5L_5R_2R_3R_5g_m}$$

**10.234 INVALID-ORDER-234** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + C_2R_2R_5s + C_5L_5R_2R_5g_ms^2 - C_5L_5R_2s^2 + C_5L_5R_5s^2 + R\right.}{4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3L_3R_2s^3 + C_2C_3L_5R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5R_2R_5g_ms^3 + C_3C_5L_5R_2s^3 + 4C}$$

**10.235 INVALID-ORDER-235** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_5}{4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 4C_2C_3L_3R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 4C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_5s^2 + 4C_2R_2s + 2C_3C_5L_3L_5R_2g_ms^4 + 4C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_5}$$

**10.236 INVALID-ORDER-236** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_3R_2R_3R_5s^3 + 4C_2L_3R_2R_3s^2 + C_2L_3R_2R_5s^2 + C_2R_2R_3R_5s + C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_3s^2 + C_3L_3R_3R_5s^2 + 2L_3R_2R_3g_ms + L_3R_2R_5g_ms + L_3R_2s + 4L_3R_3s + L_3R_5s + R_2R_3R_5g_m + R_2R_3 + R_3R_5}$$

**10.237 INVALID-ORDER-237** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3L_3R_2R_3s^3 + 4C_2C_5L_3R_2R_3s^3 + C_2L_3R_2s^2 + C_2R_2R_3s + C_3C_5L_3R_2R_3s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + 2C_5L_3R_2R_3g_ms^2 + C_5L_3R_2s^2 + 4C_5L_3R_3s^2 + C_5R_2R_3s + L_3R_2g_ms + L_3s + R_2R_3g_m + R_3}$$

**10.238 INVALID-ORDER-238** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_3R_2R_3R_5s^3 + 4C_2C_5L_3R_2R_3R_5s^3 + 4C_2L_3R_2R_3s^2 + C_2L_3R_2R_5s^2 + C_2R_2R_3R_5s + C_3C_5L_3R_2R_3R_5s^3 + C_3L_3R_2R_3R_5g_ms^2 + C_3L_3R_2R_3s^2 + C_3L_3R_3R_5s^2 + 2C_5L_3R_2R_3R_5g_ms^2 + C_5L_3R_2R_5s^2 + 4C_5L_3R_3R_5s^2 + C_5R_2R_3R_5s + 2L_3R_2R_3g_ms + L_3R_2R}$$

### 10.239 INVALID-ORDER-239 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_3R_2R_3s^3 + 4C_2C_5L_3R_2R_3s^3 + C_2C_5L_3R_2R_5s^3 + C_2C_5R_2R_3R_5s^2 + C_2L_3R_2s^2 + C_2R_2R_3s + C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_3s^3 + C_3C_5L_3R_3R_5s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + 2C_5L_3R_2R_3g_ms^2 + C_5L_3R_2R_5g_ms^2 + C_5$$

### 10.240 INVALID-ORDER-240 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_3R_2R_3s^3 + C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3R_2R_3s^3 + C_2C_5L_5R_2R_3s^3 + C_2L_3R_2s^2 + C_2R_2R_3s + C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3R_2R_3s^3 + C_3L_3R_2R_3g_ms^2 + C_3L_3R_3s^2 + C_5L_3L_5R_2g_ms^3 + C_5L_3L_5s^3 + 2C_5L_3R_2R_3$$

### 10.241 INVALID-ORDER-241 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{C_2C_3L_3L_5R_2R_3s^4 + 4C_2C_5L_3L_5R_2R_3s^4 + C_2L_3L_5R_2s^3 + 4C_2L_3R_2R_3s^2 + C_2L_5R_2R_3s^2 + C_3C_5L_3L_5R_2R_3s^4 + C_3L_3L_5R_2R_3g_ms^3 + C_3L_3L_5R_3s^3 + C_3L_3R_2R_3s^2 + 2C_5L_3L_5R_2R_3g_ms^3 + C_5L_3L_5R_2s^3 + 4C_5L_3L_5R_3s^3 + C_5L_5R_2R_3s^2 + L_3L_5R_2g_ms^2 + L_3L_5s^2$$

### 10.242 INVALID-ORDER-242 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C\right.}{C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_3R_2R_3s^3 + C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3R_2R_3s^3 + C_2C_5L_3R_2R_5s^3 + C_2C_5L_5R_2R_3s^3 + C_2C_5R_2R_3R_5s^2 + C_2L_3R_2s^2 + C_2R_2R_3s + C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_3s^4 + C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3$$

### 10.243 INVALID-ORDER-243 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5R_2R_5g_ms - L_5\right.}{C_2C_3L_3L_5R_2R_3R_5s^4 + 4C_2C_5L_3L_5R_2R_3R_5s^4 + 4C_2L_3L_5R_2R_3s^3 + C_2L_3L_5R_2R_5s^3 + 4C_2L_3R_2R_3R_5s^2 + C_2L_5R_2R_3R_5s^2 + C_3C_5L_3L_5R_2R_3R_5s^4 + C_3L_3L_5R_2R_3R_5g_ms^3 + C_3L_3L_5R_2R_3s^3 + C_3L_3L_5R_3R_5s^3 + C_3L_3R_2R_3R_5s^2 + 2C_5L_3L_5R_2R_3R_5g_ms^3 + C_5L_3$$

### 10.244 INVALID-ORDER-244 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3R_2R_3R_5s^3 + 4C_2C_5L_3L_5R_2R_3s^4 + C_2C_5L_3L_5R_2R_5s^4 + C_2C_5L_5R_2R_3R_5s^3 + C_2L_3L_5R_2s^3 + 4C_2L_3R_2R_3s^2 + C_2L_3R_2R_5s^2 + C_2L_5R_2R_3s^2 + C_2R_2R_3R_5s + C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_3s^4 +$$

### 10.245 INVALID-ORDER-245 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3}{C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_3R_2R_3R_5s^3 + 4C_2C_5L_3L_5R_2R_3s^4 + C_2C_5L_3L_5R_2R_5s^4 + 4C_2C_5L_3R_2R_3R_5s^3 + C_2C_5L_5R_2R_3R_5s^3 + 4C_2L_3R_2R_3s^2 + C_2L_3R_2R_5s^2 + C_2R_2R_3R_5s + C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_3s^4 + C_3C_5L_3L_5R_3R_5s^4 + C_3C_5L_3$$

### 10.246 INVALID-ORDER-246 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 4C_2L_3R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + 4C_3L_3R_3s^2 + C_3L_3R_5s^2 + 2L_3R_2g_ms + 4L_3s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

### 10.247 INVALID-ORDER-247 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2R_2s + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

### 10.248 INVALID-ORDER-248 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_3R_2R_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 4C_2L_3R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_5s^3 + 4C_3C_5L_3R_3R_5s^3 + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + 4C$$

### 10.249 INVALID-ORDER-249 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_3R_5s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L$$

### 10.250 INVALID-ORDER-250 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3$$

### 10.251 INVALID-ORDER-251 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_3s^3 + 4C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_5R_2R_3s^3 + 4C_2L_3R_2s^2 + C_2L_5R_2s^2 + 4C_2R_2R_3s + 2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2s^4 + 4C_3C_5L_3L_5R_3s^4 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + 2C_3L_3R_2R_3g_ms^2 + C_3$$

### 10.252 INVALID-ORDER-252 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5$$
$$C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_3R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L$$

### 10.253 INVALID-ORDER-253 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{}{4C_2C_3C_5L_3L_5R_2R_3R_5s^5 + 4C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3L_5R_2R_5s^4 + 4C_2C_3L_3R_2R_3R_5s^3 + 4C_2C_5L_3L_5R_2R_5s^4 + 4C_2C_5L_5R_2R_3R_5s^3 + 4C_2L_3L_5R_2s^3 + 4C_2L_3R_2R_5s^2 + 4C_2L_5R_2R_3s^2 + C_2L_5R_2R_5s^2 + 4C_2R_2R_3R_5s + 2C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5$$

### 10.254 INVALID-ORDER-254 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2L_3R_2s^2 + C_2L_5R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2R_5g_m$$

### 10.255 INVALID-ORDER-255 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3R_2R_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 4C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3R_2R_5s^3 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 4C_2L_3R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3L$$

### 10.256 INVALID-ORDER-256 $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2 + 1\right)\left(C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + C_2C_3R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 + 4C_3L_3R_3s^2 + C_3L_3R_5s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3 + R_5}$$

**10.257 INVALID-ORDER-257** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_3R_2s^3 + C_2C_3R_2R_3s^2 + 4C_2C_5R_2R_3s^2 + C_2R_2s + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5R_2R_3s^2 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**10.258 INVALID-ORDER-258** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{4C_2C_3C_5L_3R_2R_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + C_2C_3R_2R_3R_5s^2 + 4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3R_2R_3R_5g_ms^3 + C_3C_5L_3R_2R_5s^3 + 4C_3C_5L_3R_3R_5s^3 + C_3C_5R_2R_3R_5s^2 + 2C_3L_3R_2R_3g_ms^2 + C_3L_3R_2R_5g_ms^2 + C_3L_3R_2s^2 -}$$

**10.259 INVALID-ORDER-259** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5R_2R_5s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_3R_2s^3 + C_2C_3R_2R_3s^2 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2R_5g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_3R_5s^3 + C_3C_5R_2R_3R_5g_ms^2 + C_3C_5R}$$

**10.260 INVALID-ORDER-260** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2s^3 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_3R_2s^3 + C_2C_3R_2R_3s^2 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C_5L_3R_2s^3 + 4C_3C_5L_3R_3s^3 + C_3C_5L_5R_2R_3g_ms^3 + C_3C_5L_5}$$

**10.261 INVALID-ORDER-261** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_5R_2R_3s^3 + 4C_2C_5L_5R_2R_3s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + 2C_3C_5L_3L_5R_2R_3g_ms^4 + C_3C_5L_3L_5R_2s^4 + 4C_3C_5L_3L_5R_3s^4 + C_3C_5L_5R_2R_3s^3 + C_3L_3L_5R_2g_ms^3 + C_3L_3L_5s^3 + 2C_3L_3R_2R_3g_ms^2 +}$$

**10.262 INVALID-ORDER-262** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2s^3 + C_2C_5R_2}{C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_3R_2s^3 + C_2C_3R_2R_3s^2 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2R_2s + C_3C_5L_3L_5R_2g_ms^4 + C_3C_5L_3L_5s^4 + 2C_3C_5L_3R_2R_3g_ms^3 + C_3C}$$

**10.263 INVALID-ORDER-263** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{}{4C_2C_3C_5L_3L_5R_2R_3R_5s^5 + 4C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3L_5R_2R_5s^4 + 4C_2C_3L_3R_2R_3R_5s^3 + C_2C_3L_5R_2R_3R_5s^3 + 4C_2C_5L_5R_2R_3R_5s^3 + 4C_2L_5R_2R_3s^2 + C_2L_5R_2R_5s^2 + 4C_2R_2R_3R_5s + 2C_3C_5L_3L_5R_2R_3R_5g_ms^4 + C_3C_5L_3L_5R_2R_5s^4 + 4C_3C_5L_3L_5R_3R_5s^4 + C}$$

**10.264 INVALID-ORDER-264** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3C_5L_5R_2R_3R_5s^4 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + C_2C_3L_5R_2R_3s^3 + C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_5R_2s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3L_5R_2R}$$

**10.265 INVALID-ORDER-265** $Z(s) = \left(\infty,\ \frac{R_2}{C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3C_5L_5R_2R_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + C_2C_3R_2R_3R_5s^2 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_3C_5L_3L_5R_2R_3g_ms}$$

**10.266 INVALID-ORDER-266** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2R_3g_m + R_5g_m + 1}$$

**10.267 INVALID-ORDER-267** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5s + g_m}$$

**10.268 INVALID-ORDER-268** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_5R_2s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_ms - 1\right)}{2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + 2C_2R_2R_3g_ms + C_2R_2s + 4C_2R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 + L_5g_ms + 2R_3g_m + 1}$$

**10.269 INVALID-ORDER-269** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

**10.270 INVALID-ORDER-270** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_5R_2R_5s^3 + C_2L_5R_2R_5g_ms^2 - C_2L_5R_2s^2 + C_2L_5R_5s^2 - C_2R_2R_5s - C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5\right)}{2C_2C_5L_5R_2R_3R_5g_ms^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5L_5R_3R_5s^3 + 2C_2L_5R_2R_3g_ms^2 + C_2L_5R_2R_5g_ms^2 + C_2L_5R_2s^2 + 4C_2L_5R_3s^2 + C_2L_5R_5s^2 + 2C_2R_2R_3R_5g_ms + C_2R_2R_5s + 4C_2R_3R_5s + 2C_5L_5R_3R_5g_ms^2 + C_5L_5R_5s^2 + 2L_5R_3g_ms + L_5R_5g_ms + L_5s + 2R_3R_5g}$$

**10.271 INVALID-ORDER-271** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1\right)}{2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2R_5g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_5L_5R_3g_ms^2 + C_5L_5R_5g_ms^2 + C_5L_5s^2 + L_5g_ms + 2R_3g_m + R_5g_m + 1}$$

**10.272 INVALID-ORDER-272** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1\right)}{2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2R_5g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 2C_2C_5R_2R_3R_5g_ms^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_5L_5R_3g_ms^2 + C_5L_5R_5g_ms^2 + C_5L_5s^2 + 2C_5R_3R$$

**10.273 INVALID-ORDER-273** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m}{s\left(C_2C_3C_5R_2s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.274 INVALID-ORDER-274** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1}{C_2C_3C_5R_2R_5s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2C_5R_2R_5g_ms^2 + 4C_2C_5R_5s^2 + 2C_2R_2g_ms + 4C_2s + C_3C_5R_5s^2 + C_3R_5g_ms + C_3s + 2C_5R_5g_ms + 2g_m}$$

**10.275 INVALID-ORDER-275** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.276 INVALID-ORDER-276** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m}{s\left(C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + C_2C_3C_5R_2s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.277 INVALID-ORDER-277** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_5R_2s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_ms - 1}{C_2C_3C_5L_5R_2s^4 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + C_2C_3R_2s^2 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2R_2g_ms + 4C_2s + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

**10.278 INVALID-ORDER-278** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.279 INVALID-ORDER-279** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5R_5 s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_5R_2R_5s^3 + C_2L_5R_2R_5g_ms^2 - C_2L_5R_2s^2 + C_2L_5R_5s^2 - C_2R_2R_5s - C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5}{C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_5R_2R_5g_ms^3 + C_2C_3L_5R_2s^3 + C_2C_3L_5R_5s^3 + C_2C_3R_2R_5s^2 + 2C_2C_5L_5R_2R_5g_ms^3 + 4C_2C_5L_5R_5s^3 + 2C_2L_5R_2g_ms^2 + 4C_2L_5s^2 + 2C_2R_2R_5g_ms + 4C_2R_5s + C_3C_5L_5R_5s^3 + C_3L_5R_5g_ms^2 + C_3L_5s^2 + C_3R_5s + 2C_5L_5R_5g_ms^2 + 2L_5g_m}$$

**10.280 INVALID-ORDER-280** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2R_2g_ms + 4C_2s + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3R_5g_ms + C_3s + 2C_5$$

**10.281 INVALID-ORDER-281** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1}{C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3C_5R_2R_5s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2C_5R_2R_5g_ms^2 + 4C_2C_5R_5s^2 + 2C_2R_2g_ms + 4C_2s + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5R_5s^2 + C$$

**10.282 INVALID-ORDER-282** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{C_2C_3C_5R_2R_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5s + g_m}$$

**10.283 INVALID-ORDER-283** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{C_2C_3C_5R_2R_3R_5s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5R_2R_3R_5g_ms^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + C_3C_5R_3R_5s^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5R_3R_5g_ms + C_5R_5s + 2R$$

**10.284 INVALID-ORDER-284** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5g_ms^2 - C_2C_5R_2R_5s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_3C_5R_3R_5g_ms^2 + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5R_5g_ms +$$

**10.285 INVALID-ORDER-285** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + C_3C_5L_5R_3g_ms^3 + C_3C_5R_3s^2 + C_3R_3g_ms + C_5L_5g_ms^2 + 2C_5R_3g_ms +$$

**10.286 INVALID-ORDER-286** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_5R_2s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_ms - 1\right)}{C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_3s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + 2C_2R_2R_3g_ms + C_2R_2s + 4C_2R_3s + C_3C_5L_5R_3s^3 + C_3L_5R_3g_ms^2 + C_3R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 +$$

**10.287 INVALID-ORDER-287** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C$$

**10.288 INVALID-ORDER-288** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_5R_2R_5s^3 + C_2L_5R_2R_5g_ms^2 - C_2L_5R_2s^2 + C_2L_5R_5s^2 - C_2R_2R_5s - C_5L_5R_5s^2 + L_5R_5g_m\right.}{C_2C_3C_5L_5R_2R_3R_5s^4 + C_2C_3L_5R_2R_3R_5g_ms^3 + C_2C_3L_5R_2R_3s^3 + C_2C_3L_5R_3R_5s^3 + C_2C_3R_2R_3R_5s^2 + 2C_2C_5L_5R_2R_3R_5g_ms^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5L_5R_3R_5s^3 + 2C_2L_5R_2R_3g_ms^2 + C_2L_5R_2R_5g_ms^2 + C_2L_5R_2s^2 + 4C_2L_5R_3s^2 + C_2L_5R_5s^2 + 2C_2R_2R_3R_5g$$

**10.289 INVALID-ORDER-289** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2R_5g_ms +\right.}{C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_3s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2R_5g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2$$

**10.290 INVALID-ORDER-290** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2C_5R_2R_5s^2 + C_2R\right.}{C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2R_5g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + 2C_2C_5R_2R_3R_5g_ms^2 + C$$

**10.291 INVALID-ORDER-291** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.292 INVALID-ORDER-292** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5R_2R_5s^2 - C_2R_2R_5g_ms + C_2R_2s - C_2R_5s + C_5R_5s - R_5g_m + 1\right)}{2C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5R_2R_5g_ms^2 + 4C_2C_5R_5s^2 + 2C_2R_2g_ms + 4C_2s + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3R_3g_ms + C_3R_5g_ms +$$

**10.293 INVALID-ORDER-293** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{s\left(2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.294 INVALID-ORDER-294** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{s\left(C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.295 INVALID-ORDER-295** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_5R_2s^3 - C_2L_5R_2g_ms^2 - C_2L_5s^2 + C_2R_2s + C_5L_5s^2 - L_5g_ms + 1\right)}{2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2R_2g_ms + 4C_2s + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C$$

**10.296 INVALID-ORDER-296** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.297 INVALID-ORDER-297** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_5R_2R_5s^3 - C_2L_5R_2R_5g_ms^2 + C_2L_5R_2s^2 - C_2L_5R_5s^2 + C_2R_2R_5s + C_5$$
$$2C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5L_5R_3R_5s^4 + 2C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_2R_5g_ms^3 + C_2C_3L_5R_2s^3 + 4C_2C_3L_5R_3s^3 + C_2C_3L_5R_5s^3 + 2C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_5s^2 + 4C_2C_3R_3R_5s^2 + 2C_2C_5L_5R_2R_5g_ms^3 + 4C_2C_5L_5R_5s^3$$

**10.298 INVALID-ORDER-298** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 +$$
$$2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2R_2g_m$$

**10.299 INVALID-ORDER-299** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2C_5R_2R_5s^2 + C_2R_2R_5g_ms -$$
$$2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_5R$$

**10.300 INVALID-ORDER-300** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_3R_2g_ms^3 + 4C_2C_3L_3s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2R_2g_ms + 4C_2s + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2g_m}$$

**10.301 INVALID-ORDER-301** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_ms^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5R_2s^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.302 INVALID-ORDER-302 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 R_2 R_5 s^2 - C_2 R_2 R_5 g_m s + C_2 R_2 s - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5 s^4 + C_2C_3C_5R_2R_5 s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2 s^2 + C_2C_3R_5 s^2 + 2C_2C_5R_2R_5g_m s^2 + 4C_2C_5R_5 s^2 + 2C_2R_2g_m s + 4C_2 s + 2C_3C_5L_3R_5g_m s^3 + C_3C_5R_5 s^2 + 2C_3L_3g_m s^2 + C_3R_5g_m s + C}$$

### 10.303 INVALID-ORDER-303 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.304 INVALID-ORDER-304 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5 s^3 + C_2C_3C_5R_2 s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.305 INVALID-ORDER-305 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 s^3 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + C_2C_3C_5L_5R_2 s^4 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5R_2g_m s^3 + C_2C_3L_5 s^3 + C_2C_3R_2 s^2 + 2C_2C_5L_5R_2g_m s^3 + 4C_2C_5L_5 s^3 + 2C_2R_2g_m s + 4C_2 s + 2C_3C_5L_3L_5g_m s^4 + C_3C_5L_5 s^3 + 2C_3L_3g_m s^2 + C_3L_5g_m s^2 + C}$$

### 10.306 INVALID-ORDER-306 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5 s^3 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.307 INVALID-ORDER-307 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 R_5 s^3 - C_2 L_5 R_2 R_5 g_m s^2 + C_2 L_5 R_2 s^2 - C_2 L_5 R_5 s^2 + C_2 R_2 R_5 s + C_5\right.}{2C_2C_3C_5L_3L_5R_2R_5g_m s^5 + 4C_2C_3C_5L_3L_5R_5 s^5 + C_2C_3C_5L_5R_2R_5 s^4 + 2C_2C_3L_3L_5R_2g_m s^4 + 4C_2C_3L_3L_5 s^4 + 2C_2C_3L_3R_2R_5g_m s^3 + 4C_2C_3L_3R_5 s^3 + C_2C_3L_5R_2R_5g_m s^3 + C_2C_3L_5R_2 s^3 + C_2C_3L_5R_5 s^3 + C_2C_3R_2R_5 s^2 + 2C_2C_5L_5R_2R_5g_m s^3 + 4C_2C_5L_5R_5 s^3 +}$$

### 10.308 INVALID-ORDER-308 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 +\right.}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2 s^4 + C_2C_3C_5L_5R_5 s^4 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5R_2g_m s^3 + C_2C_3L_5 s^3 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2 s^2 + C_2C_3R_5 s^2 + 2C_2C_5L_5R_2g_m s^3 + 4C_2C_5L_5 s^3 + 2C_2R_2g_m s}$$

### 10.309 INVALID-ORDER-309 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s -\right.}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + 2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5 s^4 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2 s^4 + C_2C_3C_5L_5R_5 s^4 + C_2C_3C_5R_2R_5 s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2 s^2 + C_2C_3R_5 s^2 + 2C_2C_5L_5R_2}$$

### 10.310 INVALID-ORDER-310 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_2R_5g_m s^3 + C_2C_3L_3R_2 s^3 + C_2C_3L_3R_5 s^3 + 2C_2L_3R_2g_m s^2 + 4C_2L_3 s^2 + C_2R_2R_5g_m s + C_2R_2 s + C_2R_5 s + C_3L_3R_5g_m s^2 + C_3L_3 s^2 + 2L_3g_m s + R_5g_m + 1}$$

### 10.311 INVALID-ORDER-311 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2 C_2 C_5 L_3 R_2 g_m s^3 + 4 C_2 C_5 L_3 s^3 + C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2 C_5 L_3 g_m s^2 + C_5 s + g_m}$$

### 10.312 INVALID-ORDER-312 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 R_2 R_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_3 R_2 R_5 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s^3 + 2 C_2 C_5 L_3 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_3 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 + 2 C_2 L_3 R_2 g_m s^2 + 4 C_2 L_3 s^2 + C_2 R_2 R_5 g_m s + C_2 R_2 s + C_2 R_5 s + C_3 C_5 L_3 R_5 s^3 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2 C_5 L_3 R_5 g_m s^2 + C_5 R_5 s +}$$

### 10.313 INVALID-ORDER-313 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 R_2 R_5 g_m s^4 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2 C_2 C_5 L_3 R_2 g_m s^3 + 4 C_2 C_5 L_3 s^3 + C_2 C_5 R_2 R_5 g_m s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2 C_5 L_3 g_m s^2 + C_5 R_5 g_m s +}$$

### 10.314 INVALID-ORDER-314 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 L_5 R_2 g_m s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2 C_2 C_5 L_3 R_2 g_m s^3 + 4 C_2 C_5 L_3 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2 C_5 L_3 g_m s^2 + C_5 L_5 g_m s^2 -}$$

### 10.315 INVALID-ORDER-315 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_5 R_2 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 L_3 L_5 R_2 g_m s^4 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_2 s^3 + 2 C_2 C_5 L_3 L_5 R_2 g_m s^4 + 4 C_2 C_5 L_3 L_5 s^4 + C_2 C_5 L_5 R_2 s^3 + 2 C_2 L_3 R_2 g_m s^2 + 4 C_2 L_3 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 s + C_3 C_5 L_3 L_5 s^4 + C_3 L_3 L_5 g_m s^3 + C_3 L_3 s^2 + 2 C_5 L_3 L_5 g_m s^3 + C_5 L_5 s^2 +}$$

### 10.316 INVALID-ORDER-316 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_3 L_5 R_2 g_m s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 g_m s^4 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2 C_2 C_5 L_3 R_2 g_m s^3 + 4 C_2 C_5 L_3 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 + C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2}$$

### 10.317 INVALID-ORDER-317 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_5 R_2 R_5 g_m s^2 - C_2 L_5 R_2 s^2 + C_2 L_5 R_5 s^2 - C_2 R_2 R_5 s - C_5 L_5 R_5 s^2 + L_5 R_5}{C_2 C_3 C_5 L_3 L_5 R_2 R_5 s^5 + C_2 C_3 L_3 L_5 R_2 R_5 g_m s^4 + C_2 C_3 L_3 L_5 R_2 s^4 + C_2 C_3 L_3 L_5 R_5 s^4 + C_2 C_3 L_3 R_2 R_5 s^3 + 2 C_2 C_5 L_3 L_5 R_2 R_5 g_m s^4 + 4 C_2 C_5 L_3 L_5 R_5 s^4 + C_2 C_5 L_5 R_2 R_5 s^3 + 2 C_2 L_3 L_5 R_2 g_m s^3 + 4 C_2 L_3 L_5 s^3 + 2 C_2 L_3 R_2 R_5 g_m s^2 + 4 C_2 L_3 R_5 s^2 + C_2 L_5 R_2 R_5 g_m s^2 + C_2 L_5 R}$$

### 10.318 INVALID-ORDER-318 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 R_5 g_m s}{C_2 C_3 C_5 L_3 L_5 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_3 L_5 R_2 g_m s^4 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s^3 + 2 C_2 C_5 L_3 L_5 R_2 g_m s^4 + 4 C_2 C_5 L_3 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 + C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + 2 C_2 L_3 R_2}$$

### 10.319 INVALID-ORDER-319 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2}{C_2 C_3 C_5 L_3 L_5 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s^3 + 2 C_2 C_5 L_3 L_5 R_2 g_m s^4 + 4 C_2 C_5 L_3 L_5 s^4 + 2 C_2 C_5 L_3 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_3 R_5 s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 + C_2 C_5 L_5 R_2 s^3 + C}$$

### 10.320 INVALID-ORDER-320 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3s^3 + 2C_2C_3R_2R_3g_m s^2 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2R_2g_m s + 4C_2 s + 2C_3L_3g_m s^2 + 2C_3R_3g_m s + C_3R_5g_m s + C_3 s + 2g_m}$$

### 10.321 INVALID-ORDER-321 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.322 INVALID-ORDER-322 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 R_2 R_5 s^2 - C_2 R_2 R_5 g_m s + C_2 R_2 s - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_m s^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3s^3 + 2C_2C_3R_2R_3g_m s^2 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5R_2R_5g_m s^2 + 4C_2C_5R_5s^2 + 2C}$$

### 10.323 INVALID-ORDER-323 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.324 INVALID-ORDER-324 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.325 INVALID-ORDER-325 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_2 s^3 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_m s^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3s^3 + C_2C_3L_5R_2g_m s^3 + C_2C_3L_5s^3 + 2C_2C_3R_2R_3g_m s^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + 2C_2C_5L_5R_2g_m s^3 + 4C_2C_5L_5s^3 + 2C_2}$$

### 10.326 INVALID-ORDER-326 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + 2C_3C}$$

### 10.327 INVALID-ORDER-327 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L\right.}{2C_2C_3C_5L_3L_5R_2R_5g_m s^5 + 4C_2C_3C_5L_3L_5R_5s^5 + 2C_2C_3C_5L_5R_2R_3R_5g_m s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5L_5R_3R_5s^4 + 2C_2C_3L_3L_5R_2g_m s^4 + 4C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_5g_m s^3 + 4C_2C_3L_3R_5s^3 + 2C_2C_3L_5R_2R_3g_m s^3 + C_2C_3L_5R_2R_5g_m s^3 + C_2C_3L_5R_2s^3 +$$

### 10.328 INVALID-ORDER-328 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 +\right.}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_m s^4 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3s^3 + C_2C_3L_5R_2g_m s^3 + C_2C_3L_5s^3 + 2C_2C_3R_2R_3g_m s^2 + C_2C_3R_2R_5g_m s^2 + C_2C_3$$

### 10.329 INVALID-ORDER-329 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 \right.}{2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5s^4 + 2C_2C_3C_5L_5R_2R_3g_m s^4 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_m s^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2}$$

### 10.330 INVALID-ORDER-330 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_3R_2R_3R_5g_m s^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2L_3R_2R_3g_m s^2 + C_2L_3R_2R_5g_m s^2 + C_2L_3R_2s^2 + 4C_2L_3R_3s^2 + C_2L_3R_5s^2 + C_2R_2R_3R_5g_m s + C_2R_2R_3s + C_2R_3R_5s + C_3L_3R_3R_5g_m s^2 + C_3L_3R_3s^2 + 2L_3R_3g_m s + L_3R_5g_m s + L_3s + R_3R_5g_m + R_3}$$

### 10.331 INVALID-ORDER-331 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2C_5R_2s^2 + C_2R_2g_m s + C_2s - C_5s + g_m\right)}{C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_3R_2R_3g_m s^3 + C_2C_3L_3R_3s^3 + 2C_2C_5L_3R_2R_3g_m s^3 + C_2C_5L_3R_2s^3 + 4C_2C_5L_3R_3s^3 + C_2C_5R_2R_3s^2 + C_2L_3R_2g_m s^2 + C_2L_3s^2 + C_2R_2R_3g_m s + C_2R_3s + C_3C_5L_3R_3s^3 + C_3L_3R_3g_m s^2 + 2C_5L_3R_3g_m s^2 + C_5L_3s^2 + C_5R_3s + L_3g_m s + R}$$

### 10.332 INVALID-ORDER-332 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2C_5R_2R_5s^2 + C_2R_2R_5g_m s - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_3R_2R_3R_5g_m s^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_3R_2R_3R_5g_m s^3 + C_2C_5L_3R_2R_5s^3 + 4C_2C_5L_3R_3R_5s^3 + C_2C_5R_2R_3R_5s^2 + 2C_2L_3R_2R_3g_m s^2 + C_2L_3R_2R_5g_m s^2 + C_2L_3R_2s^2 + 4C_2L_3R_3s^2 + C_2L_3R_5s^2 + C_2R_2R_3R_5g_m}$$

### 10.333 INVALID-ORDER-333 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2C_5R_2R_5g_m s^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_m s + C_2s + C_5R_5g_m s - C_5s\right.}{C_2C_3C_5L_3R_2R_3R_5g_m s^4 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_3R_5s^4 + C_2C_3L_3R_2R_3g_m s^3 + C_2C_3L_3R_3s^3 + 2C_2C_5L_3R_2R_3g_m s^3 + C_2C_5L_3R_2R_5g_m s^3 + C_2C_5L_3R_2s^3 + 4C_2C_5L_3R_3s^3 + C_2C_5L_3R_5s^3 + C_2C_5R_2R_3R_5g_m s^2 + C_2C_5R_2R_3s^2 + C_2C_5R_3R_5s^2 + C_2L_3R_2}$$

### 10.334 INVALID-ORDER-334 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2C_5L_5R_2g_m s^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_m s + C_2s + C_5L_5g_m s^2 - C_5s\right.}{C_2C_3C_5L_3L_5R_2R_3g_m s^5 + C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_3R_2R_3g_m s^3 + C_2C_3L_3R_3s^3 + C_2C_5L_3L_5R_2g_m s^4 + C_2C_5L_3L_5s^4 + 2C_2C_5L_3R_2R_3g_m s^3 + C_2C_5L_3R_2s^3 + 4C_2C_5L_3R_3s^3 + C_2C_5L_5R_2R_3g_m s^3 + C_2C_5L_5R_3s^3 + C_2C_5R_2R_3s^2 + C_2L_3R_2}$$

### 10.335 INVALID-ORDER-335 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2C_5L_5R_2s^3 + C_2L_5R_2g_m s^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_m s - 1\right)}{C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_3L_5R_2R_3g_m s^4 + C_2C_3L_3L_5R_3s^4 + C_2C_3L_3R_2R_3s^3 + 2C_2C_5L_3L_5R_2R_3g_m s^4 + C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3L_5R_3s^4 + C_2C_5L_5R_2R_3s^3 + C_2L_3L_5R_2g_m s^3 + C_2L_3L_5s^3 + 2C_2L_3R_2R_3g_m s^2 + C_2L_3R_2s^2 + 4C_2L_3R_3s^2 + C_2L_5R_2R_3g_m s}$$

### 10.336 INVALID-ORDER-336 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2C_5L_5R_2g_m s^{}\right.}{C_2C_3C_5L_3L_5R_2R_3g_m s^5 + C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3R_2R_3R_5g_m s^4 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_3R_5s^4 + C_2C_3L_3R_2R_3g_m s^3 + C_2C_3L_3R_3s^3 + C_2C_5L_3L_5R_2g_m s^4 + C_2C_5L_3L_5s^4 + 2C_2C_5L_3R_2R_3g_m s^3 + C_2C_5L_3R_2R_5g_m s^3 + C_2C_5L_3R_2s^3 + 4C_2C_5L_3}$$

### 10.337 INVALID-ORDER-337 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_3L_5R_2R_3R_5g_m s^4 + C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3L_5R_3R_5s^4 + C_2C_3L_3R_2R_3R_5s^3 + 2C_2C_5L_3L_5R_2R_3R_5g_m s^4 + C_2C_5L_3L_5R_2R_5s^4 + 4C_2C_5L_3L_5R_3R_5s^4 + C_2C_5L_5R_2R_3R_5s^3 + 2C_2L_3L_5R_2R_3g_m s^3 + C_2L_3L_5R_2R_5g_m s^3 + C_2L_3}$$

### 10.338 INVALID-ORDER-338 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3L_3L_5R_2R_3g_ms^4 + C_2C_3L_3L_5R_3s^4 + C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_3L_5R_2R_3g_ms^4 + C_2C_5L_3L_5R_2R_5g_ms^4 + C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3L_5}$$

### 10.339 INVALID-ORDER-339 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_3L_5R_2R_3g_ms^4 + C_2C_5L_3L_5R_2R_5g_ms^4 + C_2C_5L_3L_5R_2s^4 + 4C_2C_5L_3L_5R_3s^4 + C_2C_5L_3L_5}$$

### 10.340 INVALID-ORDER-340 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2L_3R_2g_ms^2 + 4C_2L_3s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_3L_3R_3g_ms^2 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + 2L_3g_ms + 2R_3g_m + R_5g_m + 1}$$

### 10.341 INVALID-ORDER-341 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_3R_2g_ms^3 + 4C_2C_5L_3s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3L_3g_ms^2 + 2C_5L_3g_ms^2 + 2C_5L}$$

### 10.342 INVALID-ORDER-342 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5R_2R_5s^2 - C_2R_2R_5g_ms\right.}{2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2C_5L_3R_2R_5g_ms^3 + 4C_2C_5L_3R_5s^3 + 2C_2C_5R_2R_3R_5g_ms^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 +}$$

### 10.343 INVALID-ORDER-343 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_3R_2g_ms^3 + 4C_2C_5L_3s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2R_2g_ms}$$

### 10.344 INVALID-ORDER-344 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_3R_2g_ms^3 + 4C_2C_5L_3s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms}$$

### 10.345 INVALID-ORDER-345 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_5R_2s^3 - C_2L_5R_2g_ms^2\right.}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_3L_5R_2g_ms^4 + C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + 2C_2C_5L_3L_5R_2g_ms^4 + 4C_2C_5L_3L_5s^4 + 2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + 2$$

### 10.346 INVALID-ORDER-346 $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5\right.}{C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_3R_2g_ms^3 + 4C_2C_5L_3s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_m$$

**10.347 INVALID-ORDER-347** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + 2C_2C_3L_3L_5R_2R_3g_ms^4 + C_2C_3L_3L_5R_2R_5g_ms^4 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3L_5R_3s^4 + C_2C_3L_3L_5R_5s^4 + 2C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_5s^3 + 4C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_3$$

**10.348 INVALID-ORDER-348** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3L_3L_5R_2g_ms^4 + C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2C_5L_3L_5$$

**10.349 INVALID-ORDER-349** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3$$

**10.350 INVALID-ORDER-350** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_3L_3R_3g_ms^2 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + C_3R_3R_5g_m$$

**10.351 INVALID-ORDER-351** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(-C_2C_5R_2s^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2R_2g_ms + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3s^2 + C$$

**10.352 INVALID-ORDER-352** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5R_2R_5s^2 - C_2R_2R\right.}{2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5R_2R_3R_5g_ms^$$

**10.353 INVALID-ORDER-353** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2R_2g_ms + C\right.}{2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R$$

**10.354 INVALID-ORDER-354** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2R_2g_ms + C\right.}{C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 -$$

**10.355 INVALID-ORDER-355** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_5R_2s^3 - C_2L_5R_2\right.}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_3L_5R_2g_ms^4 + C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_3s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_5R_2R_3g_ms^3 +$$

**10.356 INVALID-ORDER-356** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2 + 1\right.}{C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_3}$$

**10.357 INVALID-ORDER-357** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3C_5L_5R_2R_3R_5s^4 + 2C_2C_3L_3L_5R_2R_3g_ms^4 + C_2C_3L_3L_5R_2R_5g_ms^4 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3L_5R_3s^4 + C_2C_3L_3L_5R_5s^4 + 2C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_5s^3 + 4C_2C}$$

**10.358 INVALID-ORDER-358** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_3L_5R_2g_ms^4 + C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R}$$

**10.359 INVALID-ORDER-359** $Z(s) = \left(\infty,\ R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 +}$$

**10.360 INVALID-ORDER-360** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m\right)}{2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2s + 2C_5R_3g_ms + C_5s + g_m}$$

**10.361 INVALID-ORDER-361** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_5s^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{2C_2C_5L_2R_3R_5g_ms^3 + C_2C_5L_2R_5s^3 + 4C_2C_5R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 4C_2R_3s + C_2R_5s + 2C_5R_3R_5g_ms + C_5R_5s + 2R_3g_m + R_5g_m + 1}$$

**10.362 INVALID-ORDER-362** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2R_5g_ms^3 + C_2C_5L_2s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + 2C_5R_3g_ms + C_5R_5g_ms + C_5s + g_m}$$

**10.363 INVALID-ORDER-363** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 + 2C_5R_3g_ms + C_5s + g_m}$$

**10.364 INVALID-ORDER-364** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5s^4 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1\right)}{2C_2C_5L_2L_5R_3g_ms^4 + C_2C_5L_2L_5s^4 + 4C_2C_5L_5R_3s^3 + C_2L_2L_5g_ms^3 + 2C_2L_2R_3g_ms^2 + C_2L_2s^2 + C_2L_5s^2 + 4C_2R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 + L_5g_ms + 2R_3g_m + 1}$$

### 10.365 INVALID-ORDER-365 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_m s^4 + C_2C_5L_2R_5g_m s^3 - C_2C_5L_2 s^3 + C_2C_5L_5 s^3 + C_2C_5R_5 s^2 + C_2L_2g_m s^2 + C_2 s + C_5L_5g_m s^2 + C_5R_5g_m s - C_5 s + g_m\right)}{C_2C_5L_2L_5g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2R_5g_m s^3 + C_2C_5L_2 s^3 + C_2C_5L_5 s^3 + 4C_2C_5R_3 s^2 + C_2C_5R_5 s^2 + C_2L_2g_m s^2 + C_2 s + C_5L_5g_m s^2 + 2C_5R_3g_m s + C_5R_5g_m s + C_5 s + g_m}$$

### 10.366 INVALID-ORDER-366 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5R_5 s}{C_5L_5R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_5 s^4 + C_2L_2L_5R_5g_m s^3 - C_2L_2L_5 s^3 - C_2L_2R_5 s^2 + C_2L_5R_5 s^2 - C_5L_5R_5 s^2 + L_5R_5g_m s - L_5 s - R_5\right)}{2C_2C_5L_2L_5R_3R_5g_m s^4 + C_2C_5L_2L_5R_5 s^4 + 4C_2C_5L_5R_3R_5 s^3 + 2C_2L_2L_5R_3g_m s^3 + C_2L_2L_5R_5g_m s^3 + C_2L_2L_5 s^3 + 2C_2L_2R_3R_5g_m s^2 + C_2L_2R_5 s^2 + 4C_2L_5R_3 s^2 + C_2L_5R_5 s^2 + 4C_2R_3R_5 s + 2C_5L_5R_3R_5g_m s^2 + C_5L_5R_5 s^2 + 2L_5R_3g_m s + L_5R_5g_m s + L_5 s + 2R_3R_5}$$

### 10.367 INVALID-ORDER-367 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_5g_m s^4 - C_2C_5L_2L_5 s^4 + C_2C_5L_5R_5 s^3 + C_2L_2L_5g_m s^3 + C_2L_2R_5g_m s^2 - C_2L_2 s^2 + C_2L_5 s^2 + C_2R_5 s + C_5L_5R_5g_m s^2 - C_5L_5 s^2 + L_5g_m s + R_5g_m - 1\right)}{2C_2C_5L_2L_5R_3g_m s^4 + C_2C_5L_2L_5R_5g_m s^4 + C_2C_5L_2L_5 s^4 + 4C_2C_5L_5R_3 s^3 + C_2C_5L_5R_5 s^3 + C_2L_2L_5g_m s^3 + 2C_2L_2R_3g_m s^2 + C_2L_2R_5g_m s^2 + C_2L_2 s^2 + C_2L_5 s^2 + 4C_2R_3 s + C_2R_5 s + 2C_5L_5R_3g_m s^2 + C_5L_5R_5g_m s^2 + C_5L_5 s^2 + L_5g_m s + 2R_3g_m + R_5g_m + 1}$$

### 10.368 INVALID-ORDER-368 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5\left(C_5L_5 s^2 + 1\right)}{C_5L_5 s^2 + C_5R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_5g_m s^4 - C_2C_5L_2L_5 s^4 - C_2C_5L_2R_5 s^3 + C_2C_5L_5R_5 s^3 + C_2L_2R_5g_m s^2 - C_2L_2 s^2 + C_2R_5 s + C_5L_5R_5g_m s^2 - C_5L_5 s^2 - C_5R_5 s + R_5g_m - 1\right)}{2C_2C_5L_2L_5R_3g_m s^4 + C_2C_5L_2L_5R_5g_m s^4 + C_2C_5L_2L_5 s^4 + 2C_2C_5L_2R_3R_5g_m s^3 + C_2C_5L_2R_5 s^3 + 4C_2C_5L_5R_3 s^3 + C_2C_5L_5R_5 s^3 + 4C_2C_5R_3R_5 s^2 + 2C_2L_2R_3g_m s^2 + C_2L_2R_5g_m s^2 + C_2L_2 s^2 + 4C_2R_3 s + C_2R_5 s + 2C_5L_5R_3g_m s^2 + C_5L_5R_5g_m s^2 + C_5L_5 s^2 + 2C_5R_3}$$

### 10.369 INVALID-ORDER-369 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2L_2R_5g_m s^2 - C_2L_2 s^2 + C_2R_5 s + R_5g_m - 1}{C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + C_2C_3R_5 s^2 + 2C_2L_2g_m s^2 + 4C_2 s + C_3R_5g_m s + C_3 s + 2g_m}$$

### 10.370 INVALID-ORDER-370 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2 s^3 + C_2L_2g_m s^2 + C_2 s - C_5 s + g_m}{s\left(C_2C_3C_5L_2 s^3 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.371 INVALID-ORDER-371 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2R_5 s^3 + C_2L_2R_5g_m s^2 - C_2L_2 s^2 + C_2R_5 s - C_5R_5 s + R_5g_m - 1}{C_2C_3C_5L_2R_5 s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + C_2C_3R_5 s^2 + 2C_2C_5L_2R_5g_m s^3 + 4C_2C_5R_5 s^2 + 2C_2L_2g_m s^2 + 4C_2 s + C_3C_5R_5 s^2 + C_3R_5g_m s + C_3 s + 2C_5R_5g_m s + 2g_m}$$

### 10.372 INVALID-ORDER-372 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2R_5g_m s^3 - C_2C_5L_2 s^3 + C_2C_5R_5 s^2 + C_2L_2g_m s^2 + C_2 s + C_5R_5g_m s - C_5 s + g_m}{s\left(C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.373 INVALID-ORDER-373 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5g_m s^4 - C_2C_5L_2 s^3 + C_2C_5L_5 s^3 + C_2L_2g_m s^2 + C_2 s + C_5L_5g_m s^2 - C_5 s + g_m}{s\left(C_2C_3C_5L_2L_5g_m s^4 + C_2C_3C_5L_2 s^3 + C_2C_3C_5L_5 s^3 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + C_3C_5L_5g_m s^2 + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.374 INVALID-ORDER-374 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5s^4 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1}{C_2C_3C_5L_2L_5s^5 + C_2C_3L_2L_5g_ms^4 + C_2C_3L_2s^3 + C_2C_3L_5s^3 + 2C_2C_5L_2L_5g_ms^4 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms^2 + 4C_2s + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

### 10.375 INVALID-ORDER-375 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_3C_5L_2L_5g_ms^4 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5s^3 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + C_3C_5L_5g_ms^2 + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.376 INVALID-ORDER-376 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_5s^4 + C_2L_2L_5R_5g_ms^3 - C_2L_2L_5s^3 - C_2L_2R_5s^2 + C_2L_5R_5s^2 - C_5L_5R_5s^2 + L_5R_5g_ms - L_5s - R_5}{C_2C_3C_5L_2L_5R_5s^5 + C_2C_3L_2L_5R_5g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_5s^3 + C_2C_3L_5R_5s^3 + 2C_2C_5L_2L_5R_5g_ms^4 + 4C_2C_5L_5R_5s^3 + 2C_2L_2L_5g_ms^3 + 2C_2L_2R_5g_ms^2 + 4C_2L_5s^2 + 4C_2R_5s + C_3C_5L_5R_5s^3 + C_3L_5R_5g_ms^2 + C_3L_5s^2 + C_3R_5s + 2C_5L_5R_5g_ms^2 + 2L_5g_m$$

### 10.377 INVALID-ORDER-377 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_5R_5s^3 + C_2L_2L_5g_ms^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2L_5s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 + L_5g_ms + R_5g_m - 1}{C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_2L_5g_ms^4 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5s^3 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5g_ms^4 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms^2 + 4C_2s + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3R_5g_ms + C_3s + 2C_5$$

### 10.378 INVALID-ORDER-378 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 - C_2C_5L_2R_5s^3 + C_2C_5L_5R_5s^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 - C_5R_5s + R_5g_m - 1}{C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + C_2C_3C_5L_2R_5s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_5g_ms^3 + 4C_2C_5L_5s^3 + 4C_2C_5R_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + C_3C_5L_5R_5g_ms^3 + C_3C_5L_5s^3 + C_3C_5R_5s^2 + C$$

### 10.379 INVALID-ORDER-379 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1\right)}{C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 4C_2R_3s + C_2R_5s + C_3R_3R_5g_ms + C_3R_3s + 2R_3g_m + R_5g_m + 1}$$

### 10.380 INVALID-ORDER-380 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m\right)}{C_2C_3C_5L_2R_3s^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2s + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5s + g_m}$$

### 10.381 INVALID-ORDER-381 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_5s^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{C_2C_3C_5L_2R_3R_5s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2R_3R_5g_ms^3 + C_2C_5L_2R_5s^3 + 4C_2C_5R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 4C_2R_3s + C_2R_5s + C_3C_5R_3R_5s^2 + C_3R_3R_5g_ms + C_3R_3s + 2C_5R_3R_5g_ms + C_5R_5s + 2$$

### 10.382 INVALID-ORDER-382 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2R_5g_ms^3 + C_2C_5L_2s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_3C_5R_3R_5g_ms^2 + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5R_5g_ms + $$

### 10.383 INVALID-ORDER-383 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_3s^2 + C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2s + C_3C_5L_5R_3g_ms^3 + C_3C_5R_3s^2 + C_3R_3g_ms + C_5L_5g_ms^2 + 2C_5R_3g_ms +$$

### 10.384 INVALID-ORDER-384 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5s^4 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5s^2 - C_5L_5s^2 + L_5g_ms - 1\right)}{C_2C_3C_5L_2L_5R_3s^5 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3s^3 + C_2C_3L_5R_3s^3 + 2C_2C_5L_2L_5R_3g_ms^4 + C_2C_5L_2L_5s^4 + 4C_2C_5L_5R_3s^3 + C_2L_2L_5g_ms^3 + 2C_2L_2R_3g_ms^2 + C_2L_2s^2 + C_2L_5s^2 + 4C_2R_3s + C_3C_5L_5R_3s^3 + C_3L_5R_3g_ms^2 + C_3R_3s + 2C_5L_5R_3g_ms^2 + C_5L_5s^2 +$$

### 10.385 INVALID-ORDER-385 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_3s^2 + C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2R_5g_ms^3 + C_2C_5L_2s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C$$

### 10.386 INVALID-ORDER-386 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_5s^4 + C_2L_2L_5R_5g_ms^3 - C_2L_2L_5s^3 - C_2L_2R_5s^2 + C_2L_5R_5s^2 - C_5L_5R_5s^2 + L_5R_5g\right.}{C_2C_3C_5L_2L_5R_3R_5s^5 + C_2C_3L_2L_5R_3R_5g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2R_3R_5s^3 + C_2C_3L_5R_3R_5s^3 + 2C_2C_5L_2L_5R_3R_5g_ms^4 + C_2C_5L_2L_5R_5s^4 + 4C_2C_5L_5R_3R_5s^3 + 2C_2L_2L_5R_3g_ms^3 + C_2L_2L_5R_5g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_3R_5g_ms^2 + C_2L_2R_5s^2 + 4C_2L_5R_3$$

### 10.387 INVALID-ORDER-387 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_5R_5s^3 + C_2L_2L_5g_ms^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + \right.}{C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3L_5R_3s^3 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2L_5R_3g_ms^4 + C_2C_5L_2L_5R_5g_ms^4 + C_2C_5L_2L_5s^4 + 4C_2C_5L_5R_3s^3 + C_2C_5L_5R_5s^3 + C_2L_2L_5g$$

### 10.388 INVALID-ORDER-388 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 - C_2C_5L_2R_5s^3 + C_2C_5L_5R_5s^3 + C_2L_2\right.}{C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2L_5R_3g_ms^4 + C_2C_5L_2L_5R_5g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_3R_5g_ms^3 + C_2C_5L_2R_5s^3 + 4C_2C_5L_5R_3s^3 + C_2$$

### 10.389 INVALID-ORDER-389 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2g_m}$$

### 10.390 INVALID-ORDER-390 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.391 INVALID-ORDER-391 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2R_5s^3 - C_2L_2R_5g_ms^2 + C_2L_2s^2 - C_2R_5s + C_5R_5s - R_5g_m + 1\right)}{2C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_5s^4 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2R_5g_ms^3 + 4C_2C_5R_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + 2C_3C_5R_3R_5g_ms^2 + C_3C_5R_5s^2 + 2C_3R_3g_ms + C_3R_5g_ms + C$$

**10.392 INVALID-ORDER-392** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.393 INVALID-ORDER-393** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{s\left(C_2C_3C_5L_2L_5g_ms^4 + 2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.394 INVALID-ORDER-394** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2L_5s^4 - C_2L_2L_5g_ms^3 + C_2L_2s^2 - C_2L_5s^2 + C_5L_5s^2 - L_5g_ms + 1\right)}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5s^5 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3L_2L_5g_ms^4 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + 2C_2C_5L_2L_5g_ms^4 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms^2 + 4C_2s + 2C_3C_5L_5R_3g_ms^3 + C_3C_5L_5s^3 + C_3L_5g_ms^2 + 2C_3R_3g_ms + C$$

**10.395 INVALID-ORDER-395** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m\right)}{s\left(C_2C_3C_5L_2L_5g_ms^4 + 2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5s^3 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5R_3g_ms + C_3C_5R_5g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.396 INVALID-ORDER-396** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_5s^4 - C_2L_2L_5R_5g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_5s^2 - C_2L_5R_5s^2 + C_5}{2C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_5s^5 + 4C_2C_3C_5L_5R_3R_5s^4 + 2C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2L_5R_5g_ms^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_5s^3 + 4C_2C_3L_5R_3s^3 + C_2C_3L_5R_5s^3 + 4C_2C_3R_3R_5s^2 + 2C_2C_5L_2L_5R_5g_ms^4 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms$$

**10.397 INVALID-ORDER-397** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_5R_5s^3 + C_2L_2L_5g_ms^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2L_5s^2 + C_2R_5s + C_5L_5R_5g_ms^2 - C_5L_5s^2 +}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + 4C_2C_3C_5L_5R_3R_5s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_2L_5g_ms^4 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5g_ms^4 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms^3$$

**10.398 INVALID-ORDER-398** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 - C_2C_5L_2R_5s^3 + C_2C_5L_5R_5s^3 + C_2L_2R_5g_ms^2 - C}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_5s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5$$

**10.399 INVALID-ORDER-399** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 4C_2C_3L_3s^3 + C_2C_3R_5s^2 + 2C_2L_2g_ms^2 + 4C_2s + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2g_m}$$

**10.400 INVALID-ORDER-400** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_ms^4 + C_2C_3C_5L_2s^3 + 4C_2C_3C_5L_3s^3 + C_2C_3L_2g_ms^2 + C_2C_3s + 2C_2C_5L_2g_ms^2 + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.401 INVALID-ORDER-401 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 R_5 s^3 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2R_5 s^4 + 4C_2C_3C_5L_3R_5 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3R_5 s^2 + 2C_2C_5L_2R_5g_m s^3 + 4C_2C_5R_5 s^2 + 2C_2L_2g_m s^2 + 4C_2 s + 2C_3C_5L_3R_5g_m s^3 + C_3C_5R_5 s^2 + 2C_3L_3g_m s^2 + C_3R_5g_m s + C}$$

### 10.402 INVALID-ORDER-402 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.403 INVALID-ORDER-403 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5 s^3 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.404 INVALID-ORDER-404 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 s^4 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 s^2 + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2C_2C_3C_5L_2L_3L_5g_m s^6 + C_2C_3C_5L_2L_5 s^5 + 4C_2C_3C_5L_3L_5 s^5 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5 s^3 + 2C_2C_5L_2L_5g_m s^4 + 4C_2C_5L_5 s^3 + 2C_2L_2g_m s^2 + 4C_2 s + 2C_3C_5L_3L_5g_m s^4 + C_3C_5L_5 s^3 + 2C_3L_3g_m s^2 + C_3L_5g_m s^2 + C}$$

### 10.405 INVALID-ORDER-405 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5 s^3 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.406 INVALID-ORDER-406 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_5 s^4 - C_2 L_2 L_5 R_5 g_m s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_5 s^2 - C_2 L_5 R_5 s^2 + C_5\right.}{2C_2C_3C_5L_2L_3L_5R_5g_m s^6 + C_2C_3C_5L_2L_5R_5 s^5 + 4C_2C_3C_5L_3L_5R_5 s^5 + 2C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_5R_5g_m s^4 + C_2C_3L_2L_5 s^4 + C_2C_3L_2R_5 s^3 + 4C_2C_3L_3L_5 s^4 + 4C_2C_3L_3R_5 s^3 + C_2C_3L_5R_5 s^3 + 2C_2C_5L_2L_5R_5g_m s^4 + 4C_2C_5L_5R_5 s^3 + 2}$$

### 10.407 INVALID-ORDER-407 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 s^2 + C_2 R_5 s + C_5 L_5 R_5 g_m s^2 - C_5 L_5 s^2 +\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + 4C_2C_3C_5L_3L_5 s^5 + C_2C_3C_5L_5R_5 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5 s^3 + C_2C_3R_5 s^2 + 2C_2C_5L_2L_5g_m s^4 + 4C_2C_5L_5 s^3 + 2C_2L_2g_m s^2}$$

### 10.408 INVALID-ORDER-408 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_5 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + C_2C_3C_5L_2R_5 s^4 + 4C_2C_3C_5L_3L_5 s^5 + 4C_2C_3C_5L_3R_5 s^4 + C_2C_3C_5L_5R_5 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3R_5 s^2 + 2C_2C_5L_2L_5g_m}$$

### 10.409 INVALID-ORDER-409 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_3 s^4 + C_2C_3L_3R_5 s^3 + 2C_2L_2L_3g_m s^3 + C_2L_2R_5g_m s^2 + C_2L_2 s^2 + 4C_2L_3 s^2 + C_2R_5 s + C_3L_3R_5g_m s^2 + C_3L_3 s^2 + 2L_3g_m s + R_5g_m + 1}$$

### 10.410 INVALID-ORDER-410 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 s^3 + 4C_2 C_5 L_3 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2C_5 L_3 g_m s^2 + C_5 s + g_m}$$

### 10.411 INVALID-ORDER-411 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 R_5 s^3 + 2C_2 C_5 L_2 L_3 R_5 g_m s^4 + C_2 C_5 L_2 R_5 s^3 + 4C_2 C_5 L_3 R_5 s^3 + 2C_2 L_2 L_3 g_m s^3 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 + 4C_2 L_3 s^2 + C_2 R_5 s + C_3 C_5 L_3 R_5 s^3 + C_3 L_3 R_5 g_m s^2 + C_3 L_3 s^2 + 2C_5 L_3 R_5 g_m s^2 + C_5 R_5 s +$$

### 10.412 INVALID-ORDER-412 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_2 L_3 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_3 C_5 L_3 R_5 g_m s^3 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2C_5 L_3 g_m s^2 + C_5 R_5 g_m s +$$

### 10.413 INVALID-ORDER-413 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{C_2 C_3 C_5 L_2 L_3 L_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_3 C_5 L_3 L_5 g_m s^4 + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2C_5 L_3 g_m s^2 + C_5 L_5 g_m s^2 +$$

### 10.414 INVALID-ORDER-414 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 L_5 s^4 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 L_2 L_3 L_5 g_m s^5 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 L_5 s^4 + 2C_2 C_5 L_2 L_3 L_5 g_m s^5 + C_2 C_5 L_2 L_5 s^4 + 4C_2 C_5 L_3 L_5 s^4 + 2C_2 L_2 L_3 g_m s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 + 4C_2 L_3 s^2 + C_2 L_5 s^2 + C_3 C_5 L_3 L_5 s^4 + C_3 L_3 L_5 g_m s^3 + C_3 L_3 s^2 + 2C_5 L_3 L_5 g_m s^3 + C_5 L_5 s^2 +$$

### 10.415 INVALID-ORDER-415 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_2 L_3 L_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2$$

### 10.416 INVALID-ORDER-416 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 L_5 s^3 - C_2 L_2 R_5 s^2 + C_2 L_5 R_5 s^2 - C_5 L_5 R_5 s^2 + L_5 R_5\right.$$

$$\left. + C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - L_5 s + R_5 g_m - R_5\right)$$

$$\overline{C_2 C_3 C_5 L_2 L_3 L_5 R_5 s^6 + C_2 C_3 L_2 L_3 L_5 R_5 g_m s^5 + C_2 C_3 L_2 L_3 L_5 s^5 + C_2 C_3 L_2 L_3 R_5 s^4 + C_2 C_3 L_3 L_5 R_5 s^4 + 2C_2 C_5 L_2 L_3 L_5 R_5 g_m s^5 + C_2 C_5 L_2 L_5 R_5 s^4 + 4C_2 C_5 L_3 L_5 R_5 s^4 + 2C_2 L_2 L_3 L_5 g_m s^4 + 2C_2 L_2 L_3 R_5 g_m s^3 + C_2 L_2 L_5 R_5 g_m s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_5 s^2 + 4C_2 L_3 L_5 s^3}$$

### 10.417 INVALID-ORDER-417 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2\right.$$

$$\left. + C_2 L_5 R_5 g_m s - C_2 L_5 s^2 + C_2 R_5 g_m s - C_2 R_5 s + C_5 L_5 R_5 g_m s - C_5 L_5 s^2 + C_5 R_5 g_m s - C_5 R_5 s + R_5 g_m\right)$$

$$\overline{C_2 C_3 C_5 L_2 L_3 L_5 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_2 L_3 L_5 g_m s^5 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_5 s^3 + 2C_2 C_5 L_2 L_3 L_5 g_m s^5 + C_2 C_5 L_2 L_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + 4C_2 C_5 L_3 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + 2C_2 L_2 L_3 g_m$$

### 10.418 INVALID-ORDER-418 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_5 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L\right.$$

$$\overline{C_2 C_3 C_5 L_2 L_3 L_5 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 R_5 s^3 + 2C_2 C_5 L_2 L_3 L_5 g_m s^5 + 2C_2 C_5 L_2 L_3 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_5 s^3 + 4C_2 C_5 L_3 L_5 s^4 + 4C_2$$

### 10.419 INVALID-ORDER-419 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2C_3L_2L_3g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + 4C_2C_3R_3 s^2 + C_2C_3R_5 s^2 + 2C_2L_2g_m s^2 + 4C_2 s + 2C_3L_3g_m s^2 + 2C_3R_3g_m s + C_3R_5g_m s + C_3 s + 2g_m}$$

### 10.420 INVALID-ORDER-420 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + 4C_2C_3C_5R_3 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.421 INVALID-ORDER-421 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 R_5 s^3 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_5 s + C_5 R_5 s - R_5 g_m + 1\right)}{2C_2C_3C_5L_2L_3R_5g_m s^5 + 2C_2C_3C_5L_2R_3R_5g_m s^4 + C_2C_3C_5L_2R_5 s^4 + 4C_2C_3C_5L_3R_5 s^4 + 4C_2C_3C_5R_3R_5 s^3 + 2C_2C_3L_2L_3g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + 4C_2C_3R_3 s^2 + C_2C_3R_5 s^2 + 2C_2C_5L_2R_5g_m s^3 + 4C_2C_5R_5 s^2 + 2C_2$$

### 10.422 INVALID-ORDER-422 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + 4C_2C_3C_5R_3 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5R_5g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.423 INVALID-ORDER-423 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5 s^3 + 4C_2C_3C_5R_3 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + 2C_3C_5R_3g_m s + C_3C_5 s + C_3g_m + 2C_5g_m\right)}$$

### 10.424 INVALID-ORDER-424 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 s^4 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 s^2 + C_5 L_5 s^2 - L_5 g_m s + 1\right)}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2L_5 s^5 + 4C_2C_3C_5L_3L_5 s^5 + 4C_2C_3C_5L_5R_3 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5 s^3 + 4C_2C_3R_3 s^2 + 2C_2C_5L_2L_5g_m s^4 + 4C_2C_5L_5 s^3 + 2C_2L$$

### 10.425 INVALID-ORDER-425 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5 s^3 + 4C_2C_3C_5R_3 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5L_5g_m s^2 + 2C_3$$

### 10.426 INVALID-ORDER-426 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3 L_3$$
$$2C_2C_3C_5L_2L_3L_5R_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_5 s^5 + 4C_2C_3C_5L_3L_5R_5 s^5 + 4C_2C_3C_5L_5R_3R_5 s^4 + 2C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_5g_m s^4 + 2C_2C_3L_2L_5R_3g_m s^4 + C_2C_3L_2L_5R_5g_m s^4 + C_2C_3L_2L_5 s^4 + 2C_2C_3L_2R_3R_5g_m s^3 + C_2C_3L_2R_5$$

### 10.427 INVALID-ORDER-427 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m$$
$$2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + 4C_2C_3C_5L_3L_5 s^5 + 4C_2C_3C_5L_5R_3 s^4 + C_2C_3C_5L_5R_5 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 4C_2C_3L_3 s^3 + C_2C_3L$$

### 10.428 INVALID-ORDER-428 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 \right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_5g_m s^5 + 2C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + 2C_2C_3C_5L_2R_3R_5g_m s^4 + C_2C_3C_5L_2R_5 s^4 + 4C_2C_3C_5L_3L_5 s^5 + 4C_2C_3C_5L_3R_5 s^4 + 4C_2C_3C_5L_5R_3 s^4 + C_2C_3C_5L_5R_5 s^4 + 4C_2C_3C_5R_3R_5 s^3 + 2C}$$

### 10.429 INVALID-ORDER-429 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_2L_3R_3R_5g_m s^4 + C_2C_3L_2L_3R_3 s^4 + C_2C_3L_3R_3R_5 s^3 + 2C_2L_2L_3R_3g_m s^3 + C_2L_2L_3R_5g_m s^3 + C_2L_2L_3 s^3 + C_2L_2R_3R_5g_m s^2 + C_2L_2R_3 s^2 + 4C_2L_3R_3 s^2 + C_2L_3R_5 s^2 + C_2R_3R_5 s + C_3L_3R_3R_5g_m s^2 + C_3L_3R_3 s^2 + 2L_3R_3g_m s + L_3R_5g_m s + L_3 s + R_3R_5g_m + R}$$

### 10.430 INVALID-ORDER-430 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2 C_5 L_2 s^3 + C_2 L_2 g_m s^2 + C_2 s - C_5 s + g_m\right)}{C_2C_3C_5L_2L_3R_3 s^5 + C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_3R_3 s^3 + 2C_2C_5L_2L_3R_3g_m s^4 + C_2C_5L_2L_3 s^4 + C_2C_5L_2R_3 s^3 + 4C_2C_5L_3R_3 s^3 + C_2L_2L_3g_m s^3 + C_2L_2R_3g_m s^2 + C_2L_3 s^2 + C_2R_3 s + C_3C_5L_3R_3 s^3 + C_3L_3R_3g_m s^2 + 2C_5L_3R_3g_m s^2 + C_5L_3 s^2 + C_5R_3 s + L_3g_m s + R_3}$$

### 10.431 INVALID-ORDER-431 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1\right)}{C_2C_3C_5L_2L_3R_3R_5 s^5 + C_2C_3L_2L_3R_3R_5g_m s^4 + C_2C_3L_2L_3R_3 s^4 + C_2C_3L_3R_3R_5 s^3 + 2C_2C_5L_2L_3R_3R_5g_m s^4 + C_2C_5L_2L_3R_5 s^4 + C_2C_5L_2R_3R_5 s^3 + 4C_2C_5L_3R_3R_5 s^3 + 2C_2L_2L_3R_3g_m s^3 + C_2L_2L_3R_5g_m s^3 + C_2L_2L_3 s^3 + C_2L_2R_3R_5g_m s^2 + C_2L_2R_3 s^2 + 4C_2L_3R_3 s}$$

### 10.432 INVALID-ORDER-432 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 s + C_5 R_5 g_m s - C_5 s\right.}{C_2C_3C_5L_2L_3R_3R_5g_m s^5 + C_2C_3C_5L_2L_3R_3 s^5 + C_2C_3C_5L_3R_3R_5 s^4 + C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_3R_3 s^3 + 2C_2C_5L_2L_3R_3g_m s^4 + C_2C_5L_2L_3R_5g_m s^4 + C_2C_5L_2L_3 s^4 + C_2C_5L_2R_3R_5g_m s^3 + C_2C_5L_2R_3 s^3 + 4C_2C_5L_3R_3 s^3 + C_2C_5L_3R_5 s^3 + C_2C_5R_3R_5 s^2 + C_2L_2L_3g}$$

### 10.433 INVALID-ORDER-433 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 s^3 + C_2 L_2 g_m s^2 + C_2 s + C_5 L_5 g_m s^2 - C_5 s\right.}{C_2C_3C_5L_2L_3L_5R_3g_m s^6 + C_2C_3C_5L_2L_3R_3 s^5 + C_2C_3C_5L_3L_5R_3 s^5 + C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_3R_3 s^3 + C_2C_5L_2L_3L_5g_m s^5 + 2C_2C_5L_2L_3R_3g_m s^4 + C_2C_5L_2L_3 s^4 + C_2C_5L_2L_5R_3g_m s^4 + C_2C_5L_2R_3 s^3 + C_2C_5L_3L_5 s^4 + 4C_2C_5L_3R_3 s^3 + C_2C_5L_5R_3 s^3 + C_2L_2L_3g}$$

### 10.434 INVALID-ORDER-434 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(-C_2 C_5 L_2 L_5 s^4 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 s^2 - C_5 L_5 s^2 + L_5 g_m s - 1\right)}{C_2C_3C_5L_2L_3L_5R_3 s^6 + C_2C_3L_2L_3L_5R_3g_m s^5 + C_2C_3L_2L_3R_3 s^4 + C_2C_3L_3L_5R_3 s^4 + 2C_2C_5L_2L_3L_5R_3g_m s^5 + C_2C_5L_2L_3L_5 s^5 + C_2C_5L_2L_5R_3 s^4 + 4C_2C_5L_3L_5R_3 s^4 + C_2L_2L_3L_5g_m s^4 + 2C_2L_2L_3R_3g_m s^3 + C_2L_2L_3 s^3 + C_2L_2L_5R_3g_m s^3 + C_2L_2R_3 s^2 + C_2L_3L_5 s^3 +}$$

### 10.435 INVALID-ORDER-435 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 R_3 s\left(C_2 C_5 L_2 L_5 g_m s^4\right.}{C_2C_3C_5L_2L_3L_5R_3g_m s^6 + C_2C_3C_5L_2L_3R_3R_5g_m s^5 + C_2C_3C_5L_2L_3R_3 s^5 + C_2C_3C_5L_3L_5R_3 s^5 + C_2C_3C_5L_3R_3R_5 s^4 + C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_3R_3 s^3 + C_2C_5L_2L_3L_5g_m s^5 + 2C_2C_5L_2L_3R_3g_m s^4 + C_2C_5L_2L_3R_5g_m s^4 + C_2C_5L_2L_3 s^4 + C_2C_5L_2L_5R_3g_m s^4 + C_2C_5}$$

### 10.436 INVALID-ORDER-436 $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5 s^6 + C_2C_3L_2L_3L_5R_3R_5g_m s^5 + C_2C_3L_2L_3L_5R_3 s^5 + C_2C_3L_2L_3R_3R_5 s^4 + C_2C_3L_3L_5R_3R_5 s^4 + 2C_2C_5L_2L_3L_5R_3R_5g_m s^5 + C_2C_5L_2L_3L_5R_5 s^5 + C_2C_5L_2L_5R_3R_5 s^4 + 4C_2C_5L_3L_5R_3R_5 s^4 + 2C_2L_2L_3L_5R_3g_m s^4 + C_2L_2L_3L_5R_5g_m s^4 + C_2L_2L_3}$$

**10.437 INVALID-ORDER-437** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5g_m s^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3L_2L_3L_5R_3g_m s^5 + C_2C_3L_2L_3R_3R_5g_m s^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3L_5R_3s^4 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_2L_3L_5R_3g_m s^5 + C_2C_5L_2L_3L_5R_5g_m s^5 + C_2C_5L_2L_3L_5s^5 + C_2C_5L_2L_5R_3$$

**10.438 INVALID-ORDER-438** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5g_m s^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3L_2L_3R_3R_5g_m s^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_2L_3L_5R_3g_m s^5 + C_2C_5L_2L_3L_5R_5g_m s^5 + C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_3R_3R_5g_m s^4 + C_2C_5$$

**10.439 INVALID-ORDER-439** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2L_2R_5g_m s^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_3s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2L_2L_3g_m s^3 + 2C_2L_2R_3g_m s^2 + C_2L_2R_5g_m s^2 + C_2L_2s^2 + 4C_2L_3s^2 + 4C_2R_3s + C_2R_5s + 2C_3L_3R_3g_m s^2 + C_3L_3R_5g_m s^2 + C_3L_3s^2 + 2L_3g_m s + 2R_3g_m + R_5g_m + 1}$$

**10.440 INVALID-ORDER-440** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(-C_2C_5L_2s^3 + C_2L_2g_m s^2 + C_2s - C_5s + g_m\right)}{2C_2C_3C_5L_2L_3R_3g_m s^5 + C_2C_3C_5L_2L_3s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_2L_3g_m s^4 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2s^3 + 4C_2C_5L_3s^3 + 4C_2C_5R_3s^2 + C_2L_2g_m s^2 + C_2s + 2C_3C_5L_3R_3g_m s^3 + C_3C_5L_3s^3 + C_3L_3g_m s^2 + 2C_5L_3g_m s^2 + 2C_5R$$

**10.441 INVALID-ORDER-441** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2R_5s^3 - C_2L_2R_5g_m s^2}{2C_2C_3C_5L_2L_3R_3R_5g_m s^5 + C_2C_3C_5L_2L_3R_5s^5 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_3s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2C_5L_2L_3R_5g_m s^4 + 2C_2C_5L_2R_3R_5g_m s^3 + C_2C_5L_2R_5s^3 + 4C_2C_5L_3R_5s^3 + 4C_2C_5R_3R_5s^2 + C_2$$

**10.442 INVALID-ORDER-442** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2R_5g_m s^3 - C_2C_5L_2s^3 + C_2C_5R_5s^2 + C_2L_2g_m s^2 + C_2s + C_5R_5g_m s - C_5s + g_m\right)}{2C_2C_3C_5L_2L_3R_3g_m s^5 + C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2L_3s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_2L_3g_m s^4 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2R_5g_m s^3 + C_2C_5L_2s^3 + 4C_2C_5L_3s^3 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2L_2g_m s^2$$

**10.443 INVALID-ORDER-443** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2L_5g_m s^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_m s^2 + C_2s + C_5L_5g_m s^2 - C_5s + g_m\right)}{C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_3g_m s^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_2L_3g_m s^4 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_m s^4 + C_2C_5L_2L_5g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2s^3 + 4C_2C_5L_3s^3 + C_2C_5L_5s^3 + 4C_2C_5R_3s^2 + C_2L_2g_m s^2 -$$

**10.444 INVALID-ORDER-444** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2L_5s^4 - C_2L_2L_5g_m s^3 +}{2C_2C_3C_5L_2L_3L_5R_3g_m s^6 + C_2C_3C_5L_2L_3L_5s^6 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + 2C_2C_5L_2L_3L_5g_m s^5 + 2C_2C_5L_2L_5R_3g_m s^4 + C_2C_5L_2L_5s^4 + 4C_2C_5L_3L_5s^4 + 4C_2C_5L_5R_3s^3 + 2C$$

**10.445 INVALID-ORDER-445** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2L_5g_m s^4 + C_2C_5L_2R_5g_m s^3 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2C_5}{C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_3g_m s^5 + C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_2L_3g_m s^4 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_m s^4 + C_2C_5L_2L_5g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2R_5g_m s^3 + C_2C_5$$

**10.446 INVALID-ORDER-446** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_3g_ms^5 + C_2C_3L_2L_3L_5R_5g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_5s^4 + 4C_2C_3L_3L_5R_3s^4 + C_2C_3L_3L_5R_5s^4 + 4C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_2L$$

**10.447 INVALID-ORDER-447** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3L_2L_3L_5g_ms^5 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2C_5L_2L_3L$$

**10.448 INVALID-ORDER-448** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + 4C_2C_3L_3R$$

**10.449 INVALID-ORDER-449** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 4C_2R_3s + C_2R_5s + 2C_3L_3R_3g_ms^2 + C_3L_3R_5g_ms^2 + C_3L_3s^2 + C_3R_3R_5$$

**10.450 INVALID-ORDER-450** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2s^3 + C_2L_2g_ms^2 + C_2s - C_5s + g_m\right)}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2R_3s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2s + 2C_3C_5L_3R_3g_ms^3 + C_3C_5L_3s^3 + C_3C_5R_3s^2 + C_3$$

**10.451 INVALID-ORDER-451** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_2R_5s^3 - C_2L_2R_5\right.}{2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2R_3R_5g_ms^3$$

**10.452 INVALID-ORDER-452** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C\right.}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3R_5g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2R_5$$

**10.453 INVALID-ORDER-453** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5s^3 + C_2L_2g_ms^2 + C\right.}{C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_3s^2 + C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g$$

**10.454 INVALID-ORDER-454** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{R_3\left(C_3L_3s^2+1\right)\left(C_2C_5L_2L_5s^4 - C_2L_2L_5\right.}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_5R_3s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_2L_3L_5g_ms^5 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3s^3 + C_2C_3L_3L_5s^4 + 4C_2C_3L_3R_3s^3 + C_2C_3L_5R_3s^3 + 2C_2C_5L_2L_5R_3g_ms^4 +$$

**10.455 INVALID-ORDER-455** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3 L_3 s^2+1\right.}{C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_3g_m s^5 + C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2R_3R_5g_m s^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_3L_5s^5 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2L}$$

**10.456 INVALID-ORDER-456** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3R_5g_m s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_5R_3R_5s^5 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_3g_m s^5 + C_2C_3L_2L_3L_5R_5g_m s^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_3R_5g_m s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_2L_5R_3R_5g_m s^4 + C_2C_3L_2L_5R_3s^4 + C_2}$$

**10.457 INVALID-ORDER-457** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_3g_m s^6 + C_2C_3C_5L_2L_3L_5R_5g_m s^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_5R_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_3s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_3g_m s^4 + C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2}$$

**10.458 INVALID-ORDER-458** $Z(s) = \left(\infty,\ L_2 s + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_3g_m s^6 + C_2C_3C_5L_2L_3L_5R_5g_m s^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_3R_5g_m s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2L_5R_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 4C_2C_3C_5L_3R_3R_5s^4 + C}$$

**10.459 INVALID-ORDER-459** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s - C_5s + g_m\right)}{2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2s^3 + 2C_2C_5R_2R_3g_m s^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s + 2C_5R_3g_m s + C_5s + g_m}$$

**10.460 INVALID-ORDER-460** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_5s^3 - C_2C_5R_2R_5s^2 + C_2L_2R_5g_m s^2 - C_2L_2s^2 + C_2R_2R_5g_m s - C_2R_2s + C_2R_5s - C_5R_5s + R_5g_m - 1\right)}{2C_2C_5L_2R_3R_5g_m s^3 + C_2C_5L_2R_5s^3 + 2C_2C_5R_2R_3R_5g_m s^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 + 2C_2L_2R_3g_m s^2 + C_2L_2R_5g_m s^2 + C_2L_2s^2 + 2C_2R_2R_3g_m s + C_2R_2R_5g_m s + C_2R_2s + 4C_2R_3s + C_2R_5s + 2C_5R_3R_5g_m s + C_5R_5s + 2R_3g_m + R_5g_m + 1}$$

**10.461 INVALID-ORDER-461** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_5g_m s^3 - C_2C_5L_2s^3 + C_2C_5R_2R_5g_m s^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s + C_5R_5g_m s - C_5s + g_m\right)}{2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2R_5g_m s^3 + C_2C_5L_2s^3 + 2C_2C_5R_2R_3g_m s^2 + C_2C_5R_2R_5g_m s^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2C_5R_5s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s + 2C_5R_3g_m s + C_5R_5g_m s + C_5s + g_m}$$

**10.462 INVALID-ORDER-462** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_m s^4 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_m s^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s + C_5L_5g_m s^2 - C_5s + g_m\right)}{C_2C_5L_2L_5g_m s^4 + 2C_2C_5L_2R_3g_m s^3 + C_2C_5L_2s^3 + C_2C_5L_5R_2g_m s^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_m s^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2L_2g_m s^2 + C_2R_2g_m s + C_2s + C_5L_5g_m s^2 + 2C_5R_3g_m s + C_5s + g_m}$$

**10.463 INVALID-ORDER-463** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5s^4 - C_2C_5L_5R_2s^3 + C_2L_2L_5g_m s^3 - C_2L_2s^2 + C_2L_5R_2g_m s^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_m s - 1\right)}{2C_2C_5L_2L_5R_3g_m s^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_5R_2R_3g_m s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2L_2L_5g_m s^3 + 2C_2L_2R_3g_m s^2 + C_2L_2s^2 + C_2L_5R_2g_m s^2 + C_2L_5s^2 + 2C_2R_2R_3g_m s + C_2R_2s + 4C_2R_3s + 2C_5L_5R_3g_m s^2 + C_5L_5s^2 + L_5g_m s + 2R_3g_m + 1}$$

### 10.464 INVALID-ORDER-464 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + C_5 R_5 g_m s - C_5 s + g_m\right)}{C_2 C_5 L_2 L_5 g_m s^4 + 2C_2 C_5 L_2 R_3 g_m s^3 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + 2C_2 C_5 R_2 R_3 g_m s^2 + C_2 C_5 R_2 R_5 g_m s^2 + C_2 C_5 R_2 s^2 + 4C_2 C_5 R_3 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 + 2C_5 R_3 g_m s + C_5 R_5 g_m s + C_5 s + g_m}$$

### 10.465 INVALID-ORDER-465 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3 \left(-C_2 C_5 L_2 L_5 R_5 s^4 - C_2 C_5 L_5 R_2 R_5 s^3 + C_2 L_2 L_5 R_5 g_m s^3 - C_2 L_2 L_5 s^3 - C_2 L_2 R_5 s^2 + C_2 L_5 R_2 R_5 g_m s^2 - C_2 L_5 R_2 s^2 + C_2 L_5 R_5 s^2 - C_2 R_2 R_5 s - C_5 L_5 R_5 \right.}{2C_2 C_5 L_2 L_5 R_3 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + 2C_2 C_5 L_5 R_2 R_3 R_5 g_m s^3 + C_2 C_5 L_5 R_2 R_5 s^3 + 4C_2 C_5 L_5 R_3 R_5 s^3 + 2C_2 L_2 L_5 R_3 g_m s^3 + C_2 L_2 L_5 R_5 g_m s^3 + C_2 L_2 L_5 s^3 + 2C_2 L_2 R_3 R_5 g_m s^2 + C_2 L_2 R_5 s^2 + 2C_2 L_5 R_2 R_3 g_m s^2 + C_2 L_5 R_2 R_5 g_m s^2 + C_2 L_5 R_2 s^2 + 4C_2 L_5 R_3 s^2 + C_2$$

### 10.466 INVALID-ORDER-466 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + C\right.}{2C_2 C_5 L_2 L_5 R_3 g_m s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + 2C_2 C_5 L_5 R_2 R_3 g_m s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 + C_2 C_5 L_5 R_2 s^3 + 4C_2 C_5 L_5 R_3 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2 L_2 L_5 g_m s^3 + 2C_2 L_2 R_3 g_m s^2 + C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 + 2C_2 R_2 R_3 g_m s + C_2 R_2 R$$

### 10.467 INVALID-ORDER-467 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_5 s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2\right.}{2C_2 C_5 L_2 L_5 R_3 g_m s^4 + C_2 C_5 L_2 L_5 R_5 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + 2C_2 C_5 L_2 R_3 R_5 g_m s^3 + C_2 C_5 L_2 R_5 s^3 + 2C_2 C_5 L_5 R_2 R_3 g_m s^3 + C_2 C_5 L_5 R_2 R_5 g_m s^3 + C_2 C_5 L_5 R_2 s^3 + 4C_2 C_5 L_5 R_3 s^3 + C_2 C_5 L_5 R_5 s^3 + 2C_2 C_5 R_2 R_3 R_5 g_m s^2 + C_2 C_5 R_2 R_5 s^2 + 4C_2 C_5 R_3 R_5 s^2 + 2C_2 L_2 R_3 g_m s^2$$

### 10.468 INVALID-ORDER-468 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1}{C_2 C_3 L_2 R_5 g_m s^3 + C_2 C_3 L_2 s^3 + C_2 C_3 R_2 R_5 g_m s^2 + C_2 C_3 R_2 s^2 + C_2 C_3 R_5 s^2 + 2C_2 L_2 g_m s^2 + 2C_2 R_2 g_m s + 4C_2 s + C_3 R_5 g_m s + C_3 s + 2g_m}$$

### 10.469 INVALID-ORDER-469 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m}{s\left(C_2 C_3 C_5 L_2 s^3 + C_2 C_3 C_5 R_2 s^2 + C_2 C_3 L_2 g_m s^2 + C_2 C_3 R_2 g_m s + C_2 C_3 s + 2C_2 C_5 L_2 g_m s^2 + 2C_2 C_5 R_2 g_m s + 4C_2 C_5 s + C_3 C_5 s + C_3 g_m + 2C_5 g_m\right)}$$

### 10.470 INVALID-ORDER-470 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{-C_2 C_5 L_2 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R_5 g_m - 1}{C_2 C_3 C_5 L_2 R_5 s^4 + C_2 C_3 C_5 R_2 R_5 s^3 + C_2 C_3 L_2 R_5 g_m s^3 + C_2 C_3 L_2 s^3 + C_2 C_3 R_2 R_5 g_m s^2 + C_2 C_3 R_2 s^2 + C_2 C_3 R_5 s^2 + 2C_2 C_5 L_2 R_5 g_m s^3 + 2C_2 C_5 R_2 R_5 g_m s^2 + 4C_2 C_5 R_5 s^2 + 2C_2 L_2 g_m s^2 + 2C_2 R_2 g_m s + 4C_2 s + C_3 C_5 R_5 s^2 + C_3 R_5 g_m s + C_3 s + 2C_5 R_5 g_m s + 2g_m}$$

### 10.471 INVALID-ORDER-471 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m}{s\left(C_2 C_3 C_5 L_2 R_5 g_m s^3 + C_2 C_3 C_5 L_2 s^3 + C_2 C_3 C_5 R_2 R_5 g_m s^2 + C_2 C_3 C_5 R_2 s^2 + C_2 C_3 C_5 R_5 s^2 + C_2 C_3 L_2 g_m s^2 + C_2 C_3 R_2 g_m s + C_2 C_3 s + 2C_2 C_5 L_2 g_m s^2 + 2C_2 C_5 R_2 g_m s + 4C_2 C_5 s + C_3 C_5 R_5 g_m s + C_3 C_5 s + C_3 g_m + 2C_5 g_m\right)}$$

### 10.472 INVALID-ORDER-472 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m}{s\left(C_2 C_3 C_5 L_2 L_5 g_m s^4 + C_2 C_3 C_5 L_2 s^3 + C_2 C_3 C_5 L_5 R_2 g_m s^3 + C_2 C_3 C_5 L_5 s^3 + C_2 C_3 C_5 R_2 s^2 + C_2 C_3 L_2 g_m s^2 + C_2 C_3 R_2 g_m s + C_2 C_3 s + 2C_2 C_5 L_2 g_m s^2 + 2C_2 C_5 R_2 g_m s + 4C_2 C_5 s + C_3 C_5 L_5 g_m s^2 + C_3 C_5 s + C_3 g_m + 2C_5 g_m\right)}$$

### 10.473 INVALID-ORDER-473 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5s^4 - C_2C_5L_5R_2s^3 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5R_2g_ms^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L_5g_ms - 1}{C_2C_3C_5L_2L_5s^5 + C_2C_3C_5L_5R_2s^4 + C_2C_3L_2L_5g_ms^4 + C_2C_3L_2s^3 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + C_2C_3R_2s^2 + 2C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_5R_2g_ms^3 + 4C_2C_5L_5s^3 + 2C_2L_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + C_3C_5L_5s^3 + C_3L_5g_ms^2 + C_3s + 2C_5L_5g_ms^2 + 2g_m}$$

### 10.474 INVALID-ORDER-474 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 + C_5R_5g_ms - C_5s + g_m}{s\left(C_2C_3C_5L_2L_5g_ms^4 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + C_3C_5R_5g_m\right.}$$

### 10.475 INVALID-ORDER-475 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_5s^4 - C_2C_5L_5R_2R_5s^3 + C_2L_2L_5R_5g_ms^3 - C_2L_2L_5s^3 - C_2L_2R_5s^2 + C_2L_5R_2R_5g_ms^2 - C_2L_5R_2s^2 + C_2L_5R_5s^2 - C_2R_2R_5s - C_5L_5R}{C_2C_3C_5L_2L_5R_5s^5 + C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_2L_5R_5g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_5s^3 + C_2C_3L_5R_2R_5g_ms^3 + C_2C_3L_5R_2s^3 + C_2C_3L_5R_5s^3 + C_2C_3R_2R_5s^2 + 2C_2C_5L_2L_5R_5g_ms^4 + 2C_2C_5L_5R_2R_5g_ms^3 + 4C_2C_5L_5R_5s^3 + 2C_2L_2L_5g_ms^3 + 2C_2L_2R_5g_ms^2 + 2}$$

### 10.476 INVALID-ORDER-476 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L_2L_5g_ms^3 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2L_5R_2g_ms^2 + C_2L_5s^2 + C_2R_2R_5g_ms - C_2R_2}{C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_2L_5g_ms^4 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_5R}$$

### 10.477 INVALID-ORDER-477 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 - C_2C_5L_2R_5s^3 + C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 - C_2C_5R_2R_5s^2 + C_2L_2R_5g_ms^2 - C_2L_2s^2}{C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + C_2C_3C_5L_2R_5s^4 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3C_5R_2R_5s^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_5g_ms^3 + 2C}$$

### 10.478 INVALID-ORDER-478 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 2C_2R_2R_3g_ms + C_2R_2R_5g_ms + C_2R_2s + 4C_2R_3s + C_2R_5s + C_3R_3R_5g_ms + C_3R_3s + 2R_3g_m + R_5g_m + 1}$$

### 10.479 INVALID-ORDER-479 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{C_2C_3C_5L_2R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2s^2 + 4C_2C_5R_3s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_3C_5R_3s^2 + C_3R_3g_ms + 2C_5R_3g_ms + C_5s + g_m}$$

### 10.480 INVALID-ORDER-480 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_5s^3 - C_2C_5R_2R_5s^2 + C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s - C_5R_5s + R_5}{C_2C_3C_5L_2R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2R_3R_5g_ms^3 + C_2C_5L_2R_5s^3 + 2C_2C_5R_2R_3R_5g_ms^2 + C_2C_5R_2R_5s^2 + 4C_2C_5R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 +}$$

### 10.481 INVALID-ORDER-481 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s}{C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2R_5g_ms^3 + C_2C_5L_2s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2C_5R_2R_5g_ms^2 + C_2C_5R_2s^2 + 4C}$$

**10.482 INVALID-ORDER-482** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s\right.}{C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + 2C_2C_5R_2R_3g_ms^2 + C_2$$

**10.483 INVALID-ORDER-483** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5s^4 - C_2C_5L_5R_2s^3 + C_2L_2L_5g_ms^3 - C_2L_2s^2 + C_2L_5R_2g_ms^2 + C_2L_5s^2 - C_2R_2s - C_5L_5s^2 + L\right.}{C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3s^3 + C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_3s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_2L_5R_3g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_5R_2R_3g_ms^3 + C_2C_5L_5R_2s^3 + 4C_2C_5L_5R_3s^3 + C_2L_2L_5g_ms^3 + 2C_2L_2R_3g_ms^2 + C$$

**10.484 INVALID-ORDER-484** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C\right.}{C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C_2C_3C_5R_3R_5s^3 + C_2C_3L_2R_3g_ms^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + C_2C_5L_2L_5g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C$$

**10.485 INVALID-ORDER-485** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_5s^4 - C_2\right.}{C_2C_3C_5L_2L_5R_3R_5s^5 + C_2C_3C_5L_5R_2R_3R_5s^4 + C_2C_3L_2L_5R_3R_5g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2R_3R_5s^3 + C_2C_3L_5R_2R_3R_5g_ms^3 + C_2C_3L_5R_2R_3s^3 + C_2C_3L_5R_3R_5s^3 + C_2C_3R_2R_3R_5s^2 + 2C_2C_5L_2L_5R_3R_5g_ms^4 + C_2C_5L_2L_5R_5s^4 + 2C_2C_5L_5R_2R_3R_5g_ms^3 + C_2$$

**10.486 INVALID-ORDER-486** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_5g_ms^4 - \right.}{C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_3s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R$$

**10.487 INVALID-ORDER-487** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2C_5L_2$$

**10.488 INVALID-ORDER-488** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2L_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + 2C_3R_3g_ms + C_3R_5g_ms + C_3s + 2g_m}$$

**10.489 INVALID-ORDER-489** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

**10.490 INVALID-ORDER-490** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 - C_2L_2R_5g_ms^2 + C_2L_2s^2 - C_2R_2R_5g_ms + C_2R_2s - C_2R_5s + C_5R_5s - \right.}{2C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2C_5L_2R_5g_ms^3 +$$

**10.491 INVALID-ORDER-491** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5R_5g_ms - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5R_3g_ms + C_3C_5\right.}$$

**10.492 INVALID-ORDER-492** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_ms^2 - C_5s + g_m\right)}{s\left(C_2C_3C_5L_2L_5g_ms^4 + 2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + C_3C_5L_5g_ms^2 + 2C_3C_5\right.}$$

**10.493 INVALID-ORDER-493** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2L_5s^4 + C_2C_5L_5R_2s^3 - C_2L_2L_5g_ms^3 + C_2L_2s^2 - C_2L_5R_2g_ms^2 - C_2L_5s^2 + C_2R_2s + C_5L_5s^2 - \right.}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3L_2L_5g_ms^4 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5R_2g_ms^3 + C_2C_3L_5s^3 + 2C_2C_3R_2R_3g_ms^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + 2C_2C_5L_2L_5g_ms^4 + 2C$$

**10.494 INVALID-ORDER-494** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5g_ms^4 + C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C_5L_5R_2g_ms^3 + C_2C_5L_5s^3 + C_2C_5R_2R_5g_ms^2 - C_2C_5R_2s^2 + C_2C_5R_5s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s + C_5L_5g_m\right.}{s\left(C_2C_3C_5L_2L_5g_ms^4 + 2C_2C_3C_5L_2R_3g_ms^3 + C_2C_3C_5L_2R_5g_ms^3 + C_2C_3C_5L_2s^3 + C_2C_3C_5L_5R_2g_ms^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_ms^2 + C_2C_3C_5R_2R_5g_ms^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5\right.}$$

**10.495 INVALID-ORDER-495** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2\right.}{2C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3C_5L_5R_2R_3R_5g_ms^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5L_5R_3R_5s^4 + 2C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2L_5R_5g_ms^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_5s^3 + 2C_2C_3L_5R_2R_3g_ms^3 + C_2C_3L_5R_2R_5g_ms$$

**10.496 INVALID-ORDER-496** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_5g_ms^4 - C_2C_5L_2L_5s^4 + C_2C_5L_5R_2R_5g_ms^3 - C_2C_5L_5R_2s^3 + C_2C_5L_5R_5s^3 + C_2L\right.}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + C_2C_3L_2L_5g_ms^4 + 2C_2C_3L_2R_3g_ms^3 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + C_2C_3L_5R_2g_ms^3 -$$

**10.497 INVALID-ORDER-497** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(-C_2C_5L_2L_5R_5\right.}{2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_5s^4 + 2C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_2R_5g_ms^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_5s^3$$

**10.498 INVALID-ORDER-498** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_5g_ms^3 + C_2C_3L_2s^3 + 2C_2C_3L_3R_2g_ms^3 + 4C_2C_3L_3s^3 + C_2C_3R_2R_5g_ms^2 + C_2C_3R_2s^2 + C_2C_3R_5s^2 + 2C_2L_2g_ms^2 + 2C_2R_2g_ms + 4C_2s + 2C_3L_3g_ms^2 + C_3R_5g_ms + C_3s + 2g_m}$$

**10.499 INVALID-ORDER-499** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_ms^4 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5L_3R_2g_ms^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5R_2s^2 + C_2C_3L_2g_ms^2 + C_2C_3R_2g_ms + C_2C_3s + 2C_2C_5L_2g_ms^2 + 2C_2C_5R_2g_ms + 4C_2C_5s + 2C_3C_5L_3g_ms^2 + C_3C_5s + C_3g_m + 2C_5g_m\right)}$$

### 10.500 INVALID-ORDER-500 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 - C_2 L_2 R_5 g_m s^2 + C_2 L_2 s^2 - C_2 R_2 R_5 g_m s + C_2 R_2 s - C_2 R_5 s + C_5 R_5 s - \right.}{2C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2R_5 s^4 + 2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5 s^4 + C_2C_3C_5R_2R_5 s^3 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2 s^2 + C_2C_3R_5 s^2 + 2C_2C_5L_2R_5g_m s^3 + 2}$$

### 10.501 INVALID-ORDER-501 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5}$$

### 10.502 INVALID-ORDER-502 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + C_2C_3C_5L_2 s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5 s^3 + C_2C_3C_5R_2 s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5L_2g_m s^2 + 2C_2C_5R_2g_m s + 4C_2C_5 s + 2C_3C_5L_3g_m s^2 + C_3C_5}$$

### 10.503 INVALID-ORDER-503 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 s^3 - C_2 L_2 L_5 g_m s^3 + C_2 L_2 s^2 - C_2 L_5 R_2 g_m s^2 - C_2 L_5 s^2 + C_2 R_2 s + C_5 L_5 s^2 - \right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + C_2C_3C_5L_2L_5 s^5 + 2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + C_2C_3C_5L_5R_2 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + C_2C_3L_2 s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3 s^3 + C_2C_3L_5R_2g_m s^3 + C_2C_3L_5 s^3 + C_2C_3R_2 s^2 + 2C_2C_5L_2L_5g_m s^4 + 2C}$$

### 10.504 INVALID-ORDER-504 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m\right.}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2 s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3 s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5 s^3 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2 s^2 + C_2C_3C_5R_5 s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3 s + 2C_2C_5L}$$

### 10.505 INVALID-ORDER-505 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2\right.}{2C_2C_3C_5L_2L_3L_5R_5g_m s^6 + C_2C_3C_5L_2L_5R_5 s^5 + 2C_2C_3C_5L_3L_5R_2R_5g_m s^5 + 4C_2C_3C_5L_3L_5R_5 s^5 + C_2C_3C_5L_5R_2R_5 s^4 + 2C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_5R_5g_m s^4 + C_2C_3L_2L_5 s^4 + C_2C_3L_2R_5 s^3 + 2C_2C_3L_3L_5R_2g_m s^4 + 4C_2C_3L_3L_5 s^4 + 2C}$$

### 10.506 INVALID-ORDER-506 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_5 R_2 R_5 g_m s^3 - C_2 C_5 L_5 R_2 s^3 + C_2 C_5 L_5 R_5 s^3 + C_2\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + 2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2 s^4 + C_2C_3C_5L_5R_5 s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2 s^3 + 2C_2C_3L_3R_2g_m s^3}$$

### 10.507 INVALID-ORDER-507 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + 1\right)\left(-C_2 C_5 L_2 L_5 R_5\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5 s^5 + C_2C_3C_5L_2R_5 s^4 + 2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5 s^5 + 2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5 s^4 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2 s^4 + C_2C_3C_5L_5R_5 s^4}$$

### 10.508 INVALID-ORDER-508 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{C_2C_3L_2L_3R_5g_m s^4 + C_2C_3L_2L_3 s^4 + C_2C_3L_3R_2R_5g_m s^3 + C_2C_3L_3R_2 s^3 + C_2C_3L_3R_5 s^3 + 2C_2L_2L_3g_m s^3 + C_2L_2R_5g_m s^2 + C_2L_2 s^2 + 2C_2L_3R_2g_m s^2 + 4C_2L_3 s^2 + C_2R_2R_5g_m s + C_2R_2 s + C_2R_5 s + C_3L_3R_5g_m s^2 + C_3L_3 s^2 + 2L_3g_m s + R_5g_m + 1}$$

### 10.509 INVALID-ORDER-509 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 s^3 + 2C_2 C_5 L_3 R_2 g_m s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_3 C_5 L_3 s^3 + C_3 L_3 g_m s^2 + 2C_5 L_3 g_m s^2 + C_5 s + g_m}$$

### 10.510 INVALID-ORDER-510 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 R_5 s^3 - C_2 C_5 R_2 R_5 s^2 + C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s - C_5 R_5 s + R\right.}{C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 s^4 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s^3 + 2C_2 C_5 L_2 L_3 R_5 g_m s^4 + C_2 C_5 L_2 R_5 s^3 + 2C_2 C_5 L_3 R_2 R_5 g_m s^3 + 4C_2 C_5 L_3 R_5 s^3 + C_2 C_5 R_2 R_5 s^2 + 2C_2 L_2 L_3 g_m s^3 + C_2 L_2 R_5 g_m s^2 + C$$

### 10.511 INVALID-ORDER-511 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s\right.}{C_2 C_3 C_5 L_2 L_3 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 g_m s^4 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 + C_2 C_5 L_2 s^3 + 2C_2 C_5 L_3 R_2 g_m s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 R_2 R_5 g_m s^2 + C_2$$

### 10.512 INVALID-ORDER-512 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s\right.}{C_2 C_3 C_5 L_2 L_3 L_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 L_5 R_2 g_m s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 s^3 + 2C_2 C_5 L_3 R_2 g_m s^3 + 4C_2 C_5 L_3 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C$$

### 10.513 INVALID-ORDER-513 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_5 R_2 s^3 + C_2 L_2 L_5 g_m s^3 - C_2 L_2 s^2 + C_2 L_5 R_2 g_m s^2 + C_2 L_5 s^2 - C_2 R_2 s - C_5 L_5 s^2 + \right.}{C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 L_2 L_3 L_5 g_m s^5 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 L_5 R_2 g_m s^4 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_2 s^3 + 2C_2 C_5 L_2 L_3 L_5 g_m s^5 + C_2 C_5 L_2 L_5 s^4 + 2C_2 C_5 L_3 L_5 R_2 g_m s^4 + 4C_2 C_5 L_3 L_5 s^4 + C_2 C_5 L_5 R_2 s^3 + 2C_2 L_2 L_3 g_m s^3 + C_2 L_2 L_5 g_m s^3 + C_2 L$$

### 10.514 INVALID-ORDER-514 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C\right.}{C_2 C_3 C_5 L_2 L_3 L_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 s^5 + C_2 C_3 C_5 L_3 L_5 R_2 g_m s^5 + C_2 C_3 C_5 L_3 L_5 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 g_m s^4 + C_2 C_3 C_5 L_3 R_2 s^4 + C_2 C_3 C_5 L_3 R_5 s^4 + C_2 C_3 L_2 L_3 g_m s^4 + C_2 C_3 L_3 R_2 g_m s^3 + C_2 C_3 L_3 s^3 + 2C_2 C_5 L_2 L_3 g_m s^4 + C_2 C_5 L_2 L_5 g_m s^4 + C_2$$

### 10.515 INVALID-ORDER-515 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 L_5 R_5 s^4 - C\right.}{C_2 C_3 C_5 L_2 L_3 L_5 R_5 s^6 + C_2 C_3 C_5 L_3 L_5 R_2 R_5 s^5 + C_2 C_3 L_2 L_3 L_5 R_5 g_m s^5 + C_2 C_3 L_2 L_3 L_5 s^5 + C_2 C_3 L_2 L_3 R_5 s^4 + C_2 C_3 L_3 L_5 R_2 R_5 g_m s^4 + C_2 C_3 L_3 L_5 R_2 s^4 + C_2 C_3 L_3 L_5 R_5 s^4 + C_2 C_3 L_3 R_2 R_5 s^3 + 2C_2 C_5 L_2 L_3 L_5 R_5 g_m s^5 + C_2 C_5 L_2 L_5 R_5 s^4 + 2C_2 C_5 L_3 L_5 R_2 R_5 g_m s^4 + 4C_2$$

### 10.516 INVALID-ORDER-516 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 R_5 g_m s^4 - \right.}{C_2 C_3 C_5 L_2 L_3 L_5 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_3 L_5 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 L_2 L_3 L_5 g_m s^5 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 L_5 R_2 g_m s^4 + C_2 C_3 L_3 L_5 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s$$

### 10.517 INVALID-ORDER-517 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2 C_3 C_5 L_2 L_3 L_5 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 C_5 L_3 L_5 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_3 L_5 R_2 s^5 + C_2 C_3 C_5 L_3 L_5 R_5 s^5 + C_2 C_3 C_5 L_3 R_2 R_5 s^4 + C_2 C_3 L_2 L_3 R_5 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_3 R_2 R_5 g_m s^3 + C_2 C_3 L_3 R_2 s^3 + C_2 C_3 L_3 R_5 s^3 + 2C_2 C_5 L_2 L_3$$

### 10.518 INVALID-ORDER-518 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 L_2 R_5 g_m s^2 - C_2 L_2 s^2 + C_2 R_2 R_5 g_m s - C_2 R_2 s + C_2 R_5 s + R_5 g_m - 1\right)}{2C_2C_3L_2L_3g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2s^3 + 2C_2C_3L_3R_2g_m s^3 + 4C_2C_3L_3s^3 + 2C_2C_3R_2R_3g_m s^2 + C_2C_3R_2R_5g_m s^2 + C_2C_3R_2s^2 + 4C_2C_3R_3s^2 + C_2C_3R_5s^2 + 2C_2L_2g_m s^2 + 2C_2R_2g_m s + 4C_2s + 2C_3L_3g_m s^2 + 2C_3R_3g_m s + C_3R_5g_m s + C$$

### 10.519 INVALID-ORDER-519 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_2 C_5 L_2 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s - C_5 s + g_m\right)}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3s + 2C_2C_5L_2g_m s^2 + 2C_2C_5R_2g_m s + 4C_2C_5s + 2C_3C_5L_3g_m s^2 + 2C\right.}$$

### 10.520 INVALID-ORDER-520 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 R_5 s^3 + C_2\right.}{2C_2C_3C_5L_2L_3R_5g_m s^5 + 2C_2C_3C_5L_2R_3R_5g_m s^4 + C_2C_3C_5L_2R_5s^4 + 2C_2C_3C_5L_3R_2R_5g_m s^4 + 4C_2C_3C_5L_3R_5s^4 + 2C_2C_3C_5R_2R_3R_5g_m s^3 + C_2C_3C_5R_2R_5s^3 + 4C_2C_3C_5R_3R_5s^3 + 2C_2C_3L_2L_3g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2R_5g_m s^3 + C_2C_3L_2s^3 + 2C_2C_3L_3$$

### 10.521 INVALID-ORDER-521 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 R_5 g_m s - C_5 s +\right.}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3C_5R_5s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3s + 2C_2\right.}$$

### 10.522 INVALID-ORDER-522 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 - C_2 C_5 R_2 s^2 + C_2 L_2 g_m s^2 + C_2 R_2 g_m s + C_2 s + C_5 L_5 g_m s^2 - C_5 s +\right.}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C_2C_3L_2g_m s^2 + C_2C_3R_2g_m s + C_2C_3s + 2C_2\right.}$$

### 10.523 INVALID-ORDER-523 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 s^4 + C_2 C\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_m s^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + 2C_2C_3L_2L_3g_m s^4 + C_2C_3L_2L_5g_m s^4 + 2C_2C_3L_2R_3g_m s^3 + C_2C_3L_2s^3 + 2C_2C_3L_3R_2$$

### 10.524 INVALID-ORDER-524 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 g_m s^4 + C_2 C_5 L_2 R_5 g_m s^3 - C_2 C_5 L_2 s^3 + C_2 C_5 L_5 R_2 g_m s^3 + C_2 C_5 L_5 s^3 + C_2 C_5 R_2 R_5 g_m s^2 - C_2 C_5 R_2 s^2 + C_2 C_5 R_5\right.}{s\left(2C_2C_3C_5L_2L_3g_m s^4 + C_2C_3C_5L_2L_5g_m s^4 + 2C_2C_3C_5L_2R_3g_m s^3 + C_2C_3C_5L_2R_5g_m s^3 + C_2C_3C_5L_2s^3 + 2C_2C_3C_5L_3R_2g_m s^3 + 4C_2C_3C_5L_3s^3 + C_2C_3C_5L_5R_2g_m s^3 + C_2C_3C_5L_5s^3 + 2C_2C_3C_5R_2R_3g_m s^2 + C_2C_3C_5R_2R_5g_m s^2 + C_2C_3C_5R_2s^2 + 4C_2C_3C_5R_3s^2 + C\right.}$$

### 10.525 INVALID-ORDER-525 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3C_5L_3L_5R_2R_5g_m s^5 + 4C_2C_3C_5L_3L_5R_5s^5 + 2C_2C_3C_5L_5R_2R_3R_5g_m s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5L_5R_3R_5s^4 + 2C_2C_3L_2L_3L_5g_m s^5 + 2C_2C_3L_2L_3R_5g_m s^4 + 2C_2C_3L_2L_5R_3g$$

### 10.526 INVALID-ORDER-526 $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L\right.}{2C_2C_3C_5L_2L_3L_5g_m s^6 + 2C_2C_3C_5L_2L_5R_3g_m s^5 + C_2C_3C_5L_2L_5R_5g_m s^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_3L_5R_2g_m s^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_5R_2R_3g_m s^4 + C_2C_3C_5L_5R_2R_5g_m s^4 + C_2C_3C_5L_5R_2s^4 + 4C_2C_3C_5L_5R_3s^4 + C_2C_3C_5L_5R_5s^4 + 2C_2C_3L_2L_3g_m s^4$$

**10.527 INVALID-ORDER-527** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_5g_ms^5 + 2C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2L_5R_5g_ms^5 + C_2C_3C_5L_2L_5s^5 + 2C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_5s^4 + 2C_2C_3C_5L_3L_5R_2g_ms^5 + 4C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_5g_ms^4 + 4C_2C_3C_5L_3R_5s^4 + 2C_2C_3C$$

**10.528 INVALID-ORDER-528** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2L_2L_3R_3g_ms^3 + C_2L_2L_3R_5g_ms^3 + C_2L_2L_3s^3 + C_2L_2R_3R_5g_ms^2 + C_2L_2R_3s^2 + 2C_2L_3R_2R_3g_ms^2 + C_2L_3R_2R_5g_ms^2 + C_2L_3R_2s^2 + 4C_2L_3R_3s^2 + C_2L_3R_5$$

**10.529 INVALID-ORDER-529** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_3s^3 + 2C_2C_5L_2L_3R_3g_ms^4 + C_2C_5L_2L_3s^4 + C_2C_5L_2R_3s^3 + 2C_2C_5L_3R_2R_3g_ms^3 + C_2C_5L_3R_2s^3 + 4C_2C_5L_3R_3s^3 + C_2C_5R_2R_3s^2 + C_2L_2L_3g_ms^3 + C_2L_2R_3g_ms^2 + C_2$$

**10.530 INVALID-ORDER-530** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_3R_5s^3 + 2C_2C_5L_2L_3R_3R_5g_ms^4 + C_2C_5L_2L_3R_5s^4 + C_2C_5L_2R_3R_5s^3 + 2C_2C_5L_3R_2R_3R_5g_ms^3 + C_2C_5L_3R_2R_5s^3 + 4C$$

**10.531 INVALID-ORDER-531** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2C\right.}{C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_3R_5s^4 + C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_3s^3 + 2C_2C_5L_2L_3R_3g_ms^4 + C_2C_5L_2L_3R_5g_ms^4 + C_2C_5L_2L_3s^4 + C_2C_5L_2R_3R_5g_ms^3 + C_2C$$

**10.532 INVALID-ORDER-532** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2C\right.}{C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_3s^3 + C_2C_5L_2L_3L_5g_ms^5 + 2C_2C_5L_2L_3R_3g_ms^4 + C_2C_5L_2L_3s^4 + C_2C_5L_2L_5R_3g_ms^4 + C_2C_5$$

**10.533 INVALID-ORDER-533** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = \frac{L}{C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_3g_ms^5 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3L_5R_2R_3g_ms^4 + C_2C_3L_3L_5R_3s^4 + C_2C_3L_3R_2R_3s^3 + 2C_2C_5L_2L_3L_5R_3g_ms^5 + C_2C_5L_2L_3L_5s^5 + C_2C_5L_2L_5R_3s^4 + 2C_2C_5L_3L_5R_2R_3g_ms^4 + C_2C_5L_3L_5R_2s^4 + 4C_2$$

**10.534 INVALID-ORDER-534** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_3R_5s^4 + C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_3s^3 + C_2C_5L_2L_3$$

**10.535 INVALID-ORDER-535** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_2L_3L_5R_3R_5g_ms^5 + C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3R_3R_5s^4 + C_2C_3L_3L_5R_2R_3R_5g_ms^4 + C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3L_5R_3R_5s^4 + C_2C_3L_3R_2R_3R_5s^3 + 2C_2C_5L_2L_3L_5R_3R_5g_ms^5 + C_2C_5L_2L_3L_5R_5s^5 + $$

**10.536 INVALID-ORDER-536** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3L_2L_3L_5R_3g_ms^5 + C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3L_5R_2R_3g_ms^4 + C_2C_3L_3L_5R_3s^4 + C_2C_3L_3R_2R_3R_5g_ms^3$$

**10.537 INVALID-ORDER-537** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2 + 1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3R_5g_ms^3 + C_2C_3L_3R_2R_3s^3$$

**10.538 INVALID-ORDER-538** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right)}{2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + 2C_2L_2L_3g_ms^3 + 2C_2L_2R_3g_ms^2 + C_2L_2R_5g_ms^2 + C_2L_2s^2 + 2C_2L_3R_2g_ms^2 + 4C_2L_3s^2 + 2C_2R_2R_3g_ms + C_2$$

**10.539 INVALID-ORDER-539** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C_5s + g_m\right)}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_ms^4 + 2C_2C_5L_2R_3g_ms^3 + C_2C_5L_2s^3 + 2C_2C_5L_3R_2g_ms^3 + 4C_2C_5L_3s^3 + 2C_2C_5R_2R_3g_ms^2$$

**10.540 INVALID-ORDER-540** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C$$

**10.541 INVALID-ORDER-541** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2R_5g_ms^3 - C_2C_5L_2s^3 + C_2C\right.}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3R_5g_ms^5 + C_2C_3C_5L_2L_3s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_ms^4 + 2C_2C_5L_2R_3g_ms^3$$

**10.542 INVALID-ORDER-542** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2C_5L_2L_5g_ms^4 - C_2C_5L_2s^3 + C_2C_5\right.}{C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + 2C_2C_5L_2L_3g_ms^4 + C_2C_5L_2L_5g_ms^4 +$$

**10.543 INVALID-ORDER-543** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2 + 1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3L_2L_3L_5g_ms^5 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3L_5R_2g_ms^4 + C_2C_3L_3L_5s^4 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C$$

**10.544 INVALID-ORDER-544** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2 + 1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s +\right.}{C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3R_5g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3L_2L_3g_ms^4 + C_2$$

**10.545 INVALID-ORDER-545** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_3g_ms^5 + C_2C_3L_2L_3L_5R_5g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_3R_5g_ms^4 + C_2C_3L_2L_3R_5s^4 + 2C_2C_3L_3L_5R_2$$

**10.546 INVALID-ORDER-546** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3L_2L_3L_5g_ms^5 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C$$

**10.547 INVALID-ORDER-547** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + 2C_2C_3C_5L_3R_2$$

**10.548 INVALID-ORDER-548** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2L_2R_5g_ms^2 - C_2L_2s^2 + C_2R_2R_5g_ms - C_2R_2s + C_2R_5s + R_5g_m - 1\right.}{2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 + 2C_2C_3L_3R_2R_3g_ms^3 + C_2C_3L_3R_2R_5g_ms^3 + C_2C_3L_3R_2s^3 + 4C_2C_3L_3R_3s^3 + C_2C_3L_3R_5s^3 + C_2C_3R_2R_3R_5g_ms^2 + C_2C_3R_2R_3s^2 + C_2C_3R_3R_5s^2 + 2C_2L_2R_3g_ms^2 + C$$

**10.549 INVALID-ORDER-549** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2s^3 - C_2C_5R_2s^2 + C_2L_2g_ms^2 + C_2R_2g_ms + C_2s - C\right.}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2R_3s^4 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5R_2R_3s^3 + C_2C_3L_2L_3g_ms^4 + C_2C_3L_2R_3g_ms^3 + C_2C_3L_3R_2g_ms^3 + C_2C_3L_3s^3 + C_2C_3R_2R_3g_ms^2 + C_2C_3R_3s^2 + 2C_2C_5L_2R_3g_ms$$

**10.550 INVALID-ORDER-550** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2R_3R_5s^4 + 2C_2C_3C_5L_3R_2R_3R_5g_ms^4 + C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5L_3R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3R_5g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_3R_5g_ms^3 + C_2C_3L_2R_3s^3 +$$

**10.551 INVALID-ORDER-551** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3R_5g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_3R_5s^4 + C_2C_3C_5R_2R_3R_5g_ms^3 + C_2C_3C_5R_2R_3s^3 + C$$

**10.552 INVALID-ORDER-552** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2s^4 + 4C_2C_3C_5L_3R_3s^4 + C_2C_3C_5L_5R_2R_3g_ms^4 + C_2C_3C_5L_5R_3s^4 + C_2$$

**10.553 INVALID-ORDER-553** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_5R_3s^5 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_2L_3L_5g_ms^5 + 2C_2C_3L_2L_3R_3g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2L_5R_3g_ms^4 + C_2C_3L_2R_3s^3 +$$

**10.554 INVALID-ORDER-554** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_3C_5L_2L_3L_5g_ms^6 + 2C_2C_3C_5L_2L_3R_3g_ms^5 + C_2C_3C_5L_2L_3R_5g_ms^5 + C_2C_3C_5L_2L_3s^5 + C_2C_3C_5L_2L_5R_3g_ms^5 + C_2C_3C_5L_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_3s^4 + C_2C_3C_5L_3L_5R_2g_ms^5 + C_2C_3C_5L_3L_5s^5 + 2C_2C_3C_5L_3R_2R_3g_ms^4 + C_2C_3C_5L_3R_2R_5g_ms^4 + C_2C_3C_5L_3}{}$$

**10.555 INVALID-ORDER-555** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{2C_2C_3C_5L_2L_3L_5R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_5R_3R_5s^5 + 2C_2C_3C_5L_3L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_3L_5R_3R_5s^5 + C_2C_3C_5L_5R_2R_3R_5s^4 + 2C_2C_3L_2L_3L_5R_3g_ms^5 + C_2C_3L_2L_3L_5R_5g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2}{}$$

**10.556 INVALID-ORDER-556** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3L_5R_3s^5 + C_2C_3C_5L_3L_5R_5s^5 + C_2C_3C_5L_5R_2R_3R}{}$$

**10.557 INVALID-ORDER-557** $Z(s) = \left(\infty,\ L_2 s + R_2 + \frac{1}{C_2 s},\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{2C_2C_3C_5L_2L_3L_5R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_5g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2L_5R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_3R_5s^4 + 2C_2C_3C_5L_3L_5R_2R_3g_ms^5 + C_2C_3C_5L_3L_5R_2R_5g_ms^5 + C_2C_3C_5L_3}{}$$

**10.558 INVALID-ORDER-558** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + 2C_5L_2R_3g_ms^2 + C_5L_2s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + L_2g_ms + R_2g_m + 1\right)}{2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + 2C_5L_2R_3g_ms^2 + C_5L_2s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + L_2g_ms + R_2g_m + 1}$$

**10.559 INVALID-ORDER-559** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 - C_5L_2R_5s^2 - C_5R_2R_5s + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_3R_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 2C_5L_2R_3R_5g_ms^2 + C_5L_2R_5s^2 + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2L_2R_3g_ms + L_2R_5g_ms + L_2s + 2R_2R_3g}{}$$

**10.560 INVALID-ORDER-560** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2R_5g_ms^2 - C_5L_2s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + L_2g_ms + R_2g_m + 1\right)}{2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_2R_5s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + 2C_5L_2R_3g_ms^2 + C_5L_2R_5g_ms^2 + C_5L_2s^2 + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + L_2g_ms + R_2g_m + 1}$$

**10.561 INVALID-ORDER-561** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2L_5g_ms^3 - C_5L_2s^2 + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + L_2g_ms + R_2g_m + 1\right)}{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2L_5g_ms^3 + 2C_5L_2R_3g_ms^2 + C_5L_2s^2 + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + L_2g_ms + R_2g_m + 1}$$

**10.562 INVALID-ORDER-562** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 - C_5L_2L_5s^3 - C_5L_5R_2s^2 + L_2L_5g_ms^2 - L_2s + L_5R_2g_ms + L_5s - R_2\right)}{2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + 2C_5L_2L_5R_3g_ms^3 + C_5L_2L_5s^3 + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_2L_5g_ms^2 + 2L_2R_3g_ms + L_2s + L_5R_2}{}$$

### 10.563 INVALID-ORDER-563 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + \right.}{C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + 2 C_2 C_5 L_2 R_2 R_3 g_m s^3 + C_2 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 R_2 s^3 + 4 C_2 C_5 L_2 R_3 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + 2 C_5 L_2 R_3 g_m s^2 + C_5 L_2 R_5 g_m s^2 + C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 + 2 C_5 R_2 R_3 g_m s + C_5$$

### 10.564 INVALID-ORDER-564 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{R_3 \left(-C_2 C_5 L_2 L_5 R_2 R_5 s^4 + C_2 L_2 L_5 R_2 R_5 g_m s^3 - C_2 L_2 L_5 R_2 s^3 + C_2 L_2 L_5 R_5 s^3 - C_2 L_2 R_2 R_5 s^2 - C_5 L_2 L_5 R_5 s^3 - C_5 L_5 R_2 R_5 s^2 - \right.}{2 C_2 C_5 L_2 L_5 R_2 R_3 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_2 R_5 s^4 + 4 C_2 C_5 L_2 L_5 R_3 R_5 s^4 + 2 C_2 L_2 L_5 R_2 R_3 g_m s^3 + C_2 L_2 L_5 R_2 R_5 g_m s^3 + C_2 L_2 L_5 R_2 s^3 + 4 C_2 L_2 L_5 R_3 s^3 + C_2 L_2 L_5 R_5 s^3 + 2 C_2 L_2 R_2 R_3 R_5 g_m s^2 + C_2 L_2 R_2 R_5 s^2 + 4 C_2 L_2 R_3 R_5 s^2 + 2 C_5 L_2 L_5 R_3 R_5 g_m s^3 + C_5 L_2 L_5 R_5 s^3 + 2 C$$

### 10.565 INVALID-ORDER-565 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 - C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_5 L_2 L_5 R_5 g_m s^3 - C_5 L_2 L_5 s^3 + C_5 L_5 R_2 \right.}{2 C_2 C_5 L_2 L_5 R_2 R_3 g_m s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + 4 C_2 C_5 L_2 L_5 R_3 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 + 2 C_2 L_2 R_2 R_3 g_m s^2 + C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 + 4 C_2 L_2 R_3 s^2 + C_2 L_2 R_5 s^2 + 2 C_5 L_2 L_5 R_3 g_m s^3 + C_5 L_2 L_5 R_5 g_m s^3 + C_5 L_2$$

### 10.566 INVALID-ORDER-566 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{R_3 \left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 - C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 - C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_5 \right.}{2 C_2 C_5 L_2 L_5 R_2 R_3 g_m s^4 + C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R_2 s^4 + 4 C_2 C_5 L_2 L_5 R_3 s^4 + C_2 C_5 L_2 L_5 R_5 s^4 + 2 C_2 C_5 L_2 R_2 R_3 R_5 g_m s^3 + C_2 C_5 L_2 R_2 R_5 s^3 + 4 C_2 C_5 L_2 R_3 R_5 s^3 + 2 C_2 L_2 R_2 R_3 g_m s^2 + C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 + 4 C_2 L_2 R_3 s^2 + C_2 L_2 R_5 s^2 + 2 C_5 L_2 L_5 R_3 g_m s^3 + C_5 L_2 L_5 R_5 g_m s^3 + C_5 L_2 R_3$$

### 10.567 INVALID-ORDER-567 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5}{C_2 C_3 L_2 R_2 R_5 g_m s^3 + C_2 C_3 L_2 R_2 s^3 + C_2 C_3 L_2 R_5 s^3 + 2 C_2 L_2 R_2 g_m s^2 + 4 C_2 L_2 s^2 + C_3 L_2 R_5 g_m s^2 + C_3 L_2 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2 L_2 g_m s + 2 R_2 g_m + 4}$$

### 10.568 INVALID-ORDER-568 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 - C_5 L_2 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1}{s \left(C_2 C_3 C_5 L_2 R_2 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2 C_2 C_5 L_2 R_2 g_m s^2 + 4 C_2 C_5 L_2 s^2 + C_3 C_5 L_2 s^2 + C_3 C_5 R_2 s + C_3 L_2 g_m s + C_3 R_2 g_m + C_3 + 2 C_5 L_2 g_m s + 2 C_5 R_2 g_m + 4 C_5\right)}$$

### 10.569 INVALID-ORDER-569 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{-C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 - C_5 L_2 R_5 s^2 - C_5 R_2 R_5 s + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5}{C_2 C_3 C_5 L_2 R_2 R_5 s^4 + C_2 C_3 L_2 R_2 R_5 g_m s^3 + C_2 C_3 L_2 R_2 s^3 + C_2 C_3 L_2 R_5 s^3 + 2 C_2 C_5 L_2 R_2 R_5 g_m s^3 + 4 C_2 C_5 L_2 R_5 s^3 + 2 C_2 L_2 R_2 g_m s^2 + 4 C_2 L_2 s^2 + C_3 C_5 L_2 R_5 s^3 + C_3 C_5 R_2 R_5 s^2 + C_3 L_2 R_5 g_m s^2 + C_3 L_2 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2 C_5 L_2 R_5 g_m s^2 + 2 C_5 R_2 R_5$$

### 10.570 INVALID-ORDER-570 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + L_2 g_m s + R_2 g_m + 1}{s \left(C_2 C_3 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_3 C_5 L_2 R_2 s^3 + C_2 C_3 C_5 L_2 R_5 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2 C_2 C_5 L_2 R_2 g_m s^2 + 4 C_2 C_5 L_2 s^2 + C_3 C_5 L_2 R_5 g_m s^2 + C_3 C_5 L_2 s^2 + C_3 C_5 R_2 R_5 g_m s + C_3 C_5 R_2 s + C_3 C_5 R_5 s + C_3 L_2 g_m s + C_3 R_2 g_m + C_3 + 2 C_5 L_2 g_m s + 2 C_5 R_2 g_m + 4 C_5\right)}$$

### 10.571 INVALID-ORDER-571 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1}{s \left(C_2 C_3 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_3 C_5 L_2 L_5 s^4 + C_2 C_3 C_5 L_2 R_2 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2 C_2 C_5 L_2 R_2 g_m s^2 + 4 C_2 C_5 L_2 s^2 + C_3 C_5 L_2 L_5 g_m s^3 + C_3 C_5 L_2 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + C_3 C_5 R_2 s + C_3 L_2 g_m s + C_3 R_2 g_m + C_3 + 2 C_5 L_2 g_m s + 2 C_5 R_2 g_m + 4 C$$

### 10.572 INVALID-ORDER-572 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 - C_5L_2L_5s^3 - C_5L_5R_2s^2 + L_2L_5g_ms^2 - L_2s + L_5R_2g_ms + L_5s - R_2}{C_2C_3C_5L_2L_5R_2s^5 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_2s^3 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + C_3C_5L_2L_5s^4 + C_3C_5L_5R_2s^3 + C_3L_2L_5g_ms^3 + C_3L_2s^2 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + C_3R_2s + 2C_5L_2L_5g_ms^3 + 2C_5L_5R_2}$$

### 10.573 INVALID-ORDER-573 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2L_5g_ms^3 + C_5L_2R_5g_ms^2 - C_5L_2s^2 + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5}{s\left(C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + C_3C_5L_2L_5g_ms^3 + C_3C_5L_2R_5g_ms^2 + C_3C_5L_2s^2 + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2\right.}$$

### 10.574 INVALID-ORDER-574 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_2R_5s^4 + C_2L_2L_5R_2R_5g_ms^3 - C_2L_2L_5R_2s^3 + C_2L_2L_5R_5s^3 - C_2L_2R_2R_5s^2 - C_5L_2L_5R_5s^3 - C_5L_5R_2R_5s^2 +}{C_2C_3C_5L_2L_5R_2R_5s^5 + C_2C_3L_2L_5R_2R_5g_ms^4 + C_2C_3L_2L_5R_2s^4 + C_2C_3L_2L_5R_5s^4 + C_2C_3L_2R_2R_5s^3 + 2C_2C_5L_2L_5R_2R_5g_ms^4 + 4C_2C_5L_2L_5R_5s^4 + 2C_2L_2L_5R_2g_ms^3 + 4C_2L_2L_5s^3 + 2C_2L_2R_2R_5g_ms^2 + 4C_2L_2R_5s^2 + C_3C_5L_2L_5R_5s^4 + C_3C_5L_5R_2R_5s^3 + C_3L_2L_5$$

### 10.575 INVALID-ORDER-575 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_5L_2L_5R_5g_ms^3 - C_5L}{C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + C_2C_3C_5L_2L_5R_5s^5 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + C_3C_5L_2L_5R_5g_ms^4 + C_3C_5L_2L_5s^4}$$

### 10.576 INVALID-ORDER-576 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 - C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2}{C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + C_2C_3C_5L_2L_5R_5s^5 + C_2C_3C_5L_2R_2R_5s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_5g_ms^3 + 4C_2C_5L_2R_5s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + C_3C_5L_2L_5}$$

### 10.577 INVALID-ORDER-577 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + C_3L_2R_3R_5g_ms^2 + C_3L_2R_3s^2 + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2L_2R_3g_ms + L_2R_5g_ms + L_2s + 2R_2R_3g_m + R$$

### 10.578 INVALID-ORDER-578 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 - C_5L_2s^2 - C_5R_2s + L_2g_ms + R_2g_m + 1\right)}{C_2C_3C_5L_2R_2R_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_3C_5L_2R_3s^3 + C_3C_5R_2R_3s^2 + C_3L_2R_3g_ms^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5L_2R_3g_ms^2 + C_5L_2s^2 + 2C_5R_2R_3g_ms + C_5R$$

### 10.579 INVALID-ORDER-579 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 - C_5L_2R_5s^2 - C\right.}{C_2C_3C_5L_2R_2R_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_3R_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + C_3C_5L_2R_3R_5s^3 + C_3C_5R_2R_3R_5$$

### 10.580 INVALID-ORDER-580 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2R_5g_ms^2 - C_5\right.}{C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_2R_5s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_3C_5L_2R_3R_5g_ms^3 + C_3C_5L_2R_3s^3$$

**10.581 INVALID-ORDER-581** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_5L_2L_5g_ms^3 - C_5L\right.}{C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_3C_5L_2L_5R_3g_ms^4 + C_3C_5L_2R_3s^3 +}$$

**10.582 INVALID-ORDER-582** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 - C_5L_2L_5s^3 - C\right.}{C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3L_2L_5R_2R_3g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2R_2R_3s^3 + 2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_3C_5L_2L_5R_3s^4 + C_3C_5L_5R_2R_3s^3}$$

**10.583 INVALID-ORDER-583** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2\right.}{C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2}$$

**10.584 INVALID-ORDER-584** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_5R_2R_3R_5s^5 + C_2C_3L_2L_5R_2R_3R_5g_ms^4 + C_2C_3L_2L_5R_2R_3s^4 + C_2C_3L_2L_5R_3R_5s^4 + C_2C_3L_2R_2R_3R_5s^3 + 2C_2C_5L_2L_5R_2R_3R_5g_ms^4 + C_2C_5L_2L_5R_2R_5s^4 + 4C_2C_5L_2L_5R_3R_5s^4 + 2C_2L_2L_5R_2R_3g_ms^3 + C_2L_2L_5R_2R_5g_ms^3 + C_2L_2L_5R_2s^3 + 4C_2L_2L_5R_3}$$

**10.585 INVALID-ORDER-585** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3C_5L_2L_5R_3R_5s^5 + C_2C_3L_2L_5R_2R_3g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2R_5g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5}$$

**10.586 INVALID-ORDER-586** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3}{C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3C_5L_2L_5R_3R_5s^5 + C_2C_3C_5L_2R_2R_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2R_5g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + C_2C_5L_2L_5}$$

**10.587 INVALID-ORDER-587** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 2C_3L_2R_3g_ms^2 + C_3L_2R_5g_ms^2 + C_3L_2s^2 + 2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2L_2g_ms + 2R_2g_m + 4}$$

**10.588 INVALID-ORDER-588** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 - C_5L_2s^2 - C_5R_2s + L_2g_ms + R_2g_m + 1\right)}{s\left(2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 2C_3C_5L_2R_3g_ms^2 + C_3C_5L_2s^2 + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3L_2g_ms + C_3R_2g_m + C_3 + 2C_5L_2g_ms + 2C_5R_2g_m\right.}$$

**10.589 INVALID-ORDER-589** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{(C_3R_3s+1)\left(C_2C_5L_2R_2R_5s^3 - C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 - C_2L_2R_5s^2 + C_5L\right.}{2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_5s^4 + 4C_2C_3C_5L_2R_3R_5s^4 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 2C_2C_5L_2R_2R_5g_ms^3 + 4C_2C_5L_2R_5s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 2C_3C_5L_2R_3R_5g_ms^3 + C_3C}$$

**10.590 INVALID-ORDER-590** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + L_2 g_m s + R_2 g_m\right.}{s\left(2C_2 C_3 C_5 L_2 R_2 R_3 g_m s^3 + C_2 C_3 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_3 C_5 L_2 R_2 s^3 + 4C_2 C_3 C_5 L_2 R_3 s^3 + C_2 C_3 C_5 L_2 R_5 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 s^2 + 2C_3 C_5 L_2 R_3 g_m s^2 + C_3 C_5 L_2 R_5 g_m s^2 + C_3 C_5 L_2 s^2 + 2C_3 C_5 R_2 R_3 g_m s + C_3 C_5 R_2 R_5 g_m s\right.}$$

**10.591 INVALID-ORDER-591** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g\right.}{s\left(C_2 C_3 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_3 C_5 L_2 L_5 s^4 + 2C_2 C_3 C_5 L_2 R_2 R_3 g_m s^3 + C_2 C_3 C_5 L_2 R_2 s^3 + 4C_2 C_3 C_5 L_2 R_3 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 s^2 + C_3 C_5 L_2 L_5 g_m s^3 + 2C_3 C_5 L_2 R_3 g_m s^2 + C_3 C_5 L_2 s^2 + C_3 C_5 L_5 R_2 g_m s^2 + C_3 C_5 L_5 s^2 + 2C_3\right.}$$

**10.592 INVALID-ORDER-592** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 L_5 R_2 s^4 - C_2 L_2 L_5 R_2 g_m s^3 - C_2 L_2 L_5 s^3 + C_2 L_2 R_2 s^2 + C_5 L_2\right.}{2C_2 C_3 C_5 L_2 L_5 R_2 R_3 g_m s^5 + C_2 C_3 C_5 L_2 L_5 R_2 s^5 + 4C_2 C_3 C_5 L_2 L_5 R_3 s^5 + C_2 C_3 L_2 L_5 R_2 g_m s^4 + C_2 C_3 L_2 L_5 s^4 + 2C_2 C_3 L_2 R_2 R_3 g_m s^3 + C_2 C_3 L_2 R_2 s^3 + 4C_2 C_3 L_2 R_3 s^3 + 2C_2 C_5 L_2 L_5 R_2 g_m s^4 + 4C_2 C_5 L_2 L_5 s^4 + 2C_2 L_2 R_2 g_m s^2 + 4C_2 L_2 s^2 + 2C_3 C_5 L_2 L_5 R_3 g_m s^4 + C_3 C_5$$

**10.593 INVALID-ORDER-593** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + C_5 L_2 R_5 g_m s^2 -\right.}{s\left(C_2 C_3 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_3 C_5 L_2 L_5 s^4 + 2C_2 C_3 C_5 L_2 R_2 R_3 g_m s^3 + C_2 C_3 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_3 C_5 L_2 R_2 s^3 + 4C_2 C_3 C_5 L_2 R_3 s^3 + C_2 C_3 C_5 L_2 R_5 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 s^2 + C_3 C_5 L_2 L_5 g_m s^3 + 2C_3 C_5 L_2 R_3 g_m s^2 + C_3 C_5$$

**10.594 INVALID-ORDER-594** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 L_5 R_2 R_5 s^4 - C_2 L_2 L_5 R_2 R_5 g_m s^3 - C_2 L_2 L_5 R_2 s^3 + C_2 L_2 R_2 R_5 s^2 + C_5 L_2 R_5\right.}{2C_2 C_3 C_5 L_2 L_5 R_2 R_3 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_5 R_2 R_5 s^5 + 4C_2 C_3 C_5 L_2 L_5 R_3 R_5 s^5 + 2C_2 C_3 L_2 L_5 R_2 R_3 g_m s^4 + C_2 C_3 L_2 L_5 R_2 R_5 g_m s^4 + C_2 C_3 L_2 L_5 R_2 s^4 + 4C_2 C_3 L_2 L_5 R_3 s^4 + C_2 C_3 L_2 L_5 R_5 s^4 + 2C_2 C_3 L_2 R_2 R_3 R_5 g_m s^3 + C_2 C_3 L_2 R_2 R_5 s^3 + 4C_2 C_3 L_2 R_3 R_5 s^3 + 2C_2 C_5 L_2$$

**10.595 INVALID-ORDER-595** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{(C_3 R_3 s + 1)\left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 - C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R_5$$

**10.596 INVALID-ORDER-596** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{}{2C_2 C_3 C_5 L_2 L_5 R_2 R_3 g_m s^5 + C_2 C_3 C_5 L_2 L_5 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_5 R_2 s^5 + 4C_2 C_3 C_5 L_2 L_5 R_3 s^5 + C_2 C_3 C_5 L_2 L_5 R_5 s^5 + 2C_2 C_3 C_5 L_2 R_2 R_3 R_5 g_m s^4 + C_2 C_3 C_5 L_2 R_2 R_5 s^4 + 4C_2 C_3 C_5 L_2 R_3 R_5 s^4 + 2C_2 C_3 L_2 R_2 R_3 g_m s^3 + C_2 C_3 L_2 R_2 R_5 g_m s^3 + C_2 C_3 L_2 R_2 s^3 + 4C_2 C_3 L_2$$

**10.597 INVALID-ORDER-597** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_2 C_3 L_2 L_3 R_2 g_m s^4 + 4C_2 C_3 L_2 L_3 s^4 + C_2 C_3 L_2 R_2 R_5 g_m s^3 + C_2 C_3 L_2 R_2 s^3 + C_2 C_3 L_2 R_5 s^3 + 2C_2 L_2 R_2 g_m s^2 + 4C_2 L_2 s^2 + 2C_3 L_2 L_3 g_m s^3 + C_3 L_2 R_5 g_m s^2 + C_3 L_2 s^2 + 2C_3 L_3 R_2 g_m s^2 + 4C_3 L_3 s^2 + C_3 R_2 R_5 g_m s + C_3 R_2 s + C_3 R_5 s + 2L_2 g_m s + 2R_2 g_m + 4}$$

**10.598 INVALID-ORDER-598** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + 1\right)\left(-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 - C_5 L_2 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1\right)}{s\left(2C_2 C_3 C_5 L_2 L_3 R_2 g_m s^4 + 4C_2 C_3 C_5 L_2 L_3 s^4 + C_2 C_3 C_5 L_2 R_2 s^3 + C_2 C_3 L_2 R_2 g_m s^2 + C_2 C_3 L_2 s^2 + 2C_2 C_5 L_2 R_2 g_m s^2 + 4C_2 C_5 L_2 s^2 + 2C_3 C_5 L_2 L_3 g_m s^3 + C_3 C_5 L_2 s^2 + 2C_3 C_5 L_3 R_2 g_m s^2 + 4C_3 C_5 L_3 s^2 + C_3 C_5 R_2 s + C_3 L_2 g_m s + C_3 R_2 g_m + C_3 + 2C_5 L_2 g_m s + 2C_5 R_2 g_m$$

### 10.599 INVALID-ORDER-599 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 R_2 R_5 s^3 - C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 - C_2 L_2 R_5 s^2 + C_5 L\right.}{2C_2C_3C_5L_2L_3R_2R_5g_m s^5 + 4C_2C_3C_5L_2L_3R_5 s^5 + C_2C_3C_5L_2R_2R_5 s^4 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3 s^4 + C_2C_3L_2R_2R_5g_m s^3 + C_2C_3L_2R_2 s^3 + C_2C_3L_2R_5 s^3 + 2C_2C_5L_2R_2R_5g_m s^3 + 4C_2C_5L_2R_5 s^3 + 2C_2L_2R_2g_m s^2 + 4C_2L_2 s^2 + 2C_3C_5L_2L_3R_5g_m s^4 + C_3C$$

### 10.600 INVALID-ORDER-600 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L_2 s^2 + C_5 R_2 R_5 g_m s - C_5 R_2 s + C_5 R_5 s + L_2 g_m s + R_2 g\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3 s^4 + C_2C_3C_5L_2R_2R_5g_m s^3 + C_2C_3C_5L_2R_2 s^3 + C_2C_3C_5L_2R_5 s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2 s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2 s^2 + 2C_3C_5L_2L_3g_m s^3 + C_3C_5L_2R_5g_m s^2 + C_3C_5L_2 s^2 + 2C_3C_5L_3R_2g_m s^2 + 4C_3C_5L_3 s^2 + C\right.}$$

### 10.601 INVALID-ORDER-601 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2 s^2 + C_5 L_5 R_2 g_m s^2 + C_5 L_5 s^2 - C_5 R_2 s + L_2 g_m s + R_2\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3 s^4 + C_2C_3C_5L_2L_5R_2g_m s^4 + C_2C_3C_5L_2L_5 s^4 + C_2C_3C_5L_2R_2 s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2 s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2 s^2 + 2C_3C_5L_2L_3g_m s^3 + C_3C_5L_2L_5g_m s^3 + C_3C_5L_2 s^2 + 2C_3C_5L_3R_2g_m s^2 + 4C_3C_5L_3 s^2 + C_3\right.}$$

### 10.602 INVALID-ORDER-602 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_2 s^4 - C_2 L_2 L_5 R_2 g_m s^3 - C_2 L_2 L_5 s^3 + C_2 L_2 R_2 s^2 + C_5 L_2\right.}{2C_2C_3C_5L_2L_3L_5R_2g_m s^6 + 4C_2C_3C_5L_2L_3L_5 s^6 + C_2C_3C_5L_2L_5R_2 s^5 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3 s^4 + C_2C_3L_2L_5R_2g_m s^4 + C_2C_3L_2L_5 s^4 + C_2C_3L_2R_2 s^3 + 2C_2C_5L_2L_5R_2g_m s^4 + 4C_2C_5L_2L_5 s^4 + 2C_2L_2R_2g_m s^2 + 4C_2L_2 s^2 + 2C_3C_5L_2L_3L_5g_m s^5 + C_3C_5$$

### 10.603 INVALID-ORDER-603 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 + C_5 L_2 R_5 g_m s^2\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3 s^4 + C_2C_3C_5L_2L_5R_2g_m s^4 + C_2C_3C_5L_2L_5 s^4 + C_2C_3C_5L_2R_2R_5g_m s^3 + C_2C_3C_5L_2R_2 s^3 + C_2C_3C_5L_2R_5 s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2 s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2 s^2 + 2C_3C_5L_2L_3g_m s^3 + C_3C_5L_2L_5g_m s^3 + C_3C_5L\right.}$$

### 10.604 INVALID-ORDER-604 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{C_2C_3C_5L_2L_3L_5R_2R_5g_m s^6 + 4C_2C_3C_5L_2L_3L_5R_5 s^6 + C_2C_3C_5L_2L_5R_2R_5 s^5 + 2C_2C_3L_2L_3L_5R_2g_m s^5 + 4C_2C_3L_2L_3L_5 s^5 + 2C_2C_3L_2L_3R_2R_5g_m s^4 + 4C_2C_3L_2L_3R_5 s^4 + C_2C_3L_2L_5R_2R_5g_m s^4 + C_2C_3L_2L_5R_2 s^4 + C_2C_3L_2L_5R_5 s^4 + C_2C_3L_2R_2R_5 s^3 + 2C_2C_5L_2L$$

### 10.605 INVALID-ORDER-605 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2+1\right)\left(C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 - C_2 C_5 L_2 L_5 R_2 s^4 + C_2 C_5 L_2 L_5 R\right.}{2C_2C_3C_5L_2L_3L_5R_2g_m s^6 + 4C_2C_3C_5L_2L_3L_5 s^6 + C_2C_3C_5L_2L_5R_2R_5g_m s^5 + C_2C_3C_5L_2L_5R_2 s^5 + C_2C_3C_5L_2L_5R_5 s^5 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3 s^4 + C_2C_3L_2L_5R_2g_m s^4 + C_2C_3L_2L_5 s^4 + C_2C_3L_2R_2R_5g_m s^3 + C_2C_3L_2R_2 s^3 + C_2C_3L_2R_5 s^3 + 2C_2C_5L_2L_5$$

### 10.606 INVALID-ORDER-606 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{2C_2C_3C_5L_2L_3L_5R_2g_m s^6 + 4C_2C_3C_5L_2L_3L_5 s^6 + 2C_2C_3C_5L_2L_3R_2R_5g_m s^5 + 4C_2C_3C_5L_2L_3R_5 s^5 + C_2C_3C_5L_2L_5R_2R_5g_m s^5 + C_2C_3C_5L_2L_5R_2 s^5 + C_2C_3C_5L_2L_5R_5 s^5 + C_2C_3C_5L_2R_2R_5 s^4 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3 s^4 + C_2C_3L_2R_2R_5g_m s^3 + C_2C_3L_2R$$

### 10.607 INVALID-ORDER-607 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3 s\left(C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5\right)}{C_2C_3L_2L_3R_2R_5g_m s^4 + C_2C_3L_2L_3R_2 s^4 + C_2C_3L_2L_3R_5 s^4 + 2C_2L_2L_3R_2g_m s^3 + 4C_2L_2L_3 s^3 + C_2L_2R_2R_5g_m s^2 + C_2L_2R_2 s^2 + C_2L_2R_5 s^2 + C_3L_2L_3R_5g_m s^3 + C_3L_2L_3 s^3 + C_3L_3R_2R_5g_m s^2 + C_3L_3R_2 s^2 + C_3L_3R_5 s^2 + 2L_2L_3g_m s^2 + L_2R_5g_m s + L_2 s + 2L_3R_2g_m s$$

### 10.608 INVALID-ORDER-608 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 - C_5 L_2 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1\right)}{C_2 C_3 C_5 L_2 L_3 R_2 s^5 + C_2 C_3 L_2 L_3 R_2 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + 2C_2 C_5 L_2 L_3 R_2 g_m s^4 + 4C_2 C_5 L_2 L_3 s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_3 C_5 L_2 L_3 s^4 + C_3 C_5 L_3 R_2 s^3 + C_3 L_2 L_3 g_m s^3 + C_3 L_3 R_2 g_m s^2 + C_3 L_3 s^2 + 2C_5 L_2 L_3 g_m s^3 + C_5 L_2 s^2 + 2C_5 L_3 R_2 g_m s^2 + 4C_5$$

### 10.609 INVALID-ORDER-609 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 R_2 R_5 s^3 + C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 - C_5 L_2 R_5 s^2 -$$
$$C_2 C_3 C_5 L_2 L_3 R_2 R_5 s^5 + C_2 C_3 L_2 L_3 R_2 R_5 g_m s^4 + C_2 C_3 L_2 L_3 R_2 s^4 + C_2 C_3 L_2 L_3 R_5 s^4 + 2C_2 C_5 L_2 L_3 R_2 R_5 g_m s^4 + 4C_2 C_5 L_2 L_3 R_5 s^4 + C_2 C_5 L_2 R_2 R_5 s^3 + 2C_2 L_2 L_3 R_2 g_m s^3 + 4C_2 L_2 L_3 s^3 + C_2 L_2 R_2 R_5 g_m s^2 + C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + C_3 C_5 L_2 L_3 R_5 s^4 + C_3 C_5 L_3 R_2 R_5 s^3$$

### 10.610 INVALID-ORDER-610 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5$$
$$C_2 C_3 C_5 L_2 L_3 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 R_2 s^5 + C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 L_2 L_3 R_2 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + 2C_2 C_5 L_2 L_3 R_2 g_m s^4 + 4C_2 C_5 L_2 L_3 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_3 C_5 L_2 L_3 R_5 g_m s^4 + C_3 C_5 L_2 L_3 s^4 +$$

### 10.611 INVALID-ORDER-611 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 - C_5$$
$$C_2 C_3 C_5 L_2 L_3 L_5 R_2 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_2 L_3 R_2 s^5 + C_2 C_3 L_2 L_3 R_2 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + 2C_2 C_5 L_2 L_3 R_2 g_m s^4 + 4C_2 C_5 L_2 L_3 s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_3 C_5 L_2 L_3 L_5 g_m s^5 + C_3 C_5 L_2 L_3 s^4 +$$

### 10.612 INVALID-ORDER-612 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(-C_2 C_5 L_2 L_5 R_2 s^4 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 - C_2 L_2 R_2 s^2 - C_5 L_2 L_5 s^3 -$$
$$C_2 C_3 C_5 L_2 L_3 L_5 R_2 s^6 + C_2 C_3 L_2 L_3 L_5 R_2 g_m s^5 + C_2 C_3 L_2 L_3 L_5 s^5 + C_2 C_3 L_2 L_3 R_2 s^4 + 2C_2 C_5 L_2 L_3 L_5 R_2 g_m s^5 + 4C_2 C_5 L_2 L_3 L_5 s^5 + C_2 C_5 L_2 L_5 R_2 s^4 + 2C_2 L_2 L_3 R_2 g_m s^3 + 4C_2 L_2 L_3 s^3 + C_2 L_2 L_5 R_2 g_m s^3 + C_2 L_2 L_5 s^3 + C_2 L_2 R_2 s^2 + C_3 C_5 L_2 L_3 L_5 s^5 + C_3 C_5 L_3 L_5 R_2 s^4 +$$

### 10.613 INVALID-ORDER-613 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3 s \left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2$$
$$C_2 C_3 C_5 L_2 L_3 L_5 R_2 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 s^6 + C_2 C_3 C_5 L_2 L_3 R_2 R_5 g_m s^5 + C_2 C_3 C_5 L_2 L_3 R_2 s^5 + C_2 C_3 C_5 L_2 L_3 R_5 s^5 + C_2 C_3 L_2 L_3 R_2 g_m s^4 + C_2 C_3 L_2 L_3 s^4 + 2C_2 C_5 L_2 L_3 R_2 g_m s^4 + 4C_2 C_5 L_2 L_3 s^4 + C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 + C_2 C_5 L_2 R$$

### 10.614 INVALID-ORDER-614 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2 C_3 C_5 L_2 L_3 L_5 R_2 R_5 s^6 + C_2 C_3 L_2 L_3 L_5 R_2 R_5 g_m s^5 + C_2 C_3 L_2 L_3 L_5 R_2 s^5 + C_2 C_3 L_2 L_3 L_5 R_5 s^5 + C_2 C_3 L_2 L_3 R_2 R_5 s^4 + 2C_2 C_5 L_2 L_3 L_5 R_2 R_5 g_m s^5 + 4C_2 C_5 L_2 L_3 L_5 R_5 s^5 + C_2 C_5 L_2 L_5 R_2 R_5 s^4 + 2C_2 L_2 L_3 L_5 R_2 g_m s^4 + 4C_2 L_2 L_3 L_5 s^4 + 2C_2 L_2 L_3 R_2 R_5 g_m s^3 + 4C_2 L_2 L_3 R_2$$

### 10.615 INVALID-ORDER-615 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2 C_3 C_5 L_2 L_3 L_5 R_2 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 R_2 s^6 + C_2 C_3 C_5 L_2 L_3 L_5 R_5 s^6 + C_2 C_3 L_2 L_3 L_5 R_2 g_m s^5 + C_2 C_3 L_2 L_3 L_5 s^5 + C_2 C_3 L_2 L_3 R_2 R_5 g_m s^4 + C_2 C_3 L_2 L_3 R_2 s^4 + C_2 C_3 L_2 L_3 R_5 s^4 + 2C_2 C_5 L_2 L_3 L_5 R_2 g_m s^5 + 4C_2 C_5 L_2 L_3 L_5 s^5 + C_2 C_5 L_2 L_5 R_2 R_5 g_m s^4 + C_2 C_5 L_2 L_5 R$$

### 10.616 INVALID-ORDER-616 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2 C_3 C_5 L_2 L_3 L_5 R_2 R_5 g_m s^6 + C_2 C_3 C_5 L_2 L_3 L_5 R_2 s^6 + C_2 C_3 C_5 L_2 L_3 L_5 R_5 s^6 + C_2 C_3 C_5 L_2 L_3 R_2 R_5 s^5 + C_2 C_3 L_2 L_3 R_2 R_5 g_m s^4 + C_2 C_3 L_2 L_3 R_2 s^4 + C_2 C_3 L_2 L_3 R_5 s^4 + 2C_2 C_5 L_2 L_3 L_5 R_2 g_m s^5 + 4C_2 C_5 L_2 L_3 L_5 s^5 + 2C_2 C_5 L_2 L_3 R_2 R_5 g_m s^4 + 4C_2 C_5 L_2 L_3 R_5 s^4 + C_2 C_5 L_2 L$$

### 10.617 INVALID-ORDER-617 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 L_2 R_2 R_5 g_m s^2 - C_2 L_2 R_2 s^2 + C_2 L_2 R_5 s^2 + L_2 R_5 g_m s - L_2 s + R_2 R_5 g_m - R_2 + R_5\right)}{2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3s^4 + 2C_2C_3L_2R_2R_3g_m s^3 + C_2C_3L_2R_2R_5g_m s^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 2C_2L_2R_2g_m s^2 + 4C_2L_2s^2 + 2C_3L_2L_3g_m s^3 + 2C_3L_2R_3g_m s^2 + C_3L_2R_5g_m s^2 + C_3L_2s^2 + 2C_3L_3R_2g_m s^2 + 4C_3L_3s^2 + 2C_3R_2R_3g_m$$

### 10.618 INVALID-ORDER-618 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(-C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 - C_5 L_2 s^2 - C_5 R_2 s + L_2 g_m s + R_2 g_m + 1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3s^4 + 2C_2C_3C_5L_2R_2R_3g_m s^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2s^2 + 2C_3C_5L_2L_3g_m s^3 + 2C_3C_5L_2R_3g_m s^2 + C_3C_5L_2s^2 + 2C_3C_5L_3R_2g_m s^2 + 4C_3C_5L_3s^2 +$$

### 10.619 INVALID-ORDER-619 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3R_2R_5g_m s^5 + 4C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_2R_2R_3R_5g_m s^4 + C_2C_3C_5L_2R_2R_5s^4 + 4C_2C_3C_5L_2R_3R_5s^4 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3s^4 + 2C_2C_3L_2R_2R_3g_m s^3 + C_2C_3L_2R_2R_5g_m s^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 2C_2C$$

### 10.620 INVALID-ORDER-620 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 R_5 g_m s^2 - C_5 L\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3s^4 + 2C_2C_3C_5L_2R_2R_3g_m s^3 + C_2C_3C_5L_2R_2R_5g_m s^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2s^2 + 2C_3C_5L_2L_3g_m s^3 + 2C_3C_5L_2R_3g_m s^2 + C_3$$

### 10.621 INVALID-ORDER-621 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 - C_2 C_5 L_2 R_2 s^3 + C_2 L_2 R_2 g_m s^2 + C_2 L_2 s^2 + C_5 L_2 L_5 g_m s^3 - C_5 L_2\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3s^4 + C_2C_3C_5L_2L_5R_2g_m s^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_m s^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2s^2 + 2C_3C_5L_2L_3g_m s^3 + C_3C_5L_2L_5g_m s^3 + 2C_3$$

### 10.622 INVALID-ORDER-622 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2g_m s^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3g_m s^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3s^4 + C_2C_3L_2L_5R_2g_m s^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_2R_3g_m s^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + 2C_2C_5$$

### 10.623 INVALID-ORDER-623 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3 L_3 s^2 + C_3 R_3 s + 1\right)\left(C_2 C_5 L_2 L_5 R_2 g_m s^4 + C_2 C_5 L_2 L_5 s^4 + C_2 C_5 L_2 R_2 R_5 g_m s^3 - C_2 C_5 L_2 R_2 s^3 + C_2 C_5 L_2 R_5 s^3 + C_2\right.}{s\left(2C_2C_3C_5L_2L_3R_2g_m s^4 + 4C_2C_3C_5L_2L_3s^4 + C_2C_3C_5L_2L_5R_2g_m s^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_m s^3 + C_2C_3C_5L_2R_2R_5g_m s^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3L_2R_2g_m s^2 + C_2C_3L_2s^2 + 2C_2C_5L_2R_2g_m s^2 + 4C_2C_5L_2s^2 +$$

### 10.624 INVALID-ORDER-624 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_5g_m s^6 + 4C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3R_5g_m s^5 + C_2C_3C_5L_2L_5R_2R_5s^5 + 4C_2C_3C_5L_2L_5R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_2g_m s^5 + 4C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_5g_m s^4 + 4C_2C_3L_2L_3R_5s^4 + 2C_2C_3L_2L_5R_2R_3g_m s^4 + C_2C_3L_2$$

### 10.625 INVALID-ORDER-625 $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2g_m s^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3g_m s^5 + C_2C_3C_5L_2L_5R_2R_5g_m s^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3L_2L_3R_2g_m s^4 + 4C_2C_3L_2L_3s^4 + C_2C_3L_2L_5R_2g_m s^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_2R_3g$$

**10.626 INVALID-ORDER-626** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ L_3 s + R_3 + \frac{1}{C_3 s},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2 + C_5 R_5 s + 1},\ \infty\right)$

$$H(s) = \frac{2C_2C_3C_5L_2L_3L_5R_2g_ms^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_5g_ms^5 + 4C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2}{}$$

**10.627 INVALID-ORDER-627** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s + R_2R\right.}{C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + 2C_2L_2L_3R_2R_3g_ms^3 + C_2L_2L_3R_2R_5g_ms^3 + C_2L_2L_3R_2s^3 + 4C_2L_2L_3R_3s^3 + C_2L_2L_3R_5s^3 + C_2L_2R_2R_3R_5g_ms^2 + C_2L_2R_2R_3s^2 + C_2L_2R_3R_5s^2 + C_3L_2L_3R_3R_5g_ms^3 + C_3L_2L_3R_3s^3 + C_3L_3R_2}$$

**10.628 INVALID-ORDER-628** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 - C_5L_2s^2 - C_5R_2s + L_2g\right.}{C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3R_3s^4 + C_2C_5L_2R_2R_3s^3 + C_2L_2L_3R_2g_ms^3 + C_2L_2L_3s^3 + C_2L_2R_2R_3g_ms^2 + C_2L_2R_3s^2 + C_3C_5L_2L_3R_3s^4 + C_3C_5L_3R_2R_3s^3 + C_3L_2L_3R_3g}$$

**10.629 INVALID-ORDER-629** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3R_2R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + 2C_2C_5L_2L_3R_2R_3R_5g_ms^4 + C_2C_5L_2L_3R_2R_5s^4 + 4C_2C_5L_2L_3R_3R_5s^4 + C_2C_5L_2R_2R_3R_5s^3 + 2C_2L_2L_3R_2R_3g_ms^3 + C_2L_2L_3R_2R_5g_ms^3 + C_2L_2L_3R_2s^3 + 4C_2L_2L_3R_3}$$

**10.630 INVALID-ORDER-630** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2R_5g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3R_3s^4 + C_2C_5L_2L_3R_5s^4 + C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2}$$

**10.631 INVALID-ORDER-631** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_5L_2L_3L_5R_2g_ms^5 + C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3R_3s^4 + C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5}$$

**10.632 INVALID-ORDER-632** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3R_2R_3s^4 + 2C_2C_5L_2L_3L_5R_2R_3g_ms^5 + C_2C_5L_2L_3L_5R_2s^5 + 4C_2C_5L_2L_3L_5R_3s^5 + C_2C_5L_2L_5R_2R_3s^4 + C_2L_2L_3L_5R_2g_ms^4 + C_2L_2L_3L_5s^4 + 2C_2L_2L_3R_2R_3g_ms^3 + C_2L_2L_3R_2s^3}$$

**10.633 INVALID-ORDER-633** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_5L_2L_3L_5R_2g_ms^5 + C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2R_5g_ms}$$

**10.634 INVALID-ORDER-634** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2 + L_3 s + R_3},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2 + L_5 s + R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5s^6 + C_2C_3L_2L_3L_5R_2R_3R_5g_ms^5 + C_2C_3L_2L_3L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5s^4 + 2C_2C_5L_2L_3L_5R_2R_3R_5g_ms^5 + C_2C_5L_2L_3L_5R_2R_5s^5 + 4C_2C_5L_2L_3L_5R_3R_5s^5 + C_2C_5L_2L_5R_2R_3R_5s^4 + 2C_2L_2L_3L_5R_2R_3g_ms^4 + C}$$

**10.635 INVALID-ORDER-635** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2+L_3 s+R_3},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + 2C_2C_5L_2L_3L_5R_2R_3g_ms^5 + C_2C_5L_2L_3L_5R_2R_5g_ms^5 + C_2C$$

**10.636 INVALID-ORDER-636** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 R_3 s}{C_3 L_3 R_3 s^2+L_3 s+R_3},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_2L_3R_2R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + 2C_2C_5L_2L_3L_5R_2R_3g_ms^5 + C_2C_5L_2L_3L_5R_2R_5g_ms^5 + C_2C_5L_2L_3L_5R_2s^5 + 4C_2$$

**10.637 INVALID-ORDER-637** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + L_2R_5g_ms - L_2s -}{2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + 2C_2L_2L_3R_2g_ms^3 + 4C_2L_2L_3s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 2C_3L_2L_3R_3g_ms^3 + C_3L_2L_3R_5g_ms^3 + C_3L$$

**10.638 INVALID-ORDER-638** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L_3s + R_3\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 -}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_3s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + 2C_3C_5L_2L_3R_3g_ms^4 + C_3C_5L_2L$$

**10.639 INVALID-ORDER-639** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + 2C_2C_5L_2L_3R_2R_5g_ms^4 + 4C_2C_5L_2L_3R_5s^4 + 2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2$$

**10.640 INVALID-ORDER-640** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L\right.}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C$$

**10.641 INVALID-ORDER-641** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2 + L\right.}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L$$

**10.642 INVALID-ORDER-642** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + 2C_2C_5L_2L_3L_5R_2g_ms^5 + 4C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C$$

**10.643 INVALID-ORDER-643** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C$$

**10.644 INVALID-ORDER-644** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5s^6 + 4C_2C_3C_5L_2L_3L_5R_3R_5s^6 + 2C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_2R_5g_ms^5 + C_2C_3L_2L_3L_5R_2s^5 + 4C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3L_5R_5s^5 + 2C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_5s^4 + 4C_$$

**10.645 INVALID-ORDER-645** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 +$$

**10.646 INVALID-ORDER-646** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{L_3 s}{C_3 L_3 s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 +$$

**10.647 INVALID-ORDER-647** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C\right.}{2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 2C_3L_2L_3R_3g_m$$

**10.648 INVALID-ORDER-648** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R\right.}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + 2C_3C_5L_2L_3$$

**10.649 INVALID-ORDER-649** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_2R_2R_3R_5s^4 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L$$

**10.650 INVALID-ORDER-650** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3$$

**10.651 INVALID-ORDER-651** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 -$$

**10.652 INVALID-ORDER-652** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_5R_2R_3g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2$$

**10.653 INVALID-ORDER-653** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ L_5 s + R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4}$$

**10.654 INVALID-ORDER-654** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 R_5 s}{C_5 L_5 R_5 s^2+L_5 s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5s^6 + 4C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_2L_5R_2R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_2R_5g_ms^5 + C_2C_3L_2L_3L_5R_2s^5 + 4C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3L_5R_5s^5 + 2C_2C_3L_2L_3R_2R_3R_5g_ms^4}$$

**10.655 INVALID-ORDER-655** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3C_5L_2L_5R_3R_5s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2}$$

**10.656 INVALID-ORDER-656** $Z(s) = \left(\infty,\ \frac{L_2 s}{C_2 L_2 s^2+1} + R_2,\ \frac{R_3\left(C_3 L_3 s^2+1\right)}{C_3 L_3 s^2+C_3 R_3 s+1},\ \infty,\ \frac{R_5\left(C_5 L_5 s^2+1\right)}{C_5 L_5 s^2+C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3}$$

**10.657 INVALID-ORDER-657** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2+C_2 R_2 s+1},\ R_3,\ \infty,\ \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + 4C_2C_5R_2R_3s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**10.658 INVALID-ORDER-658** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2+C_2 R_2 s+1},\ R_3,\ \infty,\ \frac{R_5}{C_5 R_5 s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_3R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + 2C_5R_2R_3R_5g_ms + C_5R_2R_5s + 4C_5R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2}$$

**10.659 INVALID-ORDER-659** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2+C_2 R_2 s+1},\ R_3,\ \infty,\ R_5 + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_2R_5s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + 2C_5R_2R_3g_ms + C_5R_2R_5g_ms + C_5R_2s + 4C_5R_3s + C_5R_5s + R_2g_m + 1}$$

**10.660 INVALID-ORDER-660** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2+C_2 R_2 s+1},\ R_3,\ \infty,\ L_5 s + \frac{1}{C_5 s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R_2g_m + 1}$$

**10.661 INVALID-ORDER-661** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2 L_2 s^2+1\right)}{C_2 L_2 s^2+C_2 R_2 s+1},\ R_3,\ \infty,\ \frac{L_5 s}{C_5 L_5 s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2\right)}{2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + 4C_2C_5L_5R_2R_3s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_5R_2s^2 + 4C_2R_2R_3s + 2C_5L_5R_2R_3g_ms^2 + C_5L_5R_2s^2 + 4C_5L_5R_3s^2 + L_5R_2g_ms + L_5s + 2R_2R_3}$$

**10.662 INVALID-ORDER-662** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3,\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + \right.}{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_2R_5s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + 2C_5R_2R_3g_ms + C_5R$$

**10.663 INVALID-ORDER-663** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3,\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_2R_5s^4 + C_2L_2L_5R_2R_5g_ms^3 - C_2L_2L_5R_2s^3 + C_2L_2L_5R_5s^3 - C_2L_2R_2R_5s^2 + C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 - \right.}{2C_2C_5L_2L_5R_2R_3R_5g_ms^4 + C_2C_5L_2L_5R_2R_5s^4 + 4C_2C_5L_2L_5R_3R_5s^4 + 4C_2C_5L_5R_2R_3R_5s^3 + 2C_2L_2L_5R_2R_3g_ms^3 + C_2L_2L_5R_2R_5g_ms^3 + C_2L_2L_5R_2s^3 + 4C_2L_2L_5R_3s^3 + C_2L_2L_5R_5s^3 + 2C_2L_2R_2R_3R_5g_ms^2 + C_2L_2R_2R_5s^2 + 4C_2L_2R_3R_5s^2 + 4C_2L_5R_2R_3s^2 + C$$

**10.664 INVALID-ORDER-664** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 + C_2C_5L_5R_2R_5s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2L_5R_2s^2 + C_2R_2R\right.}{2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2R_5g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + C_2C_5L_2L_5R_5s^4 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + C_2L_5$$

**10.665 INVALID-ORDER-665** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3,\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 - C_2C_5L_2R_2R_5s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2\right.}{2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2R_5g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + C_2C_5L_2L_5R_5s^4 + 2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_3R_5s^3 + 4C_2C_5L_5R_2R_3s^3 + C_2C_5L_5R_2R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_m$$

**10.666 INVALID-ORDER-666** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + C_2C_3R_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2R_2g_m + 4}$$

**10.667 INVALID-ORDER-667** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1}{s\left(C_2C_3C_5L_2R_2s^3 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.668 INVALID-ORDER-668** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s - C_5R_2R_5s + R_2R_5g_m - R_2 + R_5}{C_2C_3C_5L_2R_2R_5s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + C_2C_3R_2R_5s^2 + 2C_2C_5L_2R_2R_5g_ms^3 + 4C_2C_5L_2R_5s^3 + 4C_2C_5R_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + C_3C_5R_2R_5s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2C_5R_2R_5g_ms + 4C_5R_5s$$

**10.669 INVALID-ORDER-669** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1}{s\left(C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3C_5R_2R_5s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_3C_5R_2R_5g_ms + C_3C_5R_2s + C_3C_5R_5s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.670 INVALID-ORDER-670** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1}{s\left(C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + C_2C_3C_5L_2R_2s^3 + C_2C_3C_5L_5R_2s^3 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5s^2 + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.671 INVALID-ORDER-671** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5R_2g_ms + L_5s - R_2}{C_2C_3C_5L_2L_5R_2s^5 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_2s^3 + C_2C_3L_5R_2s^3 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 4C_2C_5L_5R_2s^3 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + C_3C_5L_5R_2s^3 + C_3L_5R_2g_ms^2 + C_3L_5s^2 + C_3R_2s + 2C_5L_5R_2g_ms^2 + 4C_5L_5s^2 + 4C_5R_2s + 4L_5s + 4R_2}$$

**10.672 INVALID-ORDER-672** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 + C_5R_2R_5g_ms - C_5R_5}{s\left(C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3C_5L_5R_2s^3 + C_2C_3C_5R_2R_5s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C_5L_5\right.}$$

**10.673 INVALID-ORDER-673** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{-C_2C_5L_2L_5R_2R_5s^4 + C_2L_2L_5R_2R_5g_ms^3 - C_2L_2L_5R_2s^3 + C_2L_2L_5R_5s^3 - C_2L_2R_2R_5s^2 + C_2L_5R_2R_5s^2 - C_5L_5R_2R_5s^2 + L_5}{C_2C_3C_5L_2L_5R_2R_5s^5 + C_2C_3L_2L_5R_2R_5g_ms^4 + C_2C_3L_2L_5R_2s^4 + C_2C_3L_2L_5R_5s^4 + C_2C_3L_2R_2R_5s^3 + C_2C_3L_5R_2R_5s^3 + 2C_2C_5L_2L_5R_2R_5g_ms^4 + 4C_2C_5L_2L_5R_5s^4 + 4C_2C_5L_5R_2R_5s^3 + 2C_2L_2L_5R_2g_ms^3 + 4C_2L_2L_5s^3 + 2C_2L_2R_2R_5g_ms^2 + 4C_2L_2R_5s^2 + 4C_2L_5$$

**10.674 INVALID-ORDER-674** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 + C_2C_5L_5R_2R_5s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2L_5R}{C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + C_2C_3C_5L_2L_5R_5s^5 + C_2C_3C_5L_2R_2R_5s^4 + C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + C_2C_3L_5R_2s^3 + C_2C_3R_2R_5s^2 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 4C_2C_5L_5$$

**10.675 INVALID-ORDER-675** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4 - C_2C_5L_2R_2R_5s^3 + C_2C_5L_5R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s}{C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + C_2C_3C_5L_2L_5R_5s^5 + C_2C_3C_5L_2R_2R_5s^4 + C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + C_2C_3L_5R_2s^3 + C_2C_3R_2R_5s^2 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 4C_2C_5L_5$$

**10.676 INVALID-ORDER-676** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + C_2C_3R_2R_3R_5s^2 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 4C_2R_2R_3s + C_2R_2R_5s + C_3R_2R_3R_5g_ms + C_3R_2R_3s + C_3R_3R_5s + 2R_2R_3g_m + R_2R_5g_m + R_2 + 4R_3}$$

**10.677 INVALID-ORDER-677** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_2R_2R_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + 4C_2C_5R_2R_3s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_3C_5R_2R_3s^2 + C_3R_2R_3g_ms + C_3R_3s + 2C_5R_2R_3g_ms + C_5R_2s + 4C_5R_3s + R$$

**10.678 INVALID-ORDER-678** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s - C_5R_2R_5s + R_2R_5\right.}{C_2C_3C_5L_2R_2R_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + C_2C_3R_2R_3R_5s^2 + 2C_2C_5L_2R_2R_3R_5g_ms^3 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_2R_3R_5s^3 + 4C_2C_5R_2R_3R_5s^2 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R$$

**10.679 INVALID-ORDER-679** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C\right.}{C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_2R_5s^3 + 4C_2C_5R_2R_3s^2 + C_2C_5R$$

**10.680 INVALID-ORDER-680** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5\right.}{C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3s^2 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_2R_3s^3 + C_2C_5L_5R_2s^3 + 4C_2C_5R_2$$

**10.681 INVALID-ORDER-681** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5\right.}{C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3L_2L_5R_2R_3g_ms^4 + C_2C_3L_2L_5R_3s^4 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_5R_2R_3s^3 + 2C_2C_5L_2L_5R_2R_3g_ms^4 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_2L_5R_3s^4 + 4C_2C_5L_5R_2R_3s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3$$

**10.682 INVALID-ORDER-682** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_m\right.}{C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3R_2R_3s^2 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + 2C_2C_5L_2R$$

**10.683 INVALID-ORDER-683** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{R_3\left(-C_2C_5\right.}{C_2C_3C_5L_2L_5R_2R_3R_5s^5 + C_2C_3L_2L_5R_2R_3R_5g_ms^4 + C_2C_3L_2L_5R_2R_3s^4 + C_2C_3L_2L_5R_3R_5s^4 + C_2C_3L_2R_2R_3R_5s^3 + C_2C_3L_5R_2R_3R_5s^3 + 2C_2C_5L_2L_5R_2R_3R_5g_ms^4 + C_2C_5L_2L_5R_2R_5s^4 + 4C_2C_5L_2L_5R_3R_5s^4 + 4C_2C_5L_5R_2R_3R_5s^3 + 2C_2L_2L_5R_2R_3g_ms^3 + C_2L_2$$

**10.684 INVALID-ORDER-684** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3}{C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + 2C_3R_2R_3g_ms + C_3R_2R_5g_ms + C_3R_2s + 4C_3R_3s + C_3R_5s + 2R_2g_m + 4}$$

**10.687 INVALID-ORDER-687** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + 2C_3C_5R_2R_3g_ms + C_3C_5R_2s + 4C_3C_5R_3s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.688 INVALID-ORDER-688** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5\right.}{2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_5s^4 + 4C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 2C_2C_5L_2R_2R_5g_ms^3 + 4C_2C_5L_2R_5s^3 + 4$$

**10.689 INVALID-ORDER-689** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5R_2R_5g_ms - C_5R_2s + C_5R_5s + R_2g_m + 1\right)}{s\left(2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + 2C_3C_5R_2R_3g_ms + C_3C\right.}$$

**10.690 INVALID-ORDER-690** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_5L_5R_2g_ms^2 + C_5L_5s^2 - C_5R_2s + R_2g_m + 1\right)}{s\left(C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + C_3C_5L_5R_2g_ms^2 + C_3C\right.}$$

**10.691 INVALID-ORDER-691** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2\right.}{2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_5R_2s^3 + 4C_2C_3R_2R_3s^2 + 2C_2C_5L_2L_5R_2g_ms^4 + 4C_2C_5L_2L_5s^4 + 4C$$

**10.692 INVALID-ORDER-692** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5L_5R_2s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C\right.}{s\left(C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2\right.}$$

**10.693 INVALID-ORDER-693** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_5s^5 + 4C_2C_3C_5L_2L_5R_3R_5s^5 + 4C_2C_3C_5L_5R_2R_3R_5s^4 + 2C_2C_3L_2L_5R_2R_3g_ms^4 + C_2C_3L_2L_5R_2R_5g_ms^4 + C_2C_3L_2L_5R_2s^4 + 4C_2C_3L_2L_5R_3s^4 + C_2C_3L_2L_5R_5s^4 + 2C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_5s^3 + 4C_2$$

**10.694 INVALID-ORDER-694** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{(C_3R_3s+1)\left(C_2C_5L_2L_5R_2R_5g_ms^4 - C_2C_5L_2L_5R_2s^4 + C_2C_5L_2L_5R_5s^4\right.}{2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4$$

**10.695 INVALID-ORDER-695** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ R_3+\frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_5s^4 + 4C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 2C$$

**10.696 INVALID-ORDER-696** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_3L_2L_3R_2g_ms^4 + 4C_2C_3L_2L_3s^4 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + C_2C_3L_2R_5s^3 + 4C_2C_3L_3R_2s^3 + C_2C_3R_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + C_3R_2R_5g_ms + C_3R_2s + C_3R_5s + 2R_2g_m + 4}$$

**10.697 INVALID-ORDER-697** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4 + 4C_2C_3C_5L_2L_3s^4 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_3R_2s^3 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 + 4C_3C_5L_3s^2 + C_3C_5R_2s + C_3R_2g_m + C_3 + 2C_5R_2g_m + 4C_5\right)}$$

**10.698 INVALID-ORDER-698** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2R_2R_5s^3+C_2L_2R_2R_5g_ms^2-C_2L_2R_2s^2+C_2L_2R_5s^2+C_2R_2R_5\right.}{2C_2C_3C_5L_2L_3R_2R_5g_ms^5+4C_2C_3C_5L_2L_3R_5s^5+C_2C_3C_5L_2R_2R_5s^4+4C_2C_3C_5L_3R_2R_5s^4+2C_2C_3L_2L_3R_2g_ms^4+4C_2C_3L_2L_3s^4+C_2C_3L_2R_2R_5g_ms^3+C_2C_3L_2R_2s^3+C_2C_3L_2R_5s^3+4C_2C_3L_3R_2s^3+C_2C_3R_2R_5s^2+2C_2C_5L_2R_2R_5g_ms^3+4C_2C_5L_2R_5s^3+4C}$$

**10.699 INVALID-ORDER-699** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_2R_2R_5g_ms^3-C_2C_5L_2R_2s^3+C_2C_5L_2R_5s^3+C_2C_5R_2R_5s^2+C_2L_2R_2g_ms^2+C_2L_2s^2+C_2R_2s+C_5R_2R_5g_ms-C_5R_2s+C_5R_5s+R_2g_m+1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4+4C_2C_3C_5L_2L_3s^4+C_2C_3C_5L_2R_2R_5g_ms^3+C_2C_3C_5L_2R_2s^3+C_2C_3C_5L_2R_5s^3+4C_2C_3C_5L_3R_2s^3+C_2C_3C_5R_2R_5s^2+C_2C_3L_2R_2g_ms^2+C_2C_3L_2s^2+C_2C_3R_2s+2C_2C_5L_2R_2g_ms^2+4C_2C_5L_2s^2+4C_2C_5R_2s+2C_3C_5L_3R_2g_ms^2+4C_3\right.}$$

**10.700 INVALID-ORDER-700** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_2L_5R_2g_ms^4+C_2C_5L_2L_5s^4-C_2C_5L_2R_2s^3+C_2C_5L_5R_2s^3+C_2L_2R_2g_ms^2+C_2L_2s^2+C_2R_2s+C_5L_5R_2g_ms^2+C_5L_5s^2-C_5R_2s+R_2g_m+1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4+4C_2C_3C_5L_2L_3s^4+C_2C_3C_5L_2L_5R_2g_ms^4+C_2C_3C_5L_2L_5s^4+C_2C_3C_5L_2R_2s^3+4C_2C_3C_5L_3R_2s^3+C_2C_3C_5L_5R_2s^3+C_2C_3L_2R_2g_ms^2+C_2C_3L_2s^2+C_2C_3R_2s+2C_2C_5L_2R_2g_ms^2+4C_2C_5L_2s^2+4C_2C_5R_2s+2C_3C_5L_3R_2g_ms^2+4C_3\right.}$$

**10.701 INVALID-ORDER-701** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2L_5R_2s^4+C_2L_2L_5R_2g_ms^3+C_2L_2L_5s^3-C_2L_2R_2s^2+C_2L_5R_2s\right.}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6+4C_2C_3C_5L_2L_3L_5s^6+C_2C_3C_5L_2L_5R_2s^5+4C_2C_3C_5L_3L_5R_2s^5+2C_2C_3L_2L_3R_2g_ms^4+4C_2C_3L_2L_3s^4+C_2C_3L_2L_5R_2g_ms^4+C_2C_3L_2L_5s^4+C_2C_3L_2R_2s^3+4C_2C_3L_3R_2s^3+C_2C_3L_5R_2s^3+2C_2C_5L_2L_5R_2g_ms^4+4C_2C_5L_2L_5s^4+4C_2}$$

**10.702 INVALID-ORDER-702** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_2L_5R_2g_ms^4+C_2C_5L_2L_5s^4+C_2C_5L_2R_2R_5g_ms^3-C_2C_5L_2R_2s^3+C_2C_5L_2R_5s^3+C_2C_5L_5R_2s^3+C_2C_5R_2R_5s^2+C_2L_2R_2g_ms^2+C_2L_2s^2+C_2R_2s+C_5L_5R_2g_ms^2+C_5L_5s^2+C_5R_2R_5s-C_5R_2s+R_2g_m+1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4+4C_2C_3C_5L_2L_3s^4+C_2C_3C_5L_2L_5R_2g_ms^4+C_2C_3C_5L_2L_5s^4+C_2C_3C_5L_2R_2R_5g_ms^3+C_2C_3C_5L_2R_2s^3+C_2C_3C_5L_2R_5s^3+4C_2C_3C_5L_3R_2s^3+C_2C_3C_5L_5R_2s^3+C_2C_3C_5R_2R_5s^2+C_2C_3L_2R_2g_ms^2+C_2C_3L_2s^2+C_2C_3R_2s+2C_2C_5L_2\right.}$$

**10.703 INVALID-ORDER-703** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6+4C_2C_3C_5L_2L_3L_5R_5s^6+C_2C_3C_5L_2L_5R_2R_5s^5+4C_2C_3C_5L_3L_5R_2R_5s^5+2C_2C_3L_2L_3L_5R_2g_ms^5+4C_2C_3L_2L_3L_5s^5+2C_2C_3L_2L_3R_2R_5g_ms^4+4C_2C_3L_2L_3R_5s^4+C_2C_3L_2L_5R_2R_5g_ms^4+C_2C_3L_2L_5R_2s^4+C_2C_3L_2L_5R_5s^4+C_2C}$$

**10.704 INVALID-ORDER-704** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2+1\right)\left(C_2C_5L_2L_5R_2R_5g_ms^4-C_2C_5L_2L_5R_2s^4+C_2C_5L_2L_5R_5s^4\right.}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6+4C_2C_3C_5L_2L_3L_5s^6+C_2C_3C_5L_2L_5R_2R_5g_ms^5+C_2C_3C_5L_2L_5R_2s^5+C_2C_3C_5L_2L_5R_5s^5+4C_2C_3C_5L_3L_5R_2s^5+C_2C_3C_5L_5R_2R_5s^4+2C_2C_3L_2L_3R_2g_ms^4+4C_2C_3L_2L_3s^4+C_2C_3L_2L_5R_2g_ms^4+C_2C_3L_2L_5s^4+C_2C_3L_2R_2R_5g_ms^3+C}$$

**10.705 INVALID-ORDER-705** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s+\frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6+4C_2C_3C_5L_2L_3L_5s^6+2C_2C_3C_5L_2L_3R_2R_5g_ms^5+4C_2C_3C_5L_2L_3R_5s^5+C_2C_3C_5L_2L_5R_2R_5g_ms^5+C_2C_3C_5L_2L_5R_2s^5+C_2C_3C_5L_2L_5R_5s^5+C_2C_3C_5L_2R_2R_5s^4+4C_2C_3C_5L_3L_5R_2s^5+4C_2C_3C_5L_3R_2R_5s^4+C_2C_3C_5L_5R_2R_5s^4+2C_2}$$

**10.706 INVALID-ORDER-706** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2L_2R_2R_5g_ms^2-C_2L_2R_2s^2+C_2L_2R_5s^2+C_2R_2R_5s+R_2R_5g_m-R_2+R_5\right)}{C_2C_3L_2L_3R_2R_5g_ms^4+C_2C_3L_2L_3R_2s^4+C_2C_3L_2L_3R_5s^4+C_2C_3L_3R_2R_5s^3+2C_2L_2L_3R_2g_ms^3+4C_2L_2L_3s^3+C_2L_2R_2R_5g_ms^2+C_2L_2R_2s^2+C_2L_2R_5s^2+4C_2L_3R_2s^2+C_2R_2R_5s+C_3L_3R_2R_5g_ms^2+C_3L_3R_2s^2+C_3L_3R_5s^2+2L_3R_2g_ms+4L_3s+R_2R_5g_m+}$$

**10.707 INVALID-ORDER-707** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_2L_3R_2s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C_3C_5L_3R_2s^3 + C_3L_3R_2g_ms^2 + C_3L_3s^2 + 2C_5L_3R_2g_ms^2 + 4C_5L_3s^2 + C_5R_2s +$$

**10.708 INVALID-ORDER-708** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{L_3s\left(-C_2C_5L_2R_2R_5s^3 + C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s - C_5R_2R_5s + R_2\right.}{C_2C_3C_5L_2L_3R_2R_5s^5 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_3R_2R_5s^3 + 2C_2C_5L_2L_3R_2R_5g_ms^4 + 4C_2C_5L_2L_3R_5s^4 + C_2C_5L_2R_2R_5s^3 + 4C_2C_5L_3R_2R_5s^3 + 2C_2L_2L_3R_2g_ms^3 + 4C_2L_2L_3s^3 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + C_2L_2R_5$$

**10.709 INVALID-ORDER-709** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + \right.}{C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2R_2R_5g_ms^3 + C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5R_2$$

**10.710 INVALID-ORDER-710** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s + C\right.}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_3R_2s^5 + C_2C_3C_5L_3L_5R_2s^5 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2s^3 + 4C_2C_5L_3R_2s^3 + C_2C_5L_5R$$

**10.711 INVALID-ORDER-711** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{L_3s\left(-C_2C_5L_2L_5R_2s^4 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 - C_2L_2R_2s^2 + C_2L_5R_2s^2 - C_5L_5R_2s^2 + L_5\right.}{C_2C_3C_5L_2L_3L_5R_2s^6 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + C_2C_3L_2L_3R_2s^4 + C_2C_3L_3L_5R_2s^4 + 2C_2C_5L_2L_3L_5R_2g_ms^5 + 4C_2C_5L_2L_3L_5s^5 + C_2C_5L_2L_5R_2s^4 + 4C_2C_5L_3L_5R_2s^4 + 2C_2L_2L_3R_2g_ms^3 + 4C_2L_2L_3s^3 + C_2L_2L_5R_2g_ms^3 + C_2L_2L_5s^3 + C_2L_2R_2s^2$$

**10.712 INVALID-ORDER-712** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3s\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_\right.}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_3L_5R_2s^5 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L_2L$$

**10.713 INVALID-ORDER-713** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{L_3s\left(-C_2C\right.}{C_2C_3C_5L_2L_3L_5R_2R_5s^6 + C_2C_3L_2L_3L_5R_2R_5g_ms^5 + C_2C_3L_2L_3L_5R_2s^5 + C_2C_3L_2L_3L_5R_5s^5 + C_2C_3L_2L_3R_2R_5s^4 + C_2C_3L_3L_5R_2R_5s^4 + 2C_2C_5L_2L_3L_5R_2R_5g_ms^5 + 4C_2C_5L_2L_3L_5R_5s^5 + C_2C_5L_2L_5R_2R_5s^4 + 4C_2C_5L_3L_5R_2R_5s^4 + 2C_2L_2L_3L_5R_2g_ms^4 + 4C_2L_2$$

**10.714 INVALID-ORDER-714** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_3L_5R_2R_5s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_3L_5R_2s^4 + C_2C_3L_3R_2R_5s^3 + 2C_2C_5L_2L_3L_5R_2g_m$$

**10.715 INVALID-ORDER-715** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_3R_2R_5s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_3R_2R_5s^3 + 2C_2C_5L_2L_3L_5R_2g_ms^5 + 4C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_3$$

**10.716 INVALID-ORDER-716** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{2C_2C_3L_2L_3R_2g_ms^4 + 4C_2C_3L_2L_3s^4 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_2s^3 + 4C_2C_3L_2R_3s^3 + C_2C_3L_2R_5s^3 + 4C_2C_3L_3R_2s^3 + 4C_2C_3R_2R_3s^2 + C_2C_3R_2R_5s^2 + 2C_2L_2R_2g_ms^2 + 4C_2L_2s^2 + 4C_2R_2s + 2C_3L_3R_2g_ms^2 + 4C_3L_3s^2 + 2C_3R_2R_3g_{\ldots}}$$

**10.717 INVALID-ORDER-717** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4 + 4C_2C_3C_5L_2L_3s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + 4C_2C_3C_5L_3R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_5L_2R_2g_ms^2 + 4C_2C_5L_2s^2 + 4C_2C_5R_2s + 2C_3C_5L_3R_2g_ms^2 +}$$

**10.718 INVALID-ORDER-718** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_2R_5g_ms^5 + 4C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_5s^4 + 4C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5L_3R_2R_5s^4 + 4C_2C_3C_5R_2R_3R_5s^3 + 2C_2C_3L_2L_3R_2g_ms^4 + 4C_2C_3L_2L_3s^4 + 2C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_2R_5g_ms^3 + C_2C_3L_2R_{\ldots}}$$

**10.719 INVALID-ORDER-719** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C_5R_2R_5s^2 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_{2\ldots}}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4 + 4C_2C_3C_5L_2L_3s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + 4C_2C_3C_5L_3R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C_5R_2R_5s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_{\ldots}}$$

**10.720 INVALID-ORDER-720** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 - C_2C_5L_2R_2s^3 + C_2C_5L_5R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_{2\ldots}}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4 + 4C_2C_3C_5L_2L_3s^4 + C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + 4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3L_2R_2g_ms^2 + C_2C_3L_2s^2 + C_2C_3R_2s + 2C_2C_{5\ldots}}$$

**10.721 INVALID-ORDER-721** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + 4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + 2C_2C_3L_2L_3R_2g_ms^4 + 4C_2C_3L_2L_3s^4 + C_2C_3L_2L_5R_2g_ms^4 + C_2C_3L_2L_5s^4 + 2C_2C_3L_2R_2R_3g_ms$$

**10.722 INVALID-ORDER-722** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3s^2 + C_3R_3s + 1\right)\left(C_2C_5L_2L_5R_2g_ms^4 + C_2C_5L_2L_5s^4 + C_2C_5L_2R_2R_5g_ms^3 - C_2C_5L_2R_2s^3 + C_2C_5L_2R_5s^3 + C_2C}{s\left(2C_2C_3C_5L_2L_3R_2g_ms^4 + 4C_2C_3C_5L_2L_3s^4 + C_2C_3C_5L_2L_5R_2g_ms^4 + C_2C_3C_5L_2L_5s^4 + 2C_2C_3C_5L_2R_2R_3g_ms^3 + C_2C_3C_5L_2R_2R_5g_ms^3 + C_2C_3C_5L_2R_2s^3 + 4C_2C_3C_5L_2R_3s^3 + C_2C_3C_5L_2R_5s^3 + 4C_2C_3C_5L_3R_2s^3 + C_2C_3C_5L_5R_2s^3 + 4C_2C_3C_5R_2R_3s^2 + C_2C_3C}$$

**10.723 INVALID-ORDER-723** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + 4C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_5s^5 + 4C_2C_3C_5L_2L_5R_3R_5s^5 + 4C_2C_3C_5L_3L_5R_2R_5s^5 + 4C_2C_3C_5L_5R_2R_3R_5s^4 + 2C_2C_3L_2L_3L_5R_2g_ms^5 + 4C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_5g_ms^4 + 4C_2$$

**10.724 INVALID-ORDER-724** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 4C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_5R_2R_3s^4 + C_2C_3C_5L_5R_2R_5s^4 + 2C_2C_3L_2L_3R_2g_ms^4 + 4C$$

**10.725 INVALID-ORDER-725** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ L_3s + R_3 + \frac{1}{C_3s},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2g_ms^6 + 4C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_5g_ms^5 + 4C_2C_3C_5L_2L_3R_5s^5 + 2C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_2R_5g_ms^5 + C_2C_3C_5L_2L_5R_2s^5 + 4C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2L_5R_5s^5 + 2C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2}$$

**10.726 INVALID-ORDER-726** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m - R_2 + R_5\right)}{C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + C_2C_3L_3R_2R_3R_5s^3 + 2C_2L_2L_3R_2R_3g_ms^3 + C_2L_2L_3R_2R_5g_ms^3 + C_2L_2L_3R_2s^3 + 4C_2L_2L_3R_3s^3 + C_2L_2L_3R_5s^3 + C_2L_2R_2R_3R_5g_ms^2 + C_2L_2R_2R_3s^2 + C_2L_2R_3R_5s^2 + 4C_2L_3R_2R_3s^2 + C_2L_3R}$$

**10.727 INVALID-ORDER-727** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{L_3R_3s\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s - C_5R_2s + R_2g_m + 1\right)}{C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3s^3 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3R_3s^4 + C_2C_5L_2R_2R_3s^3 + 4C_2C_5L_3R_2R_3s^3 + C_2L_2L_3R_2g_ms^3 + C_2L_2L_3s^3 + C_2L_2R_2R_3g_ms^2 + C_2L_2R_3s^2 + C_2L_3R_2s^2}$$

**10.728 INVALID-ORDER-728** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3R_2R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + C_2C_3L_3R_2R_3R_5s^3 + 2C_2C_5L_2L_3R_2R_3R_5g_ms^4 + C_2C_5L_2L_3R_2R_5s^4 + 4C_2C_5L_2L_3R_3R_5s^4 + C_2C_5L_2R_2R_3R_5s^3 + 4C_2C_5L_3R_2R_3R_5s^3 + 2C_2L_2L_3R_2R_3g_ms^3 + C_2L_2}$$

**10.729 INVALID-ORDER-729** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3s^3 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3R_3s^4 + C_2C_5L_2R_2R_3s^3 + 4C_2C_5L_3R_2R_3s^3 + C_2L_2L_3R_2g_ms^3 + C_2L_2L_3s^3 + C_2L_2R_2R_3g_ms^2 + C_2L_2R_3s^2 + C_2L_3R_2s^2}$$

**10.730 INVALID-ORDER-730** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3s^3 + C_2C_5L_2L_3L_5R_2g_ms^5 + C_2C_5L_2L_3L_5s^5 + 2C_2C_5L_2L_3R_2R_3g_ms^4 + C_2C_5L_2L_3R_2s^4 + 4C_2C_5L_2L_3}$$

**10.731 INVALID-ORDER-731** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_3L_5R_2R_3s^4 + 2C_2C_5L_2L_3L_5R_2R_3g_ms^5 + C_2C_5L_2L_3L_5R_2s^5 + 4C_2C_5L_2L_3L_5R_3s^5 + C_2C_5L_2L_5R_2R_3s^4 + 4C_2C_5L_3L_5R_2R_3s^4 + C_2L_2L_3L_5R_2g_ms^4 + C_2L_2L_3}$$

**10.732 INVALID-ORDER-732** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ L_5s + R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3R_2R_3R_5s^4 + C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_3s^4 + C_2C_3L_3R_2R_3s^3 + C_2C_5L_2L_3L_5R_2g_ms^5}$$

**10.733 INVALID-ORDER-733** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5s^6 + C_2C_3L_2L_3L_5R_2R_3R_5g_ms^5 + C_2C_3L_2L_3L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5s^4 + C_2C_3L_3L_5R_2R_3R_5s^4 + 2C_2C_5L_2L_3L_5R_2R_3R_5g_ms^5 + C_2C_5L_2L_3L_5R_2R_5s^5 + 4C_2C_5L_2L_3L_5R_3R_5s^5 + C_2C_5L_2L_5R_2R_3R_5s^4 + 4C}$$

**10.734 INVALID-ORDER-734** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + C_2C_3L_3L_5R_2R_3s^4 + C_2C_3L_3R_2$$

**10.735 INVALID-ORDER-735** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3R_3s}{C_3L_3R_3s^2+L_3s+R_3},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_3s^6 + C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_2L_3R_2R_3R_5s^5 + C_2C_3C_5L_3L_5R_2R_3R_5s^5 + C_2C_3L_2L_3R_2R_3R_5g_ms^4 + C_2C_3L_2L_3R_2R_3s^4 + C_2C_3L_2L_3R_3R_5s^4 + C_2C_3L_3R_2R_3R_5s^3 + 2C_2C_5L_2L_3L_5R_2R_3g_ms^5 + C_2C$$

**10.736 INVALID-ORDER-736** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2+L_3s+R_3\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C_2R_2R_5s + R_2R_5g_m -\right.}{2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 2C_2L_2L_3R_2g_ms^3 + 4C_2L_2L_3s^3 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2 + C_2L_2R_2s^2 + 4C_2L_2R_3s^2 + C_2L_2R_5s^2 + 4C_2$$

**10.737 INVALID-ORDER-737** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2+L_3s+R_3\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2s^2 + C_2R_2s\right.}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_3s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4C_2C_5L_3R_2s^3 + 4C$$

**10.738 INVALID-ORDER-738** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + 4C_2C_3C_5L_3R_2R_3R_5s^4 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + 2C_2C_5L_2L_3$$

**10.739 INVALID-ORDER-739** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2+L_3s+R_3\right.}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + 2C_2C$$

**10.740 INVALID-ORDER-740** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ L_5s+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{\left(C_3L_3R_3s^2+L_3s+R_3\right.}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_3R_2s^3 + 2C_2C_5L_2L_3R_2g_ms^4 + 4C_2C_5L_2L_3s^4 + C_2C_5L$$

**10.741 INVALID-ORDER-741** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + 4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_3L_5R_2s^4 + 4C_2C_3L_3R_2R_3s^3 + 2C_2C_5L_2L_3L$$

**10.742 INVALID-ORDER-742** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1}+R_3,\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2$$

**10.743 INVALID-ORDER-743** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5s^6 + 4C_2C_3C_5L_2L_3L_5R_3R_5s^6 + 4C_2C_3C_5L_3L_5R_2R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_2R_5g_ms^5 + C_2C_3L_2L_3L_5R_2s^5 + 4C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3L_5R_5s^5 + 2C_2C_3L_2L_3R_2R_3R_5g_ms^$$

**10.744 INVALID-ORDER-744** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{L_5s}{C_5L_5s^2+1} + R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R$$

**10.745 INVALID-ORDER-745** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{L_3s}{C_3L_3s^2+1} + R_3,\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + 4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 +$$

**10.746 INVALID-ORDER-746** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ R_5,\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(C_2L_2R_2R_5g_ms^2 - C_2L_2R_2s^2 + C_2L_2R_5s^2 + C}{2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C_2C_3L_2R_2R_3s^3 + C_2C_3L_2R_3R_5s^3 + 4C_2C_3L_3R_2R_3s^3 + C_2C_3L_3R_2R_5s^3 + C_2C_3R_2R_3R_5s^2 + 2C_2L_2R_2R_3g_ms^2 + C_2L_2R_2R_5g_ms^2$$

**10.747 INVALID-ORDER-747** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{R_3\left(C_3L_3s^2+1\right)\left(-C_2C_5L_2R_2s^3 + C_2L_2R_2g_ms^2 + C_2L_2}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3L_2L_3R_2g_ms^4 + C_2C_3L_2L_3s^4 + C_2C_3L_2R_2R_3g_ms^3 + C_2C_3L_2R_3s^3 + C_2C_3L_3R_2s^3 + C_2C_3R_2R_3s^2 + 2C_2C_5L_2R_2R_3g_ms^3 + C_2C_5L_2R_2s^3 + 4$$

**10.748 INVALID-ORDER-748** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5}{C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_2R_2R_3R_5s^4 + 4C_2C_3C_5L_3R_2R_3R_5s^4 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2R_5g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_3R_5s^4 + C_2C_3L_2R_2R_3R_5g_ms^3 + C$$

**10.749 INVALID-ORDER-749** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ R_5 + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_2R_3R_5s^4 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_3R_2R_5s^4 + C_2C_3C_5R_2R_3R_5s^3 + C_2C_3L$$

**10.750 INVALID-ORDER-750** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s + \frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3s^4 + C_2C_3C_5L_3L_5R_2s^5 + 4C_2C_3C_5L_3R_2R_3s^4 + C_2C_3C_5L_5R_2R_3s^4 + C_2C_3L_2$$

**10.751 INVALID-ORDER-751** $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_5R_2R_3s^5 + 4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3L_2L_3L_5R_2g_ms^5 + C_2C_3L_2L_3L_5s^5 + 2C_2C_3L_2L_3R_2R_3g_ms^4 + C_2C_3L_2L_3R_2s^4 + 4C_2C_3L_2L_3R_3s^4 + C_2C_3L_2L_5R_2R_3g_ms^4 + C_2$$

### 10.752 INVALID-ORDER-752 $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ L_5s+R_5+\frac{1}{C_5s},\ \infty\right)$

$$H(s) = \frac{}{C_2C_3C_5L_2L_3L_5R_2g_ms^6 + C_2C_3C_5L_2L_3L_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3g_ms^5 + C_2C_3C_5L_2L_3R_2R_5g_ms^5 + C_2C_3C_5L_2L_3R_2s^5 + 4C_2C_3C_5L_2L_3R_3s^5 + C_2C_3C_5L_2L_3R_5s^5 + C_2C_3C_5L_2L_5R_2R_3g_ms^5 + C_2C_3C_5L_2L_5R_3s^5 + C_2C_3C_5L_2R_2R_3R_5g_ms^4 + C_2C_3C_5L_2R_2R_3s^4}$$

### 10.753 INVALID-ORDER-753 $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5R_5s}{C_5L_5R_5s^2+L_5s+R_5},\ \infty\right)$

$$H(s) = -\frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5s^6 + 4C_2C_3C_5L_2L_3L_5R_3R_5s^6 + C_2C_3C_5L_2L_5R_2R_3R_5s^5 + 4C_2C_3C_5L_3L_5R_2R_3R_5s^5 + 2C_2C_3L_2L_3L_5R_2R_3g_ms^5 + C_2C_3L_2L_3L_5R_2R_5g_ms^5 + C_2C_3L_2L_3L_5R_2s^5 + 4C_2C_3L_2L_3L_5R_3s^5 + C_2C_3L_2L_3L_5R_5s^5}$$

### 10.754 INVALID-ORDER-754 $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{L_5s}{C_5L_5s^2+1}+R_5,\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3s^5 + C_2C_3C_5L_2L_5R_3R_5s^5 + 4C_2C_3C_5L_3L_5R_2R_3s^5 + C_2C_3C_5L_3L_5R_2R_5s^5 + C$$

### 10.755 INVALID-ORDER-755 $Z(s) = \left(\infty,\ \frac{R_2\left(C_2L_2s^2+1\right)}{C_2L_2s^2+C_2R_2s+1},\ \frac{R_3\left(C_3L_3s^2+1\right)}{C_3L_3s^2+C_3R_3s+1},\ \infty,\ \frac{R_5\left(C_5L_5s^2+1\right)}{C_5L_5s^2+C_5R_5s+1},\ \infty\right)$

$$H(s) = \frac{}{2C_2C_3C_5L_2L_3L_5R_2R_3g_ms^6 + C_2C_3C_5L_2L_3L_5R_2R_5g_ms^6 + C_2C_3C_5L_2L_3L_5R_2s^6 + 4C_2C_3C_5L_2L_3L_5R_3s^6 + C_2C_3C_5L_2L_3L_5R_5s^6 + 2C_2C_3C_5L_2L_3R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_3R_2R_5s^5 + 4C_2C_3C_5L_2L_3R_3R_5s^5 + C_2C_3C_5L_2L_5R_2R_3R_5g_ms^5 + C_2C_3C_5L_2L_5R_2R_3$$

## 11 PolynomialError