Filter Summary Report: VLSI,CMMF,Automated,NA,Z1,Z3,Z4,Z5,Z6

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Contents

1 Examined $H(z)$ for VLSI CMMF Automated NA Z1 Z3 Z4 Z5 Z6: $\frac{Z_1 Z_4 Z_6}{-Z_3 Z_4+Z_3 Z_5+Z_4 Z_5}$

$$H(z) = \frac{Z_1 Z_4 Z_6}{-Z_3 Z_4 + Z_3 Z_5 + Z_4 Z_5}$$

2 AP

3 BP

3.1 BP-1 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{-C_5 C_6 R_3 R_4 R_6 s^2 + R_3 + R_4 + s\left(-C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}}{C_5 R_3 R_4 - C_6 R_3 R_6 - C_6 R_4 R_6}$
wo: $\frac{\sqrt{-R_3-R_4}}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}}$
bandwidth: $-\frac{i\sqrt{-R_3-R_4}(C_5 R_3 R_4 - C_6 R_3 R_6 - C_6 R_4 R_6)}{C_5 C_6 R_3 R_4 R_6 \sqrt{R_3+R_4}}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_5 R_1 R_4 R_6}{C_5 R_3 R_4 - C_6 R_3 R_6 - C_6 R_4 R_6}$
Qz: None
Wz: None

3.2 BP-2 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2\left(-C_5 C_6 R_3 R_4 R_6 + C_5 C_6 R_3 R_5 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s\left(-C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5 + C_6 R_3 R_6 + C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}R_3 R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}} - \sqrt{C_5}\sqrt{C_6}R_3 R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}} - \sqrt{C_5}\sqrt{C_6}R_4 R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}}}{C_5 R_3 R_4 - C_5 R_3 R_5 - C_5 R_4 R_5 - C_6 R_3 R_6 - C_6 R_4 R_6}$
wo: $\sqrt{\frac{-R_3-R_4}{C_5 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3-R_4}{C_5 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}(C_5 R_3 R_4 - C_5 R_3 R_5 - C_5 R_4 R_5 - C_6 R_3 R_6 - C_6 R_4 R_6)}{\sqrt{C_5}\sqrt{C_6}R_3 R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}} - \sqrt{C_5}\sqrt{C_6}R_3 R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}} - \sqrt{C_5}\sqrt{C_6}R_4 R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3 R_4+R_3 R_5+R_4 R_5}}}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_5 R_1 R_4 R_6}{C_5 R_3 R_4 - C_5 R_3 R_5 - C_5 R_4 R_5 - C_6 R_3 R_6 - C_6 R_4 R_6}$
Qz: None
Wz: None

3.3 BP-3 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{s^2\left(C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6\right) + s\left(C_4 R_3 - C_5 R_3 + C_6 R_6\right) + 1}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}}}{C_4 R_3 - C_5 R_3 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}$
bandwidth: $\frac{(C_4 R_3 - C_5 R_3 + C_6 R_6)\sqrt{\frac{1}{C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0

K-BP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3 + C_6 R_6}$
Qz: None
Wz: None

3.4 BP-4 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{C_4 C_5 R_3 R_5 s^2 + s\left(C_4 R_3 - C_5 R_3 + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}{C_4 R_3 - C_5 R_3 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_4 R_3 - C_5 R_3 + C_5 R_5}{C_4 C_5 R_3 R_5}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3 + C_5 R_5}$
Qz: None
Wz: None

3.5 BP-5 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2\left(C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6\right) + s\left(C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}$
bandwidth: $\frac{\sqrt{R_3+R_4}\left(C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6\right)\sqrt{\frac{1}{C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
Qz: None
Wz: None

3.6 BP-6 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{C_4 C_5 R_3 R_4 R_5 s^2 + R_3 + R_4 + s\left(C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_4 C_5 R_3 R_4 R_5}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
Qz: None
Wz: None

3.7 BP-7 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_4 R_6 s}{C_3 C_6 R_4 R_5 R_6 s^2 - R_4 + R_5 + s\left(C_3 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_4+R_5}}{C_3 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_3 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}{C_3 C_6 R_4 R_5 R_6}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 R_1 R_4 R_6}{C_3 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
Qz: None
Wz: None

3.8 BP-8 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_3 C_5 C_6 R_4 R_5 s^2 + C_6 + s\left(C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5}$
Qz: None
Wz: None

3.9 BP-9 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_6 s}{s^2\left(C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6\right) + s\left(C_3 R_5 + C_4 R_5 - C_6 R_6\right) - 1}$$

Parameters:

Q: $\frac{i\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}}{C_3 R_5 + C_4 R_5 - C_6 R_6}$
wo: $\frac{i}{\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 R_5 + C_4 R_5 - C_6 R_6}{\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 R_1 R_6}{C_3 R_5 + C_4 R_5 - C_6 R_6}$
Qz: None
Wz: None

3.10 BP-10 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^2\left(C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6\right) + s\left(C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
K-LP: 0

K-HP: 0
K-BP: $\frac{C_3C_5R_1R_6}{C_3C_5R_5+C_3C_6R_6+C_4C_5R_5+C_4C_6R_6-C_5C_6R_6}$
Qz: None
Wz: None

3.11 BP-11 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{-R_4+R_5+s^2\left(C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6\right)+s\left(C_3R_4R_5+C_4R_4R_5-C_6R_4R_6+C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_3R_4R_5+C_4R_4R_5-C_6R_4R_6+C_6R_5R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6}}$
bandwidth: $\frac{C_3R_4R_5+C_4R_4R_5-C_6R_4R_6+C_6R_5R_6}{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3R_1R_4R_6}{C_3R_4R_5+C_4R_4R_5-C_6R_4R_6+C_6R_5R_6}$
Qz: None
Wz: None

3.12 BP-12 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6+s^2\left(C_3C_5C_6R_4R_5+C_4C_5C_6R_4R_5\right)+s\left(C_3C_6R_4+C_4C_6R_4-C_5C_6R_4+C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_4+C_4R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_4+C_4C_6R_4-C_5C_6R_4+C_5C_6R_5}$
Qz: None
Wz: None

3.13 BP-13 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{-R_4+R_5+s^2\left(-C_3C_6R_3R_4R_6+C_3C_6R_3R_5R_6+C_3C_6R_4R_5R_6\right)+s\left(-C_3R_3R_4+C_3R_3R_5+C_3R_4R_5-C_6R_4R_6+C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6}$
wo: $\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6-C_3C_6R_3R_5R_6-C_3C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6-C_3C_6R_3R_5R_6-C_3C_6R_4R_5R_6}}\left(C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6\right)}{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6}$
Qz: None
Wz: None

3.14 BP-14 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{-C_3 C_5 C_6 R_3 R_4 s^2 + C_6 + s\left(C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3 R_3 + C_3 R_4 - C_5 R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3 R_3 + C_3 R_4 - C_5 R_4}{C_3 C_5 R_3 R_4}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4}$
Qz: None
Wz: None

3.15 BP-15 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_6 + s^2\left(-C_3 C_5 C_6 R_3 R_4 + C_3 C_5 C_6 R_3 R_5 + C_3 C_5 C_6 R_4 R_5\right) + s\left(C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5} R_3 R_4 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5} R_3 R_5 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5} R_4 R_5 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}{C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_3 C_5 R_3 R_4 - C_3 C_5 R_3 R_5 - C_3 C_5 R_4 R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3 C_5 R_3 R_4 - C_3 C_5 R_3 R_5 - C_3 C_5 R_4 R_5}}\left(C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5\right)}{-\sqrt{C_3}\sqrt{C_5} R_3 R_4 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5} R_3 R_5 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5} R_4 R_5 \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5}$
Qz: None
Wz: None

3.16 BP-16 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_6 s}{C_3 C_4 R_3 R_5 s^2 + s\left(-C_3 R_3 + C_3 R_5 + C_4 R_5\right) - 1}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 - C_3 R_5 - C_4 R_5}{C_3 C_4 R_3 R_5}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_6}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
Qz: None
Wz: None

3.17 BP-17 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s + 1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^2\left(C_3 C_4 C_6 R_3 R_6 - C_3 C_5 C_6 R_3 R_6\right) + s\left(C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_6 R_6 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3} C_4 \sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4 - C_5} + \frac{C_4}{C_4 - C_5} - \frac{C_5}{C_4 - C_5}} - \sqrt{C_3} C_5 \sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4 - C_5} + \frac{C_4}{C_4 - C_5} - \frac{C_5}{C_4 - C_5}}}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_6 R_6 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\sqrt{\frac{C_3 + C_4 - C_5}{C_3 C_4 C_6 R_3 R_6 - C_3 C_5 C_6 R_3 R_6}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_3R_6-C_3C_5C_6R_3R_6}}(C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6)}{\sqrt{C_3}C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_6}{C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6}$
Qz: None
Wz: None

3.18 BP-18 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_3C_4C_5R_3R_5s^2 + C_3 + C_4 - C_5 + s\left(C_3C_4R_3 - C_3C_5R_3 + C_3C_5R_5 + C_4C_5R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3C_4R_3-C_3C_5R_3+C_3C_5R_5+C_4C_5R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_3C_4R_3-C_3C_5R_3+C_3C_5R_5+C_4C_5R_5}{C_3C_4C_5R_3R_5}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_6}{C_3C_4R_3-C_3C_5R_3+C_3C_5R_5+C_4C_5R_5}$
Qz: None
Wz: None

3.19 BP-19 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_3C_4R_3R_4R_5s^2 - R_4 + R_5 + s\left(-C_3R_3R_4 + C_3R_3R_5 + C_3R_4R_5 + C_4R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}{C_3C_4R_3R_4R_5}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}$
Qz: None
Wz: None

3.20 BP-20 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s^2\left(C_3C_4C_6R_3R_4 - C_3C_5C_6R_3R_4\right) + s\left(C_3C_6R_3 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4+C_4C_6R_4-C_5C_6R_4}$
Qz: None
Wz: None

3.21 BP-21 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^2 \left(C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 - C_5}}}{C_3 R_4 - C_5 R_4 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\left(C_3 R_4 - C_5 R_4 + C_6 R_6\right) \sqrt{\frac{1}{C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}}{C_3 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 - C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6}$
Qz: None
Wz: None

3.22 BP-22 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 C_3 C_5 R_4 R_5 s^2 + C_1 + s \left(C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3} \sqrt{C_5} \sqrt{R_4} \sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3} \sqrt{C_5} \sqrt{R_4} \sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5}$
Qz: None
Wz: None

3.23 BP-23 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^2 \left(C_1 C_3 C_6 R_4 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}} + C_4 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\left(C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6\right) \sqrt{\frac{1}{C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}}{C_3 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}} + C_4 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_4} \sqrt{R_6} \sqrt{\frac{1}{C_3 + C_4 - C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6}$
Qz: None
Wz: None

3.24 BP-24 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^2 \left(C_1 C_3 C_5 R_4 R_5 + C_1 C_4 C_5 R_4 R_5\right) + s \left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5} \sqrt{R_4} \sqrt{R_5} \sqrt{C_3 + C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$

wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_4+C_1C_4R_4-C_1C_5R_4+C_1C_5R_5}$
Qz: None
Wz: None

3.25 BP-25 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_4R_6s}{-C_1C_3C_5R_3R_4s^2 + C_1 + s\left(C_1C_3R_3 + C_1C_3R_4 - C_1C_5R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_3+C_1C_3R_4-C_1C_5R_4}$
Qz: None
Wz: None

3.26 BP-26 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_4R_6s}{C_1 + s^2\left(-C_1C_3C_5R_3R_4 + C_1C_3C_5R_3R_5 + C_1C_3C_5R_4R_5\right) + s\left(C_1C_3R_3 + C_1C_3R_4 - C_1C_5R_4 + C_1C_5R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}(C_3R_3+C_3R_4-C_5R_4+C_5R_5)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_3+C_1C_3R_4-C_1C_5R_4+C_1C_5R_5}$
Qz: None
Wz: None

3.27 BP-27 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_4R_6s}{C_1 + s^2\left(C_1C_3C_4R_3R_4 - C_1C_3C_5R_3R_4\right) + s\left(C_1C_3R_3 + C_1C_3R_4 + C_1C_4R_4 - C_1C_5R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_3+C_1C_3R_4+C_1C_4R_4-C_1C_5R_4}$
Qz: None
Wz: None

3.28 BP-28 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{-C_1 C_5 R_1 R_3 R_4 s^2 + R_3 + R_4 + s\left(C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4}$
wo: $\frac{\sqrt{-R_3-R_4}}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $\frac{i\sqrt{-R_3-R_4}(C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4)}{C_1 C_5 R_1 R_3 R_4 \sqrt{R_3+R_4}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4}$
Qz: None
Wz: None

3.29 BP-29 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2\left(-C_1 C_5 R_1 R_3 R_4 + C_1 C_5 R_1 R_3 R_5 + C_1 C_5 R_1 R_4 R_5\right) + s\left(C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3 R_4\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_4R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_3 + C_1R_1R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5}$
wo: $\sqrt{\frac{-R_3-R_4}{C_1C_5R_1R_3R_4 - C_1C_5R_1R_3R_5 - C_1C_5R_1R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_3-R_4}{C_1C_5R_1R_3R_4 - C_1C_5R_1R_3R_5 - C_1C_5R_1R_4R_5}}(C_1R_1R_3 + C_1R_1R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5)}{-\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_4\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_4R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5R_1R_4R_6}{C_1R_1R_3 + C_1R_1R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5}$
Qz: None
Wz: None

3.30 BP-30 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{s^2\left(C_1 C_4 R_1 R_3 - C_1 C_5 R_1 R_3\right) + s\left(C_1 R_1 + C_4 R_3 - C_5 R_3\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}{C_1R_1 + C_4R_3 - C_5R_3}$
wo: $\sqrt{\frac{1}{C_1C_4R_1R_3 - C_1C_5R_1R_3}}$
bandwidth: $\frac{(C_1R_1 + C_4R_3 - C_5R_3)\sqrt{\frac{1}{C_1C_4R_1R_3 - C_1C_5R_1R_3}}}{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5R_1R_6}{C_1R_1 + C_4R_3 - C_5R_3}$
Qz: None
Wz: None

3.31 BP-31 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2\left(C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4\right) + s\left(C_1 R_1 R_3 + C_1 R_1 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_4R_3R_4-C_5R_3R_4}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1R_1R_3+C_1R_1R_4+C_4R_3R_4-C_5R_3R_4)\sqrt{\frac{1}{C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_5R_1R_4R_6}{C_1R_1R_3+C_1R_1R_4+C_4R_3R_4-C_5R_3R_4}$
Qz: None
Wz: None

3.32 BP-32 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_1C_3R_1R_4R_5s^2 - R_4 + R_5 + s\left(-C_1R_1R_4 + C_1R_1R_5 + C_3R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5}{C_1C_3R_1R_4R_5}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3R_1R_4R_6}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5}$
Qz: None
Wz: None

3.33 BP-33 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s^2\left(C_1C_3C_6R_1R_4 - C_1C_5C_6R_1R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_4 - C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_1R_1+C_3R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_1C_3R_1R_4-C_1C_5R_1R_4}}$
bandwidth: $\frac{(C_1R_1+C_3R_4-C_5R_4)\sqrt{\frac{1}{C_1C_3R_1R_4-C_1C_5R_1R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_4}{C_1C_6R_1+C_3C_6R_4-C_5C_6R_4}$
Qz: None
Wz: None

3.34 BP-34 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_6s}{s^2\left(C_1C_3R_1R_5 + C_1C_4R_1R_5\right) + s\left(-C_1R_1 + C_3R_5 + C_4R_5\right) - 1}$$

Parameters:

Q: $-\frac{i\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}}{C_1R_1-C_3R_5-C_4R_5}$
wo: $\frac{i}{\sqrt{C_1C_3R_1R_5+C_1C_4R_1R_5}}$
bandwidth: $-\frac{C_1R_1-C_3R_5-C_4R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_5+C_1C_4R_1R_5}}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3R_1R_6}{C_1R_1-C_3R_5-C_4R_5}$
Qz: None

Wz: None

3.35 BP-35 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^2\left(C_1C_3C_6R_1R_6 + C_1C_4C_6R_1R_6 - C_1C_5C_6R_1R_6\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_6R_6 + C_4C_6R_6 - C_5C_6R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}{C_1R_1+C_6R_6}$
wo: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$
bandwidth: $\frac{C_1R_1+C_6R_6}{C_1C_6R_1R_6}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_6}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6}$
Qz: None
Wz: None

3.36 BP-36 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^2\left(C_1C_3C_5R_1R_5 + C_1C_4C_5R_1R_5\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_5R_5 + C_4C_5R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_5R_5+C_4C_5R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_1C_3C_5R_1R_5+C_1C_4C_5R_1R_5}}$
bandwidth: $\frac{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_5R_5+C_4C_5R_5}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3C_5R_1R_5+C_1C_4C_5R_1R_5}}$
K-LP: 0
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_6}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_5R_5+C_4C_5R_5}$
Qz: None
Wz: None

3.37 BP-37 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{-R_4 + R_5 + s^2\left(C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 + C_3R_4R_5 + C_4R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$
bandwidth: $-\frac{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$
K-LP: 0
K-HP: 0
K-BP: $-\frac{C_3R_1R_4R_6}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}$
Qz: None
Wz: None

3.38 BP-38 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s^2\left(C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1R_1+C_3R_4+C_4R_4-C_5R_4}$

wo: $\sqrt{\frac{1}{C_1C_3R_1R_4+C_1C_4R_1R_4-C_1C_5R_1R_4}}$

bandwidth: $\frac{(C_1R_1+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_1C_3R_1R_4+C_1C_4R_1R_4-C_1C_5R_1R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_4}{C_1C_6R_1+C_3C_6R_4+C_4C_6R_4-C_5C_6R_4}$

Qz: None

Wz: None

3.39 BP-39 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{-R_4+R_5+s^2\left(-C_1C_3R_1R_3R_4+C_1C_3R_1R_3R_5+C_1C_3R_1R_4R_5\right)+s\left(-C_1R_1R_4+C_1R_1R_5-C_3R_3R_4+C_3R_3R_5+C_3R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5}$

wo: $\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}(C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5)}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: 0

K-HP: 0

K-BP: $-\frac{C_3R_1R_4R_6}{C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5}$

Qz: None

Wz: None

3.40 BP-40 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_3+C_4-C_5+s^2\left(C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3\right)+s\left(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3)}{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$

K-LP: 0

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_6}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3}$

Qz: None

Wz: None

4 BP-UNSTABLE-ZERO

5 BS

6 GE

7 HP

7.1 HP-1 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^2\left(C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6\right) + s\left(C_3 R_4 - C_5 R_4 + C_6 R_6\right) + 1}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}}}{C_3 R_4 - C_5 R_4 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\left(C_3 R_4 - C_5 R_4 + C_6 R_6\right)\sqrt{\frac{1}{C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 - C_5 C_6}$
K-BP: 0
Qz: None
Wz: None

7.2 HP-2 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{C_3 C_5 R_4 R_5 s^2 + s\left(C_3 R_4 - C_5 R_4 + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: 0
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: 0
Qz: None
Wz: None

7.3 HP-3 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^2\left(C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6\right) + s\left(C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6\right) + 1}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\left(C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6\right)\sqrt{\frac{1}{C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6}}}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-BP: 0
Qz: None
Wz: None

7.4 HP-4 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^2\left(C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5\right) + s\left(C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$

wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: 0
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: 0
Qz: None
Wz: None

7.5 HP-5 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{-C_3C_5R_3R_4s^2 + s\left(C_3R_3+C_3R_4-C_5R_4\right)+1}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$
K-LP: 0
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: 0
Qz: None
Wz: None

7.6 HP-6 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^2\left(-C_3C_5R_3R_4+C_3C_5R_3R_5+C_3C_5R_4R_5\right)+s\left(C_3R_3+C_3R_4-C_5R_4+C_5R_5\right)+1}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}\left(C_3R_3+C_3R_4-C_5R_4+C_5R_5\right)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: 0
Qz: None
Wz: None

7.7 HP-7 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^2\left(C_3C_4R_3R_4-C_3C_5R_3R_4\right)+s\left(C_3R_3+C_3R_4+C_4R_4-C_5R_4\right)+1}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$
bandwidth: $\frac{\left(C_3R_3+C_3R_4+C_4R_4-C_5R_4\right)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$
K-BP: 0
Qz: None
Wz: None

7.8 HP-8 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^2\left(C_1C_3R_1R_4 - C_1C_5R_1R_4\right) + s\left(C_1R_1 + C_3R_4 - C_5R_4\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_1R_1+C_3R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_1C_3R_1R_4-C_1C_5R_1R_4}}$
bandwidth: $\frac{(C_1R_1+C_3R_4-C_5R_4)\sqrt{\frac{1}{C_1C_3R_1R_4-C_1C_5R_1R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$
K-BP: 0
Qz: None
Wz: None

7.9 HP-9 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^2\left(C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4\right) + s\left(C_1R_1 + C_3R_4 + C_4R_4 - C_5R_4\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1R_1+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_1C_3R_1R_4+C_1C_4R_1R_4-C_1C_5R_1R_4}}$
bandwidth: $\frac{(C_1R_1+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_1C_3R_1R_4+C_1C_4R_1R_4-C_1C_5R_1R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-BP: 0
Qz: None
Wz: None

8 LP

8.1 LP-1 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{R_1R_6}{C_4C_6R_3R_5R_6s^2 - R_3 + R_5 + s\left(C_4R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_3+R_5}}{C_4R_3R_5-C_6R_3R_6+C_6R_5R_6}$
wo: $\frac{\sqrt{-R_3+R_5}}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_4R_3R_5-C_6R_3R_6+C_6R_5R_6}{C_4C_6R_3R_5R_6}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.2 LP-2 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1}{C_4 C_5 C_6 R_3 R_5 s^2 + C_6 + s\left(C_4 C_6 R_3 - C_5 C_6 R_3 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}{C_4 R_3 - C_5 R_3 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_4 R_3 - C_5 R_3 + C_5 R_5}{C_4 C_5 R_3 R_5}$
K-LP: $\frac{C_5 R_1}{C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.3 LP-3 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{R_1 R_4 R_6}{C_4 C_6 R_3 R_4 R_5 R_6 s^2 - R_3 R_4 + R_3 R_5 + R_4 R_5 + s\left(C_4 R_3 R_4 R_5 - C_6 R_3 R_4 R_6 + C_6 R_3 R_5 R_6 + C_6 R_4 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_3 R_4 + R_3 R_5 + R_4 R_5}}{C_4 R_3 R_4 R_5 - C_6 R_3 R_4 R_6 + C_6 R_3 R_5 R_6 + C_6 R_4 R_5 R_6}$
wo: $\frac{\sqrt{-R_3 R_4 + R_3 R_5 + R_4 R_5}}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_4 R_3 R_4 R_5 - C_6 R_3 R_4 R_6 + C_6 R_3 R_5 R_6 + C_6 R_4 R_5 R_6}{C_4 C_6 R_3 R_4 R_5 R_6}$
K-LP: $-\frac{R_1 R_4 R_6}{R_3 R_4 - R_3 R_5 - R_4 R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.4 LP-4 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4}{C_4 C_5 C_6 R_3 R_4 R_5 s^2 + C_6 R_3 + C_6 R_4 + s\left(C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3 + R_4}}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_3 + R_4}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_4 C_5 R_3 R_4 R_5}$
K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.5 LP-5 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1}{C_3 C_4 C_6 R_3 R_5 s^2 - C_6 + s\left(-C_3 C_6 R_3 + C_3 C_6 R_5 + C_4 C_6 R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 - C_3 R_5 - C_4 R_5}{C_3 C_4 R_3 R_5}$

K-LP: $-\frac{C_3 R_1}{C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.6 LP-6 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1}{C_3 C_4 C_5 C_6 R_3 R_5 s^2 + C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3 + C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}{C_3 C_4 C_5 R_3 R_5}$
K-LP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.7 LP-7 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1 R_4}{C_3 C_4 C_6 R_3 R_4 R_5 s^2 - C_6 R_4 + C_6 R_5 + s\left(-C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5}{C_3 C_4 R_3 R_4 R_5}$
K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.8 LP-8 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_6}{-C_1 C_5 C_6 R_3 R_4 R_6 s^2 + C_1 R_3 + C_1 R_4 + s\left(-C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}}{C_5 R_3 R_4 - C_6 R_3 R_6 - C_6 R_4 R_6}$
wo: $\frac{\sqrt{-R_3-R_4}}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}}$
bandwidth: $-\frac{i\sqrt{-R_3-R_4}(C_5 R_3 R_4 - C_6 R_3 R_6 - C_6 R_4 R_6)}{C_5 C_6 R_3 R_4 R_6\sqrt{R_3+R_4}}$
K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.9 LP-9 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^2 \left(-C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_5}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_5}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_5R_3R_4 - C_5R_3R_5 - C_5R_4R_5 - C_6R_3R_6 - C_6R_4R_6}$

wo: $\sqrt{\frac{-R_3-R_4}{C_5C_6R_3R_4R_6 - C_5C_6R_3R_5R_6 - C_5C_6R_4R_5R_6}}$

bandwidth: $\frac{\sqrt{\frac{-R_3-R_4}{C_5C_6R_3R_4R_6 - C_5C_6R_3R_5R_6 - C_5C_6R_4R_5R_6}}\left(C_5R_3R_4 - C_5R_3R_5 - C_5R_4R_5 - C_6R_3R_6 - C_6R_4R_6\right)}{\sqrt{C_5}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_5}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_5}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.10 LP-10 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_6}{C_1 + s^2 \left(C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s \left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}}}{C_4R_3 - C_5R_3 + C_6R_6}$

wo: $\sqrt{\frac{1}{C_4C_6R_3R_6 - C_5C_6R_3R_6}}$

bandwidth: $\frac{\left(C_4R_3 - C_5R_3 + C_6R_6\right)\sqrt{\frac{1}{C_4C_6R_3R_6 - C_5C_6R_3R_6}}}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_4-C_5}}}$

K-LP: $\frac{C_5R_6}{C_1}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.11 LP-11 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_6}{C_1 C_4 C_5 R_3 R_5 s^2 + C_1 + s \left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}{C_4R_3 - C_5R_3 + C_5R_5}$

wo: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

bandwidth: $\frac{C_4R_3 - C_5R_3 + C_5R_5}{C_4C_5R_3R_5}$

K-LP: $\frac{C_5R_6}{C_1}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.12 LP-12 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^2 \left(C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6)\sqrt{\frac{1}{C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.13 LP-13 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5R_4R_6}{C_1C_4C_5R_3R_4R_5s^2 + C_1R_3 + C_1R_4 + s\left(C_1C_4R_3R_4 - C_1C_5R_3R_4 + C_1C_5R_3R_5 + C_1C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{C_4C_5R_3R_4R_5}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.14 LP-14 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_4R_6}{C_1C_3C_6R_4R_5R_6s^2 - C_1R_4 + C_1R_5 + s\left(C_1C_3R_4R_5 - C_1C_6R_4R_6 + C_1C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_4+R_5}}{C_3R_4R_5-C_6R_4R_6+C_6R_5R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_3R_4R_5-C_6R_4R_6+C_6R_5R_6}{C_3C_6R_4R_5R_6}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.15 LP-15 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5+\frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5R_4}{C_1C_3C_5C_6R_4R_5s^2 + C_1C_6 + s\left(C_1C_3C_6R_4 - C_1C_5C_6R_4 + C_1C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_4-C_5R_4+C_5R_5}{C_3C_5R_4R_5}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.16 LP-16 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_6}{-C_1 + s^2\left(C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}}{C_3 R_5 + C_4 R_5 - C_6 R_6}$
wo: $\frac{i}{\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 R_5 + C_4 R_5 - C_6 R_6}{\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.17 LP-17 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(C_1 C_3 C_5 C_6 R_5 R_6 + C_1 C_4 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 C_5 R_5 + C_1 C_3 C_6 R_6 + C_1 C_4 C_5 R_5 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.18 LP-18 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_3 R_4 R_5 + C_4 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{C_3 R_4 R_5 + C_4 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6}}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.19 LP-19 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4}{C_1 C_6 + s^2\left(C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$
bandwidth: $\frac{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$

K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.20 LP-20 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3R_4R_6}{-C_1R_4 + C_1R_5 + s^2\left(-C_1C_3C_6R_3R_4R_6 + C_1C_3C_6R_3R_5R_6 + C_1C_3C_6R_4R_5R_6\right) + s\left(-C_1C_3R_3R_4 + C_1C_3R_3R_5 + C_1C_3R_4R_5 - C_1C_6R_4R_6 + C_1C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3R_4 - C_3R_3R_5 - C_3R_4R_5 + C_6R_4R_6 - C_6R_5R_6}$
wo: $\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6 - C_3C_6R_3R_5R_6 - C_3C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6 - C_3C_6R_3R_5R_6 - C_3C_6R_4R_5R_6}}\left(C_3R_3R_4 - C_3R_3R_5 - C_3R_4R_5 + C_6R_4R_6 - C_6R_5R_6\right)}{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4 - C_1R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.21 LP-21 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5R_4}{-C_1C_3C_5C_6R_3R_4s^2 + C_1C_6 + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 - C_1C_5C_6R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3 + C_3R_4 - C_5R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3R_3 + C_3R_4 - C_5R_4}{C_3C_5R_3R_4}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.22 LP-22 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5R_4}{C_1C_6 + s^2\left(-C_1C_3C_5C_6R_3R_4 + C_1C_3C_5C_6R_3R_5 + C_1C_3C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 - C_1C_5C_6R_4 + C_1C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3 + C_3R_4 - C_5R_4 + C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4 - C_3C_5R_3R_5 - C_3C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4 - C_3C_5R_3R_5 - C_3C_5R_4R_5}}\left(C_3R_3 + C_3R_4 - C_5R_4 + C_5R_5\right)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.23 LP-23 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_6}{C_1 C_3 C_4 R_3 R_5 s^2 - C_1 + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 - C_3 R_5 - C_4 R_5}{C_3 C_4 R_3 R_5}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.24 LP-24 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(C_1 C_3 C_4 C_6 R_3 R_6 - C_1 C_3 C_5 C_6 R_3 R_6\right) + s\left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3 + C_1 C_3 C_6 R_6 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}{C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6}$
wo: $\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_3R_6-C_3C_5C_6R_3R_6}}$
bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_3R_6-C_3C_5C_6R_3R_6}}(C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6)}{\sqrt{C_3}C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.25 LP-25 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 C_4 C_5 R_3 R_5 s^2 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3 + C_1 C_3 C_5 R_5 + C_1 C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3C_4R_3-C_3C_5R_3+C_3C_5R_5+C_4C_5R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_3C_4R_3-C_3C_5R_3+C_3C_5R_5+C_4C_5R_5}{C_3C_4C_5R_3R_5}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.26 LP-26 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_4 R_6}{C_1 C_3 C_4 R_3 R_4 R_5 s^2 - C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$

bandwidth: $-\frac{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}{C_3C_4R_3R_4R_5}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.27 LP-27 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5R_4}{C_1C_6 + s^2\left(C_1C_3C_4C_6R_3R_4 - C_1C_3C_5C_6R_3R_4\right) + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 + C_1C_4C_6R_4 - C_1C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.28 LP-28 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(-C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}{C_1R_1+C_6R_6}$
wo: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$
bandwidth: $\frac{C_1R_1+C_6R_6}{C_1C_6R_1R_6}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.29 LP-29 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5R_1R_4}{-C_1C_5C_6R_1R_3R_4s^2 + C_6R_3 + C_6R_4 + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 - C_5C_6R_3R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}}{C_1R_1R_3+C_1R_1R_4-C_5R_3R_4}$
wo: $\frac{\sqrt{-R_3-R_4}}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $\frac{i\sqrt{-R_3-R_4}(C_1R_1R_3+C_1R_1R_4-C_5R_3R_4)}{C_1C_5R_1R_3R_4\sqrt{R_3+R_4}}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.30 LP-30 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s^2 \left(-C_1 C_5 C_6 R_1 R_3 R_4 + C_1 C_5 C_6 R_1 R_3 R_5 + C_1 C_5 C_6 R_1 R_4 R_5\right) + s \left(C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3 R_4\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_4R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_3+C_1R_1R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$

wo: $\sqrt{\frac{-R_3-R_4}{C_1C_5R_1R_3R_4-C_1C_5R_1R_3R_5-C_1C_5R_1R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_3-R_4}{C_1C_5R_1R_3R_4-C_1C_5R_1R_3R_5-C_1C_5R_1R_4R_5}}(C_1R_1R_3+C_1R_1R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5)}{-\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_4\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_3R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}R_4R_5\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.31 LP-31 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_1 R_6}{C_1 C_4 R_1 R_3 R_5 s^2 - R_3 + R_5 + s \left(-C_1 R_1 R_3 + C_1 R_1 R_5 + C_4 R_3 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-R_3+R_5}}{C_1R_1R_3-C_1R_1R_5-C_4R_3R_5}$

wo: $\frac{\sqrt{-R_3+R_5}}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}}$

bandwidth: $-\frac{C_1R_1R_3-C_1R_1R_5-C_4R_3R_5}{C_1C_4R_1R_3R_5}$

K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.32 LP-32 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1}{C_6 + s^2 \left(C_1 C_4 C_6 R_1 R_3 - C_1 C_5 C_6 R_1 R_3\right) + s \left(C_1 C_6 R_1 + C_4 C_6 R_3 - C_5 C_6 R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}{C_1R_1+C_4R_3-C_5R_3}$

wo: $\sqrt{\frac{1}{C_1C_4R_1R_3-C_1C_5R_1R_3}}$

bandwidth: $\frac{(C_1R_1+C_4R_3-C_5R_3)\sqrt{\frac{1}{C_1C_4R_1R_3-C_1C_5R_1R_3}}}{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}$

K-LP: $\frac{C_5R_1}{C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.33 LP-33 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_1 R_4 R_6}{C_1 C_4 R_1 R_3 R_4 R_5 s^2 - R_3 R_4 + R_3 R_5 + R_4 R_5 + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R_4 R_5 + C_4 R_3 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_4R_3R_4R_5}$
wo: $\frac{\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_4R_3R_4R_5}{C_1C_4R_1R_3R_4R_5}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.34 LP-34 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5R_1R_4}{C_6R_3 + C_6R_4 + s^2\left(C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_4R_3R_4-C_5R_3R_4}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1R_1R_3+C_1R_1R_4+C_4R_3R_4-C_5R_3R_4)\sqrt{\frac{1}{C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.35 LP-35 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_4}{C_1C_3C_6R_1R_4R_5s^2 - C_6R_4 + C_6R_5 + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 + C_3C_6R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5}{C_1C_3R_1R_4R_5}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.36 LP-36 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1}{-C_6 + s^2\left(C_1C_3C_6R_1R_5 + C_1C_4C_6R_1R_5\right) + s\left(-C_1C_6R_1 + C_3C_6R_5 + C_4C_6R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}}{C_1R_1-C_3R_5-C_4R_5}$
wo: $\frac{i}{\sqrt{C_1C_3R_1R_5+C_1C_4R_1R_5}}$
bandwidth: $-\frac{C_1R_1-C_3R_5-C_4R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_5+C_1C_4R_1R_5}}$
K-LP: $-\frac{C_3R_1}{C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.37 LP-37 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1}{C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_5C_6R_1R_5 + C_1C_4C_5C_6R_1R_5\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_5C_6R_5 + C_4C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_5R_5+C_4C_5R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_1C_3C_5R_1R_5+C_1C_4C_5R_1R_5}}$
bandwidth: $\frac{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_5R_5+C_4C_5R_5}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3C_5R_1R_5+C_1C_4C_5R_1R_5}}$
K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.38 LP-38 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_4}{-C_6R_4 + C_6R_5 + s^2\left(C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$
bandwidth: $-\frac{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.39 LP-39 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_4}{-C_6R_4 + C_6R_5 + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5}$
wo: $\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}(C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5)}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

8.40 LP-40 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1}{C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_3 - C_1C_3C_5C_6R_1R_3\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_3 - C_3C_5C_6R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}$
bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3)}{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$
K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-HP: 0
K-BP: 0
Qz: None
Wz: None

9 X-INVALID-NUMER

9.1 X-INVALID-NUMER-1 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_5R_6s + R_1R_4R_6}{-C_5C_6R_3R_4R_5R_6s^2 - R_3R_4 + R_3R_5 + R_4R_5 + s\left(-C_5R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{R_3R_4-R_3R_5-R_4R_5}}{C_5R_3R_4R_5+C_6R_3R_4R_6-C_6R_3R_5R_6-C_6R_4R_5R_6}$
wo: $\frac{\sqrt{R_3R_4-R_3R_5-R_4R_5}}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_5R_3R_4R_5+C_6R_3R_4R_6-C_6R_3R_5R_6-C_6R_4R_5R_6}{C_5C_6R_3R_4R_5R_6}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: $-\frac{C_5R_1R_4R_5R_6}{C_5R_3R_4R_5+C_6R_3R_4R_6-C_6R_3R_5R_6-C_6R_4R_5R_6}$
Qz: None
Wz: None

9.2 X-INVALID-NUMER-2 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_6s + C_5R_1}{C_4C_5C_6R_3R_5s^2 + C_6 + s\left(C_4C_6R_3 - C_5C_6R_3 + C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}{C_4R_3-C_5R_3+C_5R_5}$
wo: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_4R_3-C_5R_3+C_5R_5}{C_4C_5R_3R_5}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3+C_5R_5}$
Qz: None
Wz: None

9.3 X-INVALID-NUMER-3 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_5R_6s + R_1R_6}{-R_3 + R_5 + s^2\left(C_4C_6R_3R_5R_6 - C_5C_6R_3R_5R_6\right) + s\left(C_4R_3R_5 - C_5R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_4R_3R_5-C_5R_3R_5-C_6R_3R_6+C_6R_5R_6}$
wo: $\sqrt{\frac{-R_3+R_5}{C_4C_6R_3R_5R_6-C_5C_6R_3R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3+R_5}{C_4C_6R_3R_5R_6-C_5C_6R_3R_5R_6}}(C_4R_3R_5-C_5R_3R_5-C_6R_3R_6+C_6R_5R_6)}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0

K-BP: $\frac{C_5 R_1 R_5 R_6}{C_4 R_3 R_5 - C_5 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6}$
Qz: None
Wz: None

9.4 X-INVALID-NUMER-4 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s + 1}\right)$

$$H(s) = \frac{C_4 R_1 R_4 R_6 s + R_1 R_6}{-R_3 + R_5 + s^2 \left(-C_4 C_6 R_3 R_4 R_6 + C_4 C_6 R_3 R_5 R_6 + C_4 C_6 R_4 R_5 R_6\right) + s \left(-C_4 R_3 R_4 + C_4 R_3 R_5 + C_4 R_4 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_6}R_3 R_4 \sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_4}\sqrt{C_6}R_3 R_5 \sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_4}\sqrt{C_6}R_4 R_5 \sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_4 R_3 R_4 - C_4 R_3 R_5 - C_4 R_4 R_5 + C_6 R_3 R_6 - C_6 R_5 R_6}$
wo: $\sqrt{\frac{R_3 - R_5}{C_4 C_6 R_3 R_4 R_6 - C_4 C_6 R_3 R_5 R_6 - C_4 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{\sqrt{\frac{R_3-R_5}{C_4C_6R_3R_4R_6-C_4C_6R_3R_5R_6-C_4C_6R_4R_5R_6}}\left(C_4R_3R_4-C_4R_3R_5-C_4R_4R_5+C_6R_3R_6-C_6R_5R_6\right)}{\sqrt{C_4}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_4}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_4}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{R_1 R_6}{R_3 - R_5}$
K-HP: 0
K-BP: $-\frac{C_4 R_1 R_4 R_6}{C_4 R_3 R_4 - C_4 R_3 R_5 - C_4 R_4 R_5 + C_6 R_3 R_6 - C_6 R_5 R_6}$
Qz: None
Wz: None

9.5 X-INVALID-NUMER-5 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_1 R_6 s}{-C_4 C_5 R_3 R_4 s^2 + s \left(C_4 R_3 + C_4 R_4 - C_5 R_3\right) + 1}$$

Parameters:

Q: $-\frac{i\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_4 R_3 + C_4 R_4 - C_5 R_3}$
wo: $\frac{i}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_4 R_3 + C_4 R_4 - C_5 R_3}{C_4 C_5 R_3 R_4}$
K-LP: 0
K-HP: $-\frac{R_1 R_6}{R_3}$
K-BP: $\frac{C_5 R_1 R_6}{C_4 R_3 + C_4 R_4 - C_5 R_3}$
Qz: None
Wz: None

9.6 X-INVALID-NUMER-6 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 s + C_5 R_1}{-C_4 C_5 C_6 R_3 R_4 s^2 + C_6 + s \left(C_4 C_6 R_3 + C_4 C_6 R_4 - C_5 C_6 R_3\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_4 R_3 + C_4 R_4 - C_5 R_3}$
wo: $\frac{i}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_4 R_3 + C_4 R_4 - C_5 R_3}{C_4 C_5 R_3 R_4}$
K-LP: $\frac{C_5 R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_4 C_5 R_1 R_4}{C_4 C_6 R_3 + C_4 C_6 R_4 - C_5 C_6 R_3}$
Qz: None
Wz: None

9.7 X-INVALID-NUMER-7 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_1 R_6 s}{s^2\left(-C_4 C_5 R_3 R_4 + C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5\right) + s\left(C_4 R_3 + C_4 R_4 - C_5 R_3 + C_5 R_5\right) + 1}$$

Parameters:

Q: $\frac{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_4R_3+C_4R_4-C_5R_3+C_5R_5}$

wo: $\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}(C_4R_3+C_4R_4-C_5R_3+C_5R_5)}{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: 0

K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-BP: $\frac{C_5R_1R_6}{C_4R_3+C_4R_4-C_5R_3+C_5R_5}$

Qz: None

Wz: None

9.8 X-INVALID-NUMER-8 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 s + C_5 R_1}{C_6 + s^2\left(-C_4 C_5 C_6 R_3 R_4 + C_4 C_5 C_6 R_3 R_5 + C_4 C_5 C_6 R_4 R_5\right) + s\left(C_4 C_6 R_3 + C_4 C_6 R_4 - C_5 C_6 R_3 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_4R_3+C_4R_4-C_5R_3+C_5R_5}$

wo: $\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}(C_4R_3+C_4R_4-C_5R_3+C_5R_5)}{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_5R_1}{C_6}$

K-HP: 0

K-BP: $\frac{C_4C_5R_1R_4}{C_4C_6R_3+C_4C_6R_4-C_5C_6R_3+C_5C_6R_5}$

Qz: None

Wz: None

9.9 X-INVALID-NUMER-9 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{C_4 C_5 C_6 R_3 R_4 R_5 s^2 + C_6 R_3 + C_6 R_4 + s\left(C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$

wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$

bandwidth: $\frac{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{C_4C_5R_3R_4R_5}$

K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$

K-HP: 0

K-BP: $\frac{C_5R_1R_4R_6}{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$

Qz: None

Wz: None

9.10 X-INVALID-NUMER-10 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_5 R_6 s + R_1 R_4 R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_4C_6R_3R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(C_4R_3R_4R_5 - C_5R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_4-C_5}+\frac{R_3R_5}{C_4-C_5}+\frac{R_4R_5}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_4-C_5}+\frac{R_3R_5}{C_4-C_5}+\frac{R_4R_5}{C_4-C_5}}}{C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
wo: $\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_4C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_4C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}(C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6)}{C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_4-C_5}+\frac{R_3R_5}{C_4-C_5}+\frac{R_4R_5}{C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_4-C_5}+\frac{R_3R_5}{C_4-C_5}+\frac{R_4R_5}{C_4-C_5}}}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: $\frac{C_5R_1R_4R_5R_6}{C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
Qz: None
Wz: None

9.11 X-INVALID-NUMER-11 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{C_3C_5C_6R_4R_5s^2 + C_6 + s\left(C_3C_6R_4 - C_5C_6R_4 + C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_4-C_5R_4+C_5R_5}{C_3C_5R_4R_5}$
K-LP: 0
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_4-C_5C_6R_4+C_5C_6R_5}$
Qz: None
Wz: None

9.12 X-INVALID-NUMER-12 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5R_6s^2 + C_3R_1R_4R_6s}{-R_4+R_5+s^2\left(C_3C_6R_4R_5R_6 - C_5C_6R_4R_5R_6\right) + s\left(C_3R_4R_5 - C_5R_4R_5 - C_6R_4R_6 + C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}{C_3R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}(C_3R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$
K-BP: $\frac{C_3R_1R_4R_6}{C_3R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6}$
Qz: None
Wz: None

9.13 X-INVALID-NUMER-13 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_5R_6s^2 + C_3R_1R_6s}{s^2\left(C_3C_6R_5R_6 + C_4C_6R_5R_6 - C_5C_6R_5R_6\right) + s\left(C_3R_5 + C_4R_5 - C_5R_5 - C_6R_6\right) - 1}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_3R_5+C_4R_5-C_5R_5-C_6R_6}$
wo: $\sqrt{-\frac{1}{C_3C_6R_5R_6+C_4C_6R_5R_6-C_5C_6R_5R_6}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_6R_5R_6+C_4C_6R_5R_6-C_5C_6R_5R_6}}(C_3R_5+C_4R_5-C_5R_5-C_6R_6)}{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-BP: $\frac{C_3 R_1 R_6}{C_3 R_5 + C_4 R_5 - C_5 R_5 - C_6 R_6}$
Qz: None
Wz: None

9.14 X-INVALID-NUMER-14 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_1 R_6 s}{C_3 C_4 R_4 R_5 s^2 + s\left(C_3 R_5 - C_4 R_4 + C_4 R_5\right) - 1}$$

Parameters:

Q: $\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}{C_3 R_5 - C_4 R_4 + C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_5 - C_4 R_4 + C_4 R_5}{C_3 C_4 R_4 R_5}$
K-LP: 0
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_3 R_1 R_6}{C_3 R_5 - C_4 R_4 + C_4 R_5}$
Qz: None
Wz: None

9.15 X-INVALID-NUMER-15 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 s + C_3 R_1}{C_3 C_4 C_6 R_4 R_5 s^2 - C_6 + s\left(C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}{C_3 R_5 - C_4 R_4 + C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_5 - C_4 R_4 + C_4 R_5}{C_3 C_4 R_4 R_5}$
K-LP: $-\frac{C_3 R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_4 R_1 R_4}{C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5}$
Qz: None
Wz: None

9.16 X-INVALID-NUMER-16 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s + 1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^2\left(C_3 C_4 C_6 R_4 R_6 - C_4 C_5 C_6 R_4 R_6\right) + s\left(C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}{C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\sqrt{\frac{C_3 + C_4 - C_5}{C_3 C_4 C_6 R_4 R_6 - C_4 C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_3 C_4 C_6 R_4 R_6 - C_4 C_5 C_6 R_4 R_6}}\left(C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 - C_5 C_6}$
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6}$
Qz: None
Wz: None

9.17 X-INVALID-NUMER-17 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 C_4 C_5 R_4 R_5 s^2 + C_3 + C_4 - C_5 + s\left(C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}{C_3 C_4 C_5 R_4 R_5}$
K-LP: 0
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}$
Qz: None
Wz: None

9.18 X-INVALID-NUMER-18 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 s + C_3 C_5 R_1}{C_3 C_4 C_5 C_6 R_4 R_5 s^2 + C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_4 + C_3 C_5 C_6 R_5 - C_4 C_5 C_6 R_4 + C_4 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}{C_3 C_4 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_4 C_5 R_1 R_4}{C_3 C_4 C_6 R_4 + C_3 C_5 C_6 R_5 - C_4 C_5 C_6 R_4 + C_4 C_5 C_6 R_5}$
Qz: None
Wz: None

9.19 X-INVALID-NUMER-19 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s^2\left(C_3 C_5 C_6 R_4 R_5 + C_4 C_5 C_6 R_4 R_5\right) + s\left(C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$
bandwidth: $\frac{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$
K-LP: 0
K-HP: $\frac{C_3 R_1 R_6}{C_3 R_5 + C_4 R_5}$
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5}$
Qz: None
Wz: None

9.20 X-INVALID-NUMER-20 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^2\left(C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6\right) + s\left(C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}(C_3R_4R_5+C_4R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_3R_1R_4R_6}{C_3R_4R_5+C_4R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6}$
Qz: None
Wz: None

9.21 X-INVALID-NUMER-21 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{-C_3C_5C_6R_3R_4s^2 + C_6 + s\left(C_3C_6R_3 + C_3C_6R_4 - C_5C_6R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$
K-LP: 0
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4-C_5C_6R_4}$
Qz: None
Wz: None

9.22 X-INVALID-NUMER-22 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{C_6 + s^2\left(-C_3C_5C_6R_3R_4 + C_3C_5C_6R_3R_5 + C_3C_5C_6R_4R_5\right) + s\left(C_3C_6R_3 + C_3C_6R_4 - C_5C_6R_4 + C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}(C_3R_3+C_3R_4-C_5R_4+C_5R_5)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4-C_5C_6R_4+C_5C_6R_5}$
Qz: None
Wz: None

9.23 X-INVALID-NUMER-23 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5R_6s^2 + C_3R_1R_4R_6s}{-C_3C_5R_3R_4R_5s^2 - R_4 + R_5 + s\left(-C_3R_3R_4 + C_3R_3R_5 + C_3R_4R_5 - C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_4-R_5}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_4-R_5}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_5R_4R_5}{C_3C_5R_3R_4R_5}$
K-LP: 0
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_5R_4R_5}$
Qz: None
Wz: None

9.24 X-INVALID-NUMER-24 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 s + C_3 R_1 R_4}{-C_3 C_5 C_6 R_3 R_4 R_5 s^2 - C_6 R_4 + C_6 R_5 + s\left(-C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_4 - R_5}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_4 - R_5}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 C_5 R_1 R_4 R_5}{C_3 C_6 R_3 R_4 - C_3 C_6 R_3 R_5 - C_3 C_6 R_4 R_5 + C_5 C_6 R_4 R_5}$
Qz: None
Wz: None

9.25 X-INVALID-NUMER-25 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_6 s + C_3 R_1}{C_3 C_4 C_6 R_3 R_5 s^2 - C_6 + s\left(-C_3 C_6 R_3 + C_3 C_6 R_5 + C_4 C_6 R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 - C_3 R_5 - C_4 R_5}{C_3 C_4 R_3 R_5}$
K-LP: $-\frac{C_3 R_1}{C_6}$
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_6}{C_3 R_3 - C_3 R_5 - C_4 R_5}$
Qz: None
Wz: None

9.26 X-INVALID-NUMER-26 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_4 C_5 C_6 R_3 R_5 s^2 + C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3 + C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3 + C_4 - C_5}}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3 + C_4 - C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}{C_3 C_4 C_5 R_3 R_5}$
K-LP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}$
Qz: None
Wz: None

9.27 X-INVALID-NUMER-27 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^2\left(C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5\right) + s\left(-C_3 R_3 + C_3 R_5 + C_4 R_5 - C_5 R_5\right) - 1}$$

Parameters:

Q: $\frac{-\sqrt{C_3} C_4 \sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}} + \sqrt{C_3} C_5 \sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}}}{C_3 R_3 - C_3 R_5 - C_4 R_5 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}(C_3R_3-C_3R_5-C_4R_5+C_5R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$
K-BP: $-\frac{C_3R_1R_6}{C_3R_3-C_3R_5-C_4R_5+C_5R_5}$
Qz: None
Wz: None

9.28 X-INVALID-NUMER-28 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_5s + C_3R_1}{-C_6 + s^2\left(C_3C_4C_6R_3R_5 - C_3C_5C_6R_3R_5\right) + s\left(-C_3C_6R_3 + C_3C_6R_5 + C_4C_6R_5 - C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}{C_3R_3-C_3R_5-C_4R_5+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}(C_3R_3-C_3R_5-C_4R_5+C_5R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}$
K-LP: $-\frac{C_3R_1}{C_6}$
K-HP: 0
K-BP: $-\frac{C_3C_5R_1R_5}{C_3C_6R_3-C_3C_6R_5-C_4C_6R_5+C_5C_6R_5}$
Qz: None
Wz: None

9.29 X-INVALID-NUMER-29 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_1R_4R_6s^2 + C_3R_1R_6s}{s^2\left(-C_3C_4R_3R_4 + C_3C_4R_3R_5 + C_3C_4R_4R_5\right) + s\left(-C_3R_3 + C_3R_5 - C_4R_4 + C_4R_5\right) - 1}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3-C_3R_5+C_4R_4-C_4R_5}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}$
bandwidth: $\frac{(C_3R_3-C_3R_5+C_4R_4-C_4R_5)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}}{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $-\frac{C_3R_1R_6}{C_3R_3-C_3R_5+C_4R_4-C_4R_5}$
Qz: None
Wz: None

9.30 X-INVALID-NUMER-30 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4R_1R_4s + C_3R_1}{-C_6 + s^2\left(-C_3C_4C_6R_3R_4 + C_3C_4C_6R_3R_5 + C_3C_4C_6R_4R_5\right) + s\left(-C_3C_6R_3 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3-C_3R_5+C_4R_4-C_4R_5}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}$
bandwidth: $\frac{(C_3R_3-C_3R_5+C_4R_4-C_4R_5)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}}{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{C_3R_1}{C_6}$
K-HP: 0
K-BP: $-\frac{C_3C_4R_1R_4}{C_3C_6R_3-C_3C_6R_5+C_4C_6R_4-C_4C_6R_5}$

Qz: None
Wz: None

9.31 X-INVALID-NUMER-31 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{-C_3 C_4 C_5 R_3 R_4 s^2 + C_3 + C_4 - C_5 + s\left(C_3 C_4 R_3 + C_3 C_4 R_4 - C_3 C_5 R_3 - C_4 C_5 R_4\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{-C_3-C_4+C_5}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$
wo: $\frac{\sqrt{-C_3-C_4+C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}{C_3C_4C_5R_3R_4}$
K-LP: 0
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_3C_5R_1R_6}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$
Qz: None
Wz: None

9.32 X-INVALID-NUMER-32 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 s + C_3 C_5 R_1}{-C_3 C_4 C_5 C_6 R_3 R_4 s^2 + C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_3 + C_3 C_4 C_6 R_4 - C_3 C_5 C_6 R_3 - C_4 C_5 C_6 R_4\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{-C_3-C_4+C_5}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$
wo: $\frac{\sqrt{-C_3-C_4+C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}{C_3C_4C_5R_3R_4}$
K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-HP: 0
K-BP: $\frac{C_3C_4C_5R_1R_4}{C_3C_4C_6R_3+C_3C_4C_6R_4-C_3C_5C_6R_3-C_4C_5C_6R_4}$
Qz: None
Wz: None

9.33 X-INVALID-NUMER-33 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^2\left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5\right) + s\left(C_3 C_4 R_3 + C_3 C_4 R_4 - C_3 C_5 R_3 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$
wo: $\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}(C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5)}{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: 0
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_3C_5R_1R_6}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$
Qz: None
Wz: None

9.34 X-INVALID-NUMER-34 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s^2 \left(-C_3 C_4 C_5 C_6 R_3 R_4 + C_3 C_4 C_5 C_6 R_3 R_5 + C_3 C_4 C_5 C_6 R_4 R_5\right) + s \left(C_3 C_4 C_6 R_3 + C_3 C_4 C_6 R_4 - C_3 C_5 C_6 R_3 + C_3 C_5 C_6 R_5 - C_4 C_5 C_6 R_4 + C_4 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$

wo: $\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}(C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5)}{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-HP: 0

K-BP: $\frac{C_3C_4C_5R_1R_4}{C_3C_4C_6R_3+C_3C_4C_6R_4-C_3C_5C_6R_3+C_3C_5C_6R_5-C_4C_5C_6R_4+C_4C_5C_6R_5}$

Qz: None

Wz: None

9.35 X-INVALID-NUMER-35 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_4 R_6 s + C_3 R_1 R_4}{C_3 C_4 C_6 R_3 R_4 R_5 s^2 - C_6 R_4 + C_6 R_5 + s \left(-C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}$

wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$

bandwidth: $-\frac{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}{C_3C_4R_3R_4R_5}$

K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5}$

Qz: None

Wz: None

9.36 X-INVALID-NUMER-36 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s^2 \left(C_3 C_4 C_6 R_3 R_4 - C_3 C_5 C_6 R_3 R_4\right) + s \left(C_3 C_6 R_3 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$

wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$

bandwidth: $\frac{(C_3R_3+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$

K-LP: 0

K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$

K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4+C_4C_6R_4-C_5C_6R_4}$

Qz: None

Wz: None

9.37 X-INVALID-NUMER-37 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^2 \left(C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5\right) + s \left(-C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}(C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$
K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5}$
Qz: None
Wz: None

9.38 X-INVALID-NUMER-38 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5s + C_3R_1R_4}{-C_6R_4 + C_6R_5 + s^2\left(C_3C_4C_6R_3R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}(C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: 0
K-BP: $-\frac{C_3C_5R_1R_4R_5}{C_3C_6R_3R_4-C_3C_6R_3R_5-C_3C_6R_4R_5-C_4C_6R_4R_5+C_5C_6R_4R_5}$
Qz: None
Wz: None

9.39 X-INVALID-NUMER-39 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_3R_4R_6s + R_1R_4R_6}{C_3C_6R_3R_4R_5R_6s^2 - R_3R_4 + R_3R_5 + R_4R_5 + s\left(C_3R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{C_3R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
wo: $\frac{\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_3R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}{C_3C_6R_3R_4R_5R_6}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: $\frac{C_3R_1R_3R_4R_6}{C_3R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
Qz: None
Wz: None

9.40 X-INVALID-NUMER-40 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^2\left(C_3C_6R_3R_4R_6 - C_5C_6R_3R_4R_6\right) + s\left(C_3R_3R_4 - C_5R_3R_4 + C_6R_3R_6 + C_6R_4R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_3R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_3R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6)\sqrt{\frac{1}{C_3C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$

K-BP: $\frac{C_5 R_1 R_4 R_6}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
Qz: None
Wz: None

9.41 X-INVALID-NUMER-41 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{C_3 C_5 R_3 R_4 R_5 s^2 + R_3 + R_4 + s\left(C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: 0
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
Qz: None
Wz: None

9.42 X-INVALID-NUMER-42 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 s + C_5 R_1 R_4}{C_3 C_5 C_6 R_3 R_4 R_5 s^2 + C_6 R_3 + C_6 R_4 + s\left(C_3 C_6 R_3 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_3 R_4}{C_3 C_6 R_3 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5}$
Qz: None
Wz: None

9.43 X-INVALID-NUMER-43 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_6 s + R_1 R_6}{-R_3 + R_5 + s^2\left(C_3 C_6 R_3 R_5 R_6 + C_4 C_6 R_3 R_5 R_6\right) + s\left(C_3 R_3 R_5 + C_4 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{-R_3+R_5}}{C_3 R_3 R_5 + C_4 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6}$
wo: $\frac{\sqrt{-R_3+R_5}}{\sqrt{C_3 C_6 R_3 R_5 R_6 + C_4 C_6 R_3 R_5 R_6}}$
bandwidth: $\frac{C_3 R_3 R_5 + C_4 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6}{\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_3 R_5 R_6 + C_4 C_6 R_3 R_5 R_6}}$
K-LP: $-\frac{R_1 R_6}{R_3 - R_5}$
K-HP: 0
K-BP: $\frac{C_3 R_1 R_3 R_6}{C_3 R_3 R_5 + C_4 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6}$
Qz: None
Wz: None

9.44 X-INVALID-NUMER-44 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^2\left(C_3C_6R_3R_6 + C_4C_6R_3R_6 - C_5C_6R_3R_6\right) + s\left(C_3R_3 + C_4R_3 - C_5R_3 + C_6R_6\right) + 1}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3R_3+C_4R_3-C_5R_3+C_6R_6}$
wo: $\sqrt{\frac{1}{C_3C_6R_3R_6+C_4C_6R_3R_6-C_5C_6R_3R_6}}$
bandwidth: $\frac{(C_3R_3+C_4R_3-C_5R_3+C_6R_6)\sqrt{\frac{1}{C_3C_6R_3R_6+C_4C_6R_3R_6-C_5C_6R_3R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_5R_1R_6}{C_3R_3+C_4R_3-C_5R_3+C_6R_6}$
Qz: None
Wz: None

9.45 X-INVALID-NUMER-45 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^2\left(C_3C_5R_3R_5 + C_4C_5R_3R_5\right) + s\left(C_3R_3 + C_4R_3 - C_5R_3 + C_5R_5\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_3+C_4R_3-C_5R_3+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
bandwidth: $\frac{C_3R_3+C_4R_3-C_5R_3+C_5R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
K-LP: 0
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_5R_1R_6}{C_3R_3+C_4R_3-C_5R_3+C_5R_5}$
Qz: None
Wz: None

9.46 X-INVALID-NUMER-46 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3s + C_5R_1}{C_6 + s^2\left(C_3C_5C_6R_3R_5 + C_4C_5C_6R_3R_5\right) + s\left(C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3 + C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_3+C_4R_3-C_5R_3+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
bandwidth: $\frac{C_3R_3+C_4R_3-C_5R_3+C_5R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_3}{C_3C_6R_3+C_4C_6R_3-C_5C_6R_3+C_5C_6R_5}$
Qz: None
Wz: None

9.47 X-INVALID-NUMER-47 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_3R_4R_6s + R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_3C_6R_3R_4R_5R_6 + C_4C_6R_3R_4R_5R_6\right) + s\left(C_3R_3R_4R_5 + C_4R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{C_3R_3R_4R_5+C_4R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
wo: $\frac{\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{\sqrt{C_3C_6R_3R_4R_5R_6+C_4C_6R_3R_4R_5R_6}}$

bandwidth: $\frac{C_3R_3R_4R_5+C_4R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}{\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3C_6R_3R_4R_5R_6+C_4C_6R_3R_4R_5R_6}}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: $\frac{C_3R_1R_3R_4R_6}{C_3R_3R_4R_5+C_4R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
Qz: None
Wz: None

9.48 X-INVALID-NUMER-48 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^2\left(C_3C_6R_3R_4R_6 + C_4C_6R_3R_4R_6 - C_5C_6R_3R_4R_6\right) + s\left(C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4 + C_6R_3R_6 + C_6R_4R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6)\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_5R_1R_4R_6}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6}$
Qz: None
Wz: None

9.49 X-INVALID-NUMER-49 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^2\left(C_3C_5R_3R_4R_5 + C_4C_5R_3R_4R_5\right) + s\left(C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{R_3+R_4}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
bandwidth: $\frac{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
K-LP: 0
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_5R_1R_4R_6}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
Qz: None
Wz: None

9.50 X-INVALID-NUMER-50 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4s + C_5R_1R_4}{C_6R_3 + C_6R_4 + s^2\left(C_3C_5C_6R_3R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{R_3+R_4}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
bandwidth: $\frac{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_3R_4}{C_3C_6R_3R_4+C_4C_6R_3R_4-C_5C_6R_3R_4+C_5C_6R_3R_5+C_5C_6R_4R_5}$
Qz: None
Wz: None

9.51 X-INVALID-NUMER-51 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_6 s + C_5 R_6}{-C_1 C_4 C_5 R_3 R_4 s^2 + C_1 + s\left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_4 R_3 + C_4 R_4 - C_5 R_3}$
wo: $\frac{i}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_4 R_3 + C_4 R_4 - C_5 R_3}{C_4 C_5 R_3 R_4}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_4 C_5 R_4 R_6}{C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3}$
Qz: None
Wz: None

9.52 X-INVALID-NUMER-52 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_6 s + C_5 R_6}{C_1 + s^2\left(-C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_5 R_4 R_5\right) + s\left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_4}\sqrt{C_5}R_3 R_4\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_4}\sqrt{C_5}R_3 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_4}\sqrt{C_5}R_4 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}{C_4 R_3 + C_4 R_4 - C_5 R_3 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_4 C_5 R_3 R_4 - C_4 C_5 R_3 R_5 - C_4 C_5 R_4 R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_4 C_5 R_3 R_4 - C_4 C_5 R_3 R_5 - C_4 C_5 R_4 R_5}}\left(C_4 R_3 + C_4 R_4 - C_5 R_3 + C_5 R_5\right)}{-\sqrt{C_4}\sqrt{C_5}R_3 R_4\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_4}\sqrt{C_5}R_3 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_4}\sqrt{C_5}R_4 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_4 C_5 R_4 R_6}{C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_5 R_5}$
Qz: None
Wz: None

9.53 X-INVALID-NUMER-53 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_3 C_5 C_6 R_4 R_5 s^2 + C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5}$
Qz: None
Wz: None

9.54 X-INVALID-NUMER-54 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ \frac{R_6}{C_6 R_6 s + 1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}}}{C_3 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$

wo: $\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}(C_3R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: 0
K-BP: $\frac{C_3C_5R_4R_5R_6}{C_1C_3R_4R_5-C_1C_5R_4R_5-C_1C_6R_4R_6+C_1C_6R_5R_6}$
Qz: None
Wz: None

9.55 X-INVALID-NUMER-55 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_5R_6s + C_3R_6}{-C_1 + s^2\left(C_1C_3C_6R_5R_6 + C_1C_4C_6R_5R_6 - C_1C_5C_6R_5R_6\right) + s\left(C_1C_3R_5 + C_1C_4R_5 - C_1C_5R_5 - C_1C_6R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_3R_5+C_4R_5-C_5R_5-C_6R_6}$
wo: $\sqrt{-\frac{1}{C_3C_6R_5R_6+C_4C_6R_5R_6-C_5C_6R_5R_6}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_6R_5R_6+C_4C_6R_5R_6-C_5C_6R_5R_6}}(C_3R_5+C_4R_5-C_5R_5-C_6R_6)}{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$
K-LP: $-\frac{C_3R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_3C_5R_5R_6}{C_1C_3R_5+C_1C_4R_5-C_1C_5R_5-C_1C_6R_6}$
Qz: None
Wz: None

9.56 X-INVALID-NUMER-56 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_4R_6s + C_3R_6}{C_1C_3C_4R_4R_5s^2 - C_1 + s\left(C_1C_3R_5 - C_1C_4R_4 + C_1C_4R_5\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}{C_3R_5-C_4R_4+C_4R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_5-C_4R_4+C_4R_5}{C_3C_4R_4R_5}$
K-LP: $-\frac{C_3R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_3C_4R_4R_6}{C_1C_3R_5-C_1C_4R_4+C_1C_4R_5}$
Qz: None
Wz: None

9.57 X-INVALID-NUMER-57 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_6s + C_3C_5R_6}{C_1C_3 + C_1C_4 - C_1C_5 + s^2\left(C_1C_3C_4C_6R_4R_6 - C_1C_4C_5C_6R_4R_6\right) + s\left(C_1C_3C_4R_4 + C_1C_3C_6R_6 - C_1C_4C_5R_4 + C_1C_4C_6R_6 - C_1C_5C_6R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}{C_3C_4R_4+C_3C_6R_6-C_4C_5R_4+C_4C_6R_6-C_5C_6R_6}$
wo: $\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_4R_6-C_4C_5C_6R_4R_6}}$
bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_4R_6-C_4C_5C_6R_4R_6}}(C_3C_4R_4+C_3C_6R_6-C_4C_5R_4+C_4C_6R_6-C_5C_6R_6)}{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: 0
K-BP: $\frac{C_3C_4C_5R_4R_6}{C_1C_3C_4R_4+C_1C_3C_6R_6-C_1C_4C_5R_4+C_1C_4C_6R_6-C_1C_5C_6R_6}$
Qz: None

Wz: None

9.58 X-INVALID-NUMER-58 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_6 s + C_3 C_5 R_6}{C_1 C_3 C_4 C_5 R_4 R_5 s^2 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_4 + C_1 C_3 C_5 R_5 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}{C_3 C_4 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: 0
K-BP: $\frac{C_3 C_4 C_5 R_4 R_6}{C_1 C_3 C_4 R_4 + C_1 C_3 C_5 R_5 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5}$
Qz: None
Wz: None

9.59 X-INVALID-NUMER-59 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_6 + s^2\left(C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$
bandwidth: $\frac{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5}}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5}$
Qz: None
Wz: None

9.60 X-INVALID-NUMER-60 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}\left(C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6}$
Qz: None
Wz: None

9.61 X-INVALID-NUMER-61 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{-C_1 C_3 C_5 C_6 R_3 R_4 s^2 + C_1 C_6 + s\left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3 R_3 + C_3 R_4 - C_5 R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3 R_3 + C_3 R_4 - C_5 R_4}{C_3 C_5 R_3 R_4}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4}$
Qz: None
Wz: None

9.62 X-INVALID-NUMER-62 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_6 + s^2\left(-C_1 C_3 C_5 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_3 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3 R_4\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5}R_3 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5}R_4 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}{C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_3 C_5 R_3 R_4 - C_3 C_5 R_3 R_5 - C_3 C_5 R_4 R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3 C_5 R_3 R_4 - C_3 C_5 R_3 R_5 - C_3 C_5 R_4 R_5}}\left(C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5\right)}{-\sqrt{C_3}\sqrt{C_5}R_3 R_4\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5}R_3 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_3}\sqrt{C_5}R_4 R_5\sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5}$
Qz: None
Wz: None

9.63 X-INVALID-NUMER-63 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 C_3 C_5 R_3 R_4 R_5 s^2 - C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_4 - R_5}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_4 - R_5}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_3 R_4 - C_1 C_3 R_3 R_5 - C_1 C_3 R_4 R_5 + C_1 C_5 R_4 R_5}$
Qz: None
Wz: None

9.64 X-INVALID-NUMER-64 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s + 1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_5 R_6 s + C_3 R_6}{-C_1 + s^2\left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_5 R_3 R_5\right) + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}} + \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}}}{C_3 R_3 - C_3 R_5 - C_4 R_5 + C_5 R_5}$

wo: $\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}(C_3R_3-C_3R_5-C_4R_5+C_5R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}$
K-LP: $-\frac{C_3R_6}{C_1}$
K-HP: 0
K-BP: $-\frac{C_3C_5R_5R_6}{C_1C_3R_3-C_1C_3R_5-C_1C_4R_5+C_1C_5R_5}$
Qz: None
Wz: None

9.65 X-INVALID-NUMER-65 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_4R_6s + C_3R_6}{-C_1 + s^2\left(-C_1C_3C_4R_3R_4 + C_1C_3C_4R_3R_5 + C_1C_3C_4R_4R_5\right) + s\left(-C_1C_3R_3 + C_1C_3R_5 - C_1C_4R_4 + C_1C_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3-C_3R_5+C_4R_4-C_4R_5}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}$
bandwidth: $\frac{(C_3R_3-C_3R_5+C_4R_4-C_4R_5)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}}{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{C_3R_6}{C_1}$
K-HP: 0
K-BP: $-\frac{C_3C_4R_4R_6}{C_1C_3R_3-C_1C_3R_5+C_1C_4R_4-C_1C_4R_5}$
Qz: None
Wz: None

9.66 X-INVALID-NUMER-66 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_6s + C_3C_5R_6}{-C_1C_3C_4C_5R_3R_4s^2 + C_1C_3 + C_1C_4 - C_1C_5 + s\left(C_1C_3C_4R_3 + C_1C_3C_4R_4 - C_1C_3C_5R_3 - C_1C_4C_5R_4\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{-C_3-C_4+C_5}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$
wo: $\frac{\sqrt{-C_3-C_4+C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}{C_3C_4C_5R_3R_4}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: 0
K-BP: $\frac{C_3C_4C_5R_4R_6}{C_1C_3C_4R_3+C_1C_3C_4R_4-C_1C_3C_5R_3-C_1C_4C_5R_4}$
Qz: None
Wz: None

9.67 X-INVALID-NUMER-67 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_6s + C_3C_5R_6}{C_1C_3 + C_1C_4 - C_1C_5 + s^2\left(-C_1C_3C_4C_5R_3R_4 + C_1C_3C_4C_5R_3R_5 + C_1C_3C_4C_5R_4R_5\right) + s\left(C_1C_3C_4R_3 + C_1C_3C_4R_4 - C_1C_3C_5R_3 + C_1C_3C_5R_5 - C_1C_4C_5R_4 + C_1C_4C_5R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$
wo: $\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}(C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5)}{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: 0
K-BP: $\frac{C_3C_4C_5R_4R_6}{C_1C_3C_4R_3+C_1C_3C_4R_4-C_1C_3C_5R_3+C_1C_3C_5R_5-C_1C_4C_5R_4+C_1C_4C_5R_5}$

Qz: None
Wz: None

9.68 X-INVALID-NUMER-68 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}} - \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}}}{C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4}$
wo: $\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}$
bandwidth: $\frac{(C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4) \sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}}{\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}} - \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}}}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4}$
Qz: None
Wz: None

9.69 X-INVALID-NUMER-69 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_5 R_3 R_4 R_5\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_4 - C_5} + \frac{R_5}{C_4 - C_5}} + \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_4 - C_5} + \frac{R_5}{C_4 - C_5}}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5}$
wo: $\sqrt{\frac{-R_4 + R_5}{C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4 + R_5}{C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5}} (C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5)}{-\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_4 - C_5} + \frac{R_5}{C_4 - C_5}} + \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_4 - C_5} + \frac{R_5}{C_4 - C_5}}}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_3 R_4 - C_1 C_3 R_3 R_5 - C_1 C_3 R_4 R_5 - C_1 C_4 R_4 R_5 + C_1 C_5 R_4 R_5}$
Qz: None
Wz: None

9.70 X-INVALID-NUMER-70 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^2 \left(C_1 C_3 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_3 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_3 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_3 - C_5}}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
wo: $\sqrt{R_3 + R_4} \sqrt{\frac{1}{C_3 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}$
bandwidth: $\frac{\sqrt{R_3 + R_4} (C_3 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6) \sqrt{\frac{1}{C_3 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}}{C_3 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_3 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_3 - C_5}}}$
K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_3 R_4 R_6}{C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6}$
Qz: None
Wz: None

9.71 X-INVALID-NUMER-71 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 C_3 C_5 R_3 R_4 R_5 s^2 + C_1 R_3 + C_1 R_4 + s\left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_3 R_4 R_6}{C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5}$
Qz: None
Wz: None

9.72 X-INVALID-NUMER-72 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_6 s + C_5 R_6}{C_1 + s^2\left(C_1 C_3 C_6 R_3 R_6 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3 R_3 + C_4 R_3 - C_5 R_3 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_3 C_6 R_3 R_6 + C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}$
bandwidth: $\frac{(C_3 R_3 + C_4 R_3 - C_5 R_3 + C_6 R_6)\sqrt{\frac{1}{C_3 C_6 R_3 R_6 + C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_3 R_6}{C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_6 R_6}$
Qz: None
Wz: None

9.73 X-INVALID-NUMER-73 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_6 s + C_5 R_6}{C_1 + s^2\left(C_1 C_3 C_5 R_3 R_5 + C_1 C_4 C_5 R_3 R_5\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3 R_3 + C_4 R_3 - C_5 R_3 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3 C_5 R_3 R_5 + C_4 C_5 R_3 R_5}}$
bandwidth: $\frac{C_3 R_3 + C_4 R_3 - C_5 R_3 + C_5 R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3 C_5 R_3 R_5 + C_4 C_5 R_3 R_5}}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_3 R_6}{C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5}$
Qz: None
Wz: None

9.74 X-INVALID-NUMER-74 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^2\left(C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s\left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$

wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6)\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: $\frac{C_3C_5R_3R_4R_6}{C_1C_3R_3R_4+C_1C_4R_3R_4-C_1C_5R_3R_4+C_1C_6R_3R_6+C_1C_6R_4R_6}$
Qz: None
Wz: None

9.75 X-INVALID-NUMER-75 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_3R_4R_6s + C_5R_4R_6}{C_1R_3 + C_1R_4 + s^2\left(C_1C_3C_5R_3R_4R_5 + C_1C_4C_5R_3R_4R_5\right) + s\left(C_1C_3R_3R_4 + C_1C_4R_3R_4 - C_1C_5R_3R_4 + C_1C_5R_3R_5 + C_1C_5R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{R_3+R_4}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
bandwidth: $\frac{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: $\frac{C_3C_5R_3R_4R_6}{C_1C_3R_3R_4+C_1C_4R_3R_4-C_1C_5R_3R_4+C_1C_5R_3R_5+C_1C_5R_4R_5}$
Qz: None
Wz: None

9.76 X-INVALID-NUMER-76 $Z(s) = \left(R_1+\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_5R_1R_4R_6s + C_5R_4R_6}{-C_1C_5C_6R_3R_4R_6s^2 + C_1R_3 + C_1R_4 + s\left(-C_1C_5R_3R_4 + C_1C_6R_3R_6 + C_1C_6R_4R_6\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}}{C_5R_3R_4-C_6R_3R_6-C_6R_4R_6}$
wo: $\frac{\sqrt{-R_3-R_4}}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}}$
bandwidth: $-\frac{i\sqrt{-R_3-R_4}(C_5R_3R_4-C_6R_3R_6-C_6R_4R_6)}{C_5C_6R_3R_4R_6\sqrt{R_3+R_4}}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: $-\frac{C_5R_1R_4R_6}{C_5R_3R_4-C_6R_3R_6-C_6R_4R_6}$
Qz: None
Wz: None

9.77 X-INVALID-NUMER-77 $Z(s) = \left(R_1+\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5+\frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_5R_1R_4R_6s + C_5R_4R_6}{C_1R_3 + C_1R_4 + s^2\left(-C_1C_5C_6R_3R_4R_6 + C_1C_5C_6R_3R_5R_6 + C_1C_5C_6R_4R_5R_6\right) + s\left(-C_1C_5R_3R_4 + C_1C_5R_3R_5 + C_1C_5R_4R_5 + C_1C_6R_3R_6 + C_1C_6R_4R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_5}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_5}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_5R_3R_4-C_5R_3R_5-C_5R_4R_5-C_6R_3R_6-C_6R_4R_6}$
wo: $\sqrt{\frac{-R_3-R_4}{C_5C_6R_3R_4R_6-C_5C_6R_3R_5R_6-C_5C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3-R_4}{C_5C_6R_3R_4R_6-C_5C_6R_3R_5R_6-C_5C_6R_4R_5R_6}}(C_5R_3R_4-C_5R_3R_5-C_5R_4R_5-C_6R_3R_6-C_6R_4R_6)}{\sqrt{C_5}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_5}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_5}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: $-\frac{C_5R_1R_4R_6}{C_5R_3R_4-C_5R_3R_5-C_5R_4R_5-C_6R_3R_6-C_6R_4R_6}$
Qz: None
Wz: None

9.78 X-INVALID-NUMER-78 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_6 s + C_5 R_6}{C_1 + s^2 \left(C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s \left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_4 \sqrt{C_6} \sqrt{R_3} \sqrt{R_6} \sqrt{\frac{1}{C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_6} \sqrt{\frac{1}{C_4 - C_5}}}{C_4 R_3 - C_5 R_3 + C_6 R_6}$
wo: $\sqrt{\frac{1}{C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}$
bandwidth: $\frac{\left(C_4 R_3 - C_5 R_3 + C_6 R_6\right) \sqrt{\frac{1}{C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6}}}{C_4 \sqrt{C_6} \sqrt{R_3} \sqrt{R_6} \sqrt{\frac{1}{C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_6} \sqrt{\frac{1}{C_4 - C_5}}}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3 + C_6 R_6}$
Qz: None
Wz: None

9.79 X-INVALID-NUMER-79 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_6 s + C_5 R_6}{C_1 C_4 C_5 R_3 R_5 s^2 + C_1 + s \left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4} \sqrt{C_5} \sqrt{R_3} \sqrt{R_5}}{C_4 R_3 - C_5 R_3 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_4} \sqrt{C_5} \sqrt{R_3} \sqrt{R_5}}$
bandwidth: $\frac{C_4 R_3 - C_5 R_3 + C_5 R_5}{C_4 C_5 R_3 R_5}$
K-LP: $\frac{C_5 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3 + C_5 R_5}$
Qz: None
Wz: None

9.80 X-INVALID-NUMER-80 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^2 \left(C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_4 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_4 - C_5}}}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
wo: $\sqrt{R_3 + R_4} \sqrt{\frac{1}{C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}$
bandwidth: $\frac{\sqrt{R_3 + R_4} \left(C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6\right) \sqrt{\frac{1}{C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}}{C_4 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_4 - C_5}} - C_5 \sqrt{C_6} \sqrt{R_3} \sqrt{R_4} \sqrt{R_6} \sqrt{R_3 + R_4} \sqrt{\frac{1}{C_4 - C_5}}}$
K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_4 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$
Qz: None
Wz: None

9.81 X-INVALID-NUMER-81 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{C_1 C_4 C_5 R_3 R_4 R_5 s^2 + C_1 R_3 + C_1 R_4 + s \left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{C_4C_5R_3R_4R_5}$
K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$
K-HP: 0
K-BP: $\frac{C_5R_1R_4R_6}{C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
Qz: None
Wz: None

9.82 X-INVALID-NUMER-82 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_3R_1R_4R_6s + C_3R_4R_6}{C_1C_3C_6R_4R_5R_6s^2 - C_1R_4 + C_1R_5 + s\left(C_1C_3R_4R_5 - C_1C_6R_4R_6 + C_1C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-R_4+R_5}}{C_3R_4R_5-C_6R_4R_6+C_6R_5R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}}$
bandwidth: $\frac{C_3R_4R_5-C_6R_4R_6+C_6R_5R_6}{C_3C_6R_4R_5R_6}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: 0
K-BP: $\frac{C_3R_1R_4R_6}{C_3R_4R_5-C_6R_4R_6+C_6R_5R_6}$
Qz: None
Wz: None

9.83 X-INVALID-NUMER-83 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4R_6s^2 + C_3C_5R_4R_6s}{C_1 + s^2\left(C_1C_3C_6R_4R_6 - C_1C_5C_6R_4R_6\right) + s\left(C_1C_3R_4 - C_1C_5R_4 + C_1C_6R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}}}{C_3R_4-C_5R_4+C_6R_6}$
wo: $\sqrt{\frac{1}{C_3C_6R_4R_6-C_5C_6R_4R_6}}$
bandwidth: $\frac{(C_3R_4-C_5R_4+C_6R_6)\sqrt{\frac{1}{C_3C_6R_4R_6-C_5C_6R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_4-C_1C_5R_4+C_1C_6R_6}$
Qz: None
Wz: None

9.84 X-INVALID-NUMER-84 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4R_6s^2 + C_3C_5R_4R_6s}{C_1C_3C_5R_4R_5s^2 + C_1 + s\left(C_1C_3R_4 - C_1C_5R_4 + C_1C_5R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_4-C_5R_4+C_5R_5}{C_3C_5R_4R_5}$
K-LP: 0
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_4-C_1C_5R_4+C_1C_5R_5}$
Qz: None
Wz: None

9.85 X-INVALID-NUMER-85 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{C_1 C_3 C_5 C_6 R_4 R_5 s^2 + C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5}$
Qz: None
Wz: None

9.86 X-INVALID-NUMER-86 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_6 s + C_3 R_6}{-C_1 + s^2\left(C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}}{C_3 R_5 + C_4 R_5 - C_6 R_6}$
wo: $\frac{i}{\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 R_5 + C_4 R_5 - C_6 R_6}{\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6}}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: 0
K-BP: $\frac{C_3 R_1 R_6}{C_3 R_5 + C_4 R_5 - C_6 R_6}$
Qz: None
Wz: None

9.87 X-INVALID-NUMER-87 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(C_1 C_3 C_5 C_6 R_5 R_6 + C_1 C_4 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 C_5 R_5 + C_1 C_3 C_6 R_6 + C_1 C_4 C_5 R_5 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
bandwidth: $\frac{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6}}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6}$
Qz: None
Wz: None

9.88 X-INVALID-NUMER-88 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_3 R_4 R_5 + C_4 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{C_3 R_4 R_5 + C_4 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}{\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{C_3+C_4}\sqrt{C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6}}$

K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: 0
K-BP: $\frac{C_3R_1R_4R_6}{C_3R_4R_5+C_4R_4R_5-C_6R_4R_6+C_6R_5R_6}$
Qz: None
Wz: None

9.89 X-INVALID-NUMER-89 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4R_6s^2 + C_3C_5R_4R_6s}{C_1 + s^2\left(C_1C_3C_6R_4R_6 + C_1C_4C_6R_4R_6 - C_1C_5C_6R_4R_6\right) + s\left(C_1C_3R_4 + C_1C_4R_4 - C_1C_5R_4 + C_1C_6R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3R_4+C_4R_4-C_5R_4+C_6R_6}$
wo: $\sqrt{\frac{1}{C_3C_6R_4R_6+C_4C_6R_4R_6-C_5C_6R_4R_6}}$
bandwidth: $\frac{(C_3R_4+C_4R_4-C_5R_4+C_6R_6)\sqrt{\frac{1}{C_3C_6R_4R_6+C_4C_6R_4R_6-C_5C_6R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_4+C_1C_4R_4-C_1C_5R_4+C_1C_6R_6}$
Qz: None
Wz: None

9.90 X-INVALID-NUMER-90 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4R_6s^2 + C_3C_5R_4R_6s}{C_1 + s^2\left(C_1C_3C_5R_4R_5 + C_1C_4C_5R_4R_5\right) + s\left(C_1C_3R_4 + C_1C_4R_4 - C_1C_5R_4 + C_1C_5R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_4+C_4R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: 0
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_4+C_1C_4R_4-C_1C_5R_4+C_1C_5R_5}$
Qz: None
Wz: None

9.91 X-INVALID-NUMER-91 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4s + C_3C_5R_4}{C_1C_6 + s^2\left(C_1C_3C_5C_6R_4R_5 + C_1C_4C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_4 + C_1C_4C_6R_4 - C_1C_5C_6R_4 + C_1C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_4+C_4R_4-C_5R_4+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_4+C_4C_6R_4-C_5C_6R_4+C_5C_6R_5}$
Qz: None
Wz: None

9.92 X-INVALID-NUMER-92 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6}$

wo: $\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6-C_3C_6R_3R_5R_6-C_3C_6R_4R_5R_6}}$

bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_3C_6R_3R_4R_6-C_3C_6R_3R_5R_6-C_3C_6R_4R_5R_6}}(C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6)}{\sqrt{C_3}\sqrt{C_6}R_3R_4\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_3R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_6}R_4R_5\sqrt{R_6}\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_4R_6}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_6R_4R_6-C_6R_5R_6}$

Qz: None

Wz: None

9.93 X-INVALID-NUMER-93 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{-C_1 C_3 C_5 R_3 R_4 s^2 + C_1 + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$

wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$

bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$

K-LP: 0

K-HP: $-\frac{R_1R_6}{R_3}$

K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_3+C_1C_3R_4-C_1C_5R_4}$

Qz: None

Wz: None

9.94 X-INVALID-NUMER-94 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{-C_1 C_3 C_5 C_6 R_3 R_4 s^2 + C_1 C_6 + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$

wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$

bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$

K-LP: $\frac{C_3C_5R_4}{C_1C_6}$

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4-C_5C_6R_4}$

Qz: None

Wz: None

9.95 X-INVALID-NUMER-95 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s^2 \left(-C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$

wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}(C_3R_3+C_3R_4-C_5R_4+C_5R_5)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: 0

K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-BP: $\frac{C_3C_5R_4R_6}{C_1C_3R_3+C_1C_3R_4-C_1C_5R_4+C_1C_5R_5}$

Qz: None

Wz: None

9.96 X-INVALID-NUMER-96 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4s + C_3C_5R_4}{C_1C_6 + s^2\left(-C_1C_3C_5C_6R_3R_4 + C_1C_3C_5C_6R_3R_5 + C_1C_3C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 - C_1C_5C_6R_4 + C_1C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$

wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}(C_3R_3+C_3R_4-C_5R_4+C_5R_5)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_3C_5R_4}{C_1C_6}$

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_4}{C_3C_6R_3+C_3C_6R_4-C_5C_6R_4+C_5C_6R_5}$

Qz: None

Wz: None

9.97 X-INVALID-NUMER-97 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1C_3R_1R_6s + C_3R_6}{C_1C_3C_4R_3R_5s^2 - C_1 + s\left(-C_1C_3R_3 + C_1C_3R_5 + C_1C_4R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}{C_3R_3-C_3R_5-C_4R_5}$

wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_5}}$

bandwidth: $-\frac{C_3R_3-C_3R_5-C_4R_5}{C_3C_4R_3R_5}$

K-LP: $-\frac{C_3R_6}{C_1}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_6}{C_3R_3-C_3R_5-C_4R_5}$

Qz: None

Wz: None

9.98 X-INVALID-NUMER-98 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_6s + C_3C_5R_6}{C_1C_3 + C_1C_4 - C_1C_5 + s^2\left(C_1C_3C_4C_6R_3R_6 - C_1C_3C_5C_6R_3R_6\right) + s\left(C_1C_3C_4R_3 - C_1C_3C_5R_3 + C_1C_3C_6R_6 + C_1C_4C_6R_6 - C_1C_5C_6R_6\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}{C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_3R_6-C_3C_5C_6R_3R_6}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_3C_4C_6R_3R_6-C_3C_5C_6R_3R_6}}(C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6)}{\sqrt{C_3}C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$

K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_6}{C_3C_4R_3-C_3C_5R_3+C_3C_6R_6+C_4C_6R_6-C_5C_6R_6}$

Qz: None
Wz: None

9.99 X-INVALID-NUMER-99 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 C_4 C_5 R_3 R_5 s^2 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3 + C_1 C_3 C_5 R_5 + C_1 C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}{C_3 C_4 C_5 R_3 R_5}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_4 C_5 R_5}$
Qz: None
Wz: None

9.100 X-INVALID-NUMER-100 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{C_1 C_3 C_4 R_3 R_4 R_5 s^2 - C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_4+R_5}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $-\frac{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5}{C_3 C_4 R_3 R_4 R_5}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_4 R_6}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5}$
Qz: None
Wz: None

9.101 X-INVALID-NUMER-101 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s^2\left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4\right) + s\left(C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4}$
wo: $\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}$
bandwidth: $\frac{(C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4)\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3}$
K-BP: $\frac{C_3 C_5 R_4 R_6}{C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4}$
Qz: None
Wz: None

9.102 X-INVALID-NUMER-102 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}} - \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}}}{C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4}$
wo: $\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}$
bandwidth: $\frac{(C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4) \sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4}}}{\sqrt{C_3} C_4 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}} - \sqrt{C_3} C_5 \sqrt{R_3} \sqrt{R_4} \sqrt{\frac{1}{C_4 - C_5}}}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_3 C_6 R_3 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4}$
Qz: None
Wz: None

9.103 X-INVALID-NUMER-103 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{-C_1 C_5 C_6 R_1 R_3 R_4 s^2 + C_6 R_3 + C_6 R_4 + s \left(C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 - C_5 C_6 R_3 R_4\right)}$$

Parameters:

Q: $-\frac{i \sqrt{C_1} \sqrt{C_5} \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3 + R_4}}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4}$
wo: $\frac{\sqrt{-R_3 - R_4}}{\sqrt{C_1} \sqrt{C_5} \sqrt{R_1} \sqrt{R_3} \sqrt{R_4}}$
bandwidth: $\frac{i \sqrt{-R_3 - R_4} (C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4)}{C_1 C_5 R_1 R_3 R_4 \sqrt{R_3 + R_4}}$
K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4}$
Qz: None
Wz: None

9.104 X-INVALID-NUMER-104 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s^2 \left(-C_1 C_5 C_6 R_1 R_3 R_4 + C_1 C_5 C_6 R_1 R_3 R_5 + C_1 C_5 C_6 R_1 R_4 R_5\right) + s \left(C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 - C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_3 R_4 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_3 R_5 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_4 R_5 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
wo: $\sqrt{\frac{-R_3 - R_4}{C_1 C_5 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_5 - C_1 C_5 R_1 R_4 R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_3 - R_4}{C_1 C_5 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_5 - C_1 C_5 R_1 R_4 R_5}} (C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5)}{-\sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_3 R_4 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_3 R_5 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} + \sqrt{C_1} \sqrt{C_5} \sqrt{R_1} R_4 R_5 \sqrt{R_3 + R_4} \sqrt{\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}$
K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_1 R_1 R_3 + C_1 R_1 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$
Qz: None
Wz: None

9.105 X-INVALID-NUMER-105 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_5 R_6 s + R_1 R_4 R_6}{-C_1 C_5 R_1 R_3 R_4 R_5 s^2 - R_3 R_4 + R_3 R_5 + R_4 R_5 + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R_4 R_5 - C_5 R_3 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3R_4-R_3R_5-R_4R_5}}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5+C_5R_3R_4R_5}$
wo: $\frac{\sqrt{R_3R_4-R_3R_5-R_4R_5}}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5+C_5R_3R_4R_5}{C_1C_5R_1R_3R_4R_5}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: 0
K-BP: $-\frac{C_5R_1R_4R_5R_6}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5+C_5R_3R_4R_5}$
Qz: None
Wz: None

9.106 X-INVALID-NUMER-106 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_6s + C_5R_1}{C_6 + s^2\left(C_1C_4C_6R_1R_3 - C_1C_5C_6R_1R_3\right) + s\left(C_1C_6R_1 + C_4C_6R_3 - C_5C_6R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}{C_1R_1+C_4R_3-C_5R_3}$
wo: $\sqrt{\frac{1}{C_1C_4R_1R_3-C_1C_5R_1R_3}}$
bandwidth: $\frac{(C_1R_1+C_4R_3-C_5R_3)\sqrt{\frac{1}{C_1C_4R_1R_3-C_1C_5R_1R_3}}}{\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_5R_1R_6}{C_1R_1+C_4R_3-C_5R_3}$
Qz: None
Wz: None

9.107 X-INVALID-NUMER-107 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_5R_1R_5R_6s + R_1R_6}{-R_3 + R_5 + s^2\left(C_1C_4R_1R_3R_5 - C_1C_5R_1R_3R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_4R_3R_5 - C_5R_3R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}} + \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_1R_1R_3-C_1R_1R_5-C_4R_3R_5+C_5R_3R_5}$
wo: $\sqrt{\frac{-R_3+R_5}{C_1C_4R_1R_3R_5-C_1C_5R_1R_3R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_3+R_5}{C_1C_4R_1R_3R_5-C_1C_5R_1R_3R_5}}(C_1R_1R_3-C_1R_1R_5-C_4R_3R_5+C_5R_3R_5)}{-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0
K-BP: $-\frac{C_5R_1R_5R_6}{C_1R_1R_3-C_1R_1R_5-C_4R_3R_5+C_5R_3R_5}$
Qz: None
Wz: None

9.108 X-INVALID-NUMER-108 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_4R_1R_4R_6s + R_1R_6}{-R_3 + R_5 + s^2\left(-C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_3-C_1R_1R_5+C_4R_3R_4-C_4R_3R_5-C_4R_4R_5}$
wo: $\sqrt{\frac{R_3-R_5}{C_1C_4R_1R_3R_4-C_1C_4R_1R_3R_5-C_1C_4R_1R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{R_3-R_5}{C_1C_4R_1R_3R_4-C_1C_4R_1R_3R_5-C_1C_4R_1R_4R_5}}(C_1R_1R_3-C_1R_1R_5+C_4R_3R_4-C_4R_3R_5-C_4R_4R_5)}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}} - \sqrt{C_1}\sqrt{C_4}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0

K-BP: $-\frac{C_4 R_1 R_4 R_6}{C_1 R_1 R_3 - C_1 R_1 R_5 + C_4 R_3 R_4 - C_4 R_3 R_5 - C_4 R_4 R_5}$
Qz: None
Wz: None

9.109 X-INVALID-NUMER-109 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s^2 \left(C_1 C_4 C_6 R_1 R_3 R_4 - C_1 C_5 C_6 R_1 R_3 R_4\right) + s \left(C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 + C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_4-C_5}}}{C_1 R_1 R_3 + C_1 R_1 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4}$
wo: $\sqrt{R_3 + R_4} \sqrt{\frac{1}{C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1 R_1 R_3 + C_1 R_1 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4) \sqrt{\frac{1}{C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4}}}{\sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$
K-HP: 0
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_1 R_1 R_3 + C_1 R_1 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4}$
Qz: None
Wz: None

9.110 X-INVALID-NUMER-110 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_5 R_6 s + R_1 R_4 R_6}{-R_3 R_4 + R_3 R_5 + R_4 R_5 + s^2 \left(C_1 C_4 R_1 R_3 R_4 R_5 - C_1 C_5 R_1 R_3 R_4 R_5\right) + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R_4 R_5 + C_4 R_3 R_4 R_5 - C_5 R_3 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_3 R_4}{C_4-C_5} + \frac{R_3 R_5}{C_4-C_5} + \frac{R_4 R_5}{C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_3 R_4}{C_4-C_5} + \frac{R_3 R_5}{C_4-C_5} + \frac{R_4 R_5}{C_4-C_5}}}{C_1 R_1 R_3 R_4 - C_1 R_1 R_3 R_5 - C_1 R_1 R_4 R_5 - C_4 R_3 R_4 R_5 + C_5 R_3 R_4 R_5}$
wo: $\sqrt{\frac{-R_3 R_4 + R_3 R_5 + R_4 R_5}{C_1 C_4 R_1 R_3 R_4 R_5 - C_1 C_5 R_1 R_3 R_4 R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_3 R_4 + R_3 R_5 + R_4 R_5}{C_1 C_4 R_1 R_3 R_4 R_5 - C_1 C_5 R_1 R_3 R_4 R_5}} (C_1 R_1 R_3 R_4 - C_1 R_1 R_3 R_5 - C_1 R_1 R_4 R_5 - C_4 R_3 R_4 R_5 + C_5 R_3 R_4 R_5)}{-\sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_3 R_4}{C_4-C_5} + \frac{R_3 R_5}{C_4-C_5} + \frac{R_4 R_5}{C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_3 R_4}{C_4-C_5} + \frac{R_3 R_5}{C_4-C_5} + \frac{R_4 R_5}{C_4-C_5}}}$
K-LP: $-\frac{R_1 R_4 R_6}{R_3 R_4 - R_3 R_5 - R_4 R_5}$
K-HP: 0
K-BP: $-\frac{C_5 R_1 R_4 R_5 R_6}{C_1 R_1 R_3 R_4 - C_1 R_1 R_3 R_5 - C_1 R_1 R_4 R_5 - C_4 R_3 R_4 R_5 + C_5 R_3 R_4 R_5}$
Qz: None
Wz: None

9.111 X-INVALID-NUMER-111 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_4 R_6 s + C_3 R_1 R_4}{C_1 C_3 C_6 R_1 R_4 R_5 s^2 - C_6 R_4 + C_6 R_5 + s \left(-C_1 C_6 R_1 R_4 + C_1 C_6 R_1 R_5 + C_3 C_6 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1} \sqrt{C_3} \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-R_4+R_5}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5}$
wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1} \sqrt{C_3} \sqrt{R_1} \sqrt{R_4} \sqrt{R_5}}$
bandwidth: $-\frac{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5}{C_1 C_3 R_1 R_4 R_5}$
K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_4 R_6}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5}$
Qz: None
Wz: None

9.112 X-INVALID-NUMER-112 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_4 - C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3 - C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3 - C_5}}}{C_1 R_1 + C_3 R_4 - C_5 R_4}$
wo: $\sqrt{\frac{1}{C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4}}$
bandwidth: $\frac{\left(C_1 R_1 + C_3 R_4 - C_5 R_4\right) \sqrt{\frac{1}{C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4}}}{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3 - C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3 - C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 - C_1 C_5}$
K-BP: $\frac{C_3 C_5 R_1 R_4}{C_1 C_6 R_1 + C_3 C_6 R_4 - C_5 C_6 R_4}$
Qz: None
Wz: None

9.113 X-INVALID-NUMER-113 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^2 \left(C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5\right) + s \left(-C_1 R_1 R_4 + C_1 R_1 R_5 + C_3 R_4 R_5 - C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
wo: $\sqrt{\frac{-R_4 + R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4 + R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}} \left(C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 - C_1 C_5}$
K-BP: $-\frac{C_3 R_1 R_4 R_6}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
Qz: None
Wz: None

9.114 X-INVALID-NUMER-114 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s^2 \left(C_1 C_3 C_6 R_1 R_4 R_5 - C_1 C_5 C_6 R_1 R_4 R_5\right) + s \left(-C_1 C_6 R_1 R_4 + C_1 C_6 R_1 R_5 + C_3 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
wo: $\sqrt{\frac{-R_4 + R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4 + R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}} \left(C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3 - C_5} + \frac{R_5}{C_3 - C_5}}}$
K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 C_5 R_1 R_4 R_5}{C_1 C_6 R_1 R_4 - C_1 C_6 R_1 R_5 - C_3 C_6 R_4 R_5 + C_5 C_6 R_4 R_5}$
Qz: None
Wz: None

9.115 X-INVALID-NUMER-115 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_6 s + C_3 R_1}{-C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_5 + C_1 C_4 C_6 R_1 R_5\right) + s \left(-C_1 C_6 R_1 + C_3 C_6 R_5 + C_4 C_6 R_5\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}}{C_1 R_1 - C_3 R_5 - C_4 R_5}$
wo: $\frac{i}{\sqrt{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5}}$
bandwidth: $-\frac{C_1 R_1 - C_3 R_5 - C_4 R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5}}$
K-LP: $-\frac{C_3 R_1}{C_6}$
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_6}{C_1 R_1 - C_3 R_5 - C_4 R_5}$
Qz: None
Wz: None

9.116 X-INVALID-NUMER-116 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s^2 \left(C_1 C_3 C_5 C_6 R_1 R_5 + C_1 C_4 C_5 C_6 R_1 R_5\right) + s \left(C_1 C_3 C_6 R_1 + C_1 C_4 C_6 R_1 - C_1 C_5 C_6 R_1 + C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3+C_4-C_5}}{C_1 C_3 R_1 + C_1 C_4 R_1 - C_1 C_5 R_1 + C_3 C_5 R_5 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_1 C_3 C_5 R_1 R_5 + C_1 C_4 C_5 R_1 R_5}}$
bandwidth: $\frac{C_1 C_3 R_1 + C_1 C_4 R_1 - C_1 C_5 R_1 + C_3 C_5 R_5 + C_4 C_5 R_5}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1 C_3 C_5 R_1 R_5 + C_1 C_4 C_5 R_1 R_5}}$
K-LP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_6}{C_1 C_3 R_1 + C_1 C_4 R_1 - C_1 C_5 R_1 + C_3 C_5 R_5 + C_4 C_5 R_5}$
Qz: None
Wz: None

9.117 X-INVALID-NUMER-117 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^2 \left(C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5\right) + s \left(-C_1 R_1 + C_3 R_5 + C_4 R_5 - C_5 R_5\right) - 1}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5}}\left(C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5\right)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-BP: $-\frac{C_3 R_1 R_6}{C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5}$
Qz: None
Wz: None

9.118 X-INVALID-NUMER-118 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 s + C_3 R_1}{-C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_5 + C_1 C_4 C_6 R_1 R_5 - C_1 C_5 C_6 R_1 R_5\right) + s \left(-C_1 C_6 R_1 + C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5}$

wo: $\sqrt{-\frac{1}{C_1C_3R_1R_5+C_1C_4R_1R_5-C_1C_5R_1R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_1C_3R_1R_5+C_1C_4R_1R_5-C_1C_5R_1R_5}}(C_1R_1-C_3R_5-C_4R_5+C_5R_5)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$

K-LP: $-\frac{C_3R_1}{C_6}$

K-HP: 0

K-BP: $-\frac{C_3C_5R_1R_5}{C_1C_6R_1-C_3C_6R_5-C_4C_6R_5+C_5C_6R_5}$

Qz: None

Wz: None

9.119 X-INVALID-NUMER-119 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^2\left(C_1C_3C_4R_1R_4 - C_1C_4C_5R_1R_4\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_4 - C_4C_5R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4)}{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}$

K-LP: 0

K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$

K-BP: $\frac{C_3C_5R_1R_6}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4}$

Qz: None

Wz: None

9.120 X-INVALID-NUMER-120 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4s + C_3C_5R_1}{C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_4 - C_1C_4C_5C_6R_1R_4\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_4 - C_4C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4)}{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-HP: 0

K-BP: $\frac{C_3C_4C_5R_1R_4}{C_1C_3C_6R_1+C_1C_4C_6R_1-C_1C_5C_6R_1+C_3C_4C_6R_4-C_4C_5C_6R_4}$

Qz: None

Wz: None

9.121 X-INVALID-NUMER-121 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_4R_6s + C_3R_1R_4}{-C_6R_4 + C_6R_5 + s^2\left(C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{-R_4+R_5}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}$

wo: $\frac{\sqrt{-R_4+R_5}}{\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$

bandwidth: $-\frac{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5}}$

K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_4R_6}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5}$

Qz: None
Wz: None

9.122 X-INVALID-NUMER-122 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_4 + C_1 C_4 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 + C_3 R_4 + C_4 R_4 - C_5 R_4}$

wo: $\sqrt{\frac{1}{C_1 C_3 R_1 R_4 + C_1 C_4 R_1 R_4 - C_1 C_5 R_1 R_4}}$

bandwidth: $\frac{\left(C_1 R_1 + C_3 R_4 + C_4 R_4 - C_5 R_4\right) \sqrt{\frac{1}{C_1 C_3 R_1 R_4 + C_1 C_4 R_1 R_4 - C_1 C_5 R_1 R_4}}}{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: 0

K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$

K-BP: $\frac{C_3 C_5 R_1 R_4}{C_1 C_6 R_1 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4}$

Qz: None

Wz: None

9.123 X-INVALID-NUMER-123 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^2 \left(C_1 C_3 R_1 R_4 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5\right) + s \left(-C_1 R_1 R_4 + C_1 R_1 R_5 + C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5}$

wo: $\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}} \left(C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}}}$

K-LP: 0

K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$

K-BP: $-\frac{C_3 R_1 R_4 R_6}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5}$

Qz: None

Wz: None

9.124 X-INVALID-NUMER-124 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s^2 \left(C_1 C_3 C_6 R_1 R_4 R_5 + C_1 C_4 C_6 R_1 R_4 R_5 - C_1 C_5 C_6 R_1 R_4 R_5\right) + s \left(-C_1 C_6 R_1 R_4 + C_1 C_6 R_1 R_5 + C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5}$

wo: $\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}} \left(C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_4} \sqrt{R_5} \sqrt{-\frac{R_4}{C_3+C_4-C_5} + \frac{R_5}{C_3+C_4-C_5}}}$

K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$

K-HP: 0

K-BP: $-\frac{C_3 C_5 R_1 R_4 R_5}{C_1 C_6 R_1 R_4 - C_1 C_6 R_1 R_5 - C_3 C_6 R_4 R_5 - C_4 C_6 R_4 R_5 + C_5 C_6 R_4 R_5}$

Qz: None

Wz: None

9.125 X-INVALID-NUMER-125 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_4 R_6 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s^2 \left(-C_1 C_3 C_6 R_1 R_3 R_4 + C_1 C_3 C_6 R_1 R_3 R_5 + C_1 C_3 C_6 R_1 R_4 R_5\right) + s \left(-C_1 C_6 R_1 R_4 + C_1 C_6 R_1 R_5 - C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5}$

wo: $\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{R_4-R_5}{C_1C_3R_1R_3R_4-C_1C_3R_1R_3R_5-C_1C_3R_1R_4R_5}}(C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5)}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_4\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_3R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}R_4R_5\sqrt{-\frac{R_4}{-R_3R_4+R_3R_5+R_4R_5}+\frac{R_5}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_4R_6}{C_1R_1R_4-C_1R_1R_5+C_3R_3R_4-C_3R_3R_5-C_3R_4R_5}$

Qz: None

Wz: None

9.126 X-INVALID-NUMER-126 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_1 R_3 - C_1 C_3 C_5 C_6 R_1 R_3\right) + s \left(C_1 C_3 C_6 R_1 + C_1 C_4 C_6 R_1 - C_1 C_5 C_6 R_1 + C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_3-C_1C_3C_5R_1R_3}}(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3)}{\sqrt{C_1}\sqrt{C_3}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}-\sqrt{C_1}\sqrt{C_3}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{C_3}{C_4-C_5}+\frac{C_4}{C_4-C_5}-\frac{C_5}{C_4-C_5}}}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-HP: 0

K-BP: $\frac{C_3C_5R_1R_6}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_3-C_3C_5R_3}$

Qz: None

Wz: None

9.127 X-INVALID-NUMER-127 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 R_6 s + R_1 R_4 R_6}{C_1 C_3 R_1 R_3 R_4 R_5 s^2 - R_3 R_4 + R_3 R_5 + R_4 R_5 + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R_4 R_5 + C_3 R_3 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5}$

wo: $\frac{\sqrt{-R_3R_4+R_3R_5+R_4R_5}}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$

bandwidth: $-\frac{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5}{C_1C_3R_1R_3R_4R_5}$

K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-HP: 0

K-BP: $-\frac{C_3R_1R_3R_4R_6}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5}$

Qz: None

Wz: None

9.128 X-INVALID-NUMER-128 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2 \left(C_1 C_3 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4\right) + s \left(C_1 R_1 R_3 + C_1 R_1 R_4 + C_3 R_3 R_4 - C_5 R_3 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4)\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$
K-BP: $\frac{C_5R_1R_4R_6}{C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4}$
Qz: None
Wz: None

9.129 X-INVALID-NUMER-129 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4s + C_5R_1R_4}{C_6R_3 + C_6R_4 + s^2\left(C_1C_3C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4}$
wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4)\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: 0
K-BP: $\frac{C_3C_5R_1R_3R_4}{C_1C_6R_1R_3+C_1C_6R_1R_4+C_3C_6R_3R_4-C_5C_6R_3R_4}$
Qz: None
Wz: None

9.130 X-INVALID-NUMER-130 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_3R_6s + R_1R_6}{-R_3 + R_5 + s^2\left(C_1C_3R_1R_3R_5 + C_1C_4R_1R_3R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_3R_3R_5 + C_4R_3R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1}\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{-R_3+R_5}}{C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5}$
wo: $\frac{\sqrt{-R_3+R_5}}{\sqrt{C_1C_3R_1R_3R_5+C_1C_4R_1R_3R_5}}$
bandwidth: $-\frac{C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5}{\sqrt{C_1}\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_1C_3R_1R_3R_5+C_1C_4R_1R_3R_5}}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: 0
K-BP: $-\frac{C_3R_1R_3R_6}{C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5}$
Qz: None
Wz: None

9.131 X-INVALID-NUMER-131 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 - C_1C_5R_1R_3\right) + s\left(C_1R_1 + C_3R_3 + C_4R_3 - C_5R_3\right) + 1}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1R_1+C_3R_3+C_4R_3-C_5R_3}$
wo: $\sqrt{\frac{1}{C_1C_3R_1R_3+C_1C_4R_1R_3-C_1C_5R_1R_3}}$
bandwidth: $\frac{(C_1R_1+C_3R_3+C_4R_3-C_5R_3)\sqrt{\frac{1}{C_1C_3R_1R_3+C_1C_4R_1R_3-C_1C_5R_1R_3}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{C_5 R_1 R_6}{C_1 R_1+C_3 R_3+C_4 R_3-C_5 R_3}$
Qz: None
Wz: None

9.132 X-INVALID-NUMER-132 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 s + C_5 R_1}{C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_4 C_6 R_1 R_3 - C_1 C_5 C_6 R_1 R_3\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_3 + C_4 C_6 R_3 - C_5 C_6 R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1 R_1+C_3 R_3+C_4 R_3-C_5 R_3}$
wo: $\sqrt{\frac{1}{C_1 C_3 R_1 R_3+C_1 C_4 R_1 R_3-C_1 C_5 R_1 R_3}}$
bandwidth: $\frac{(C_1 R_1+C_3 R_3+C_4 R_3-C_5 R_3) \sqrt{\frac{1}{C_1 C_3 R_1 R_3+C_1 C_4 R_1 R_3-C_1 C_5 R_1 R_3}}}{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: $\frac{C_5 R_1}{C_6}$
K-HP: 0
K-BP: $\frac{C_3 C_5 R_1 R_3}{C_1 C_6 R_1+C_3 C_6 R_3+C_4 C_6 R_3-C_5 C_6 R_3}$
Qz: None
Wz: None

9.133 X-INVALID-NUMER-133 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 R_6 s + R_1 R_4 R_6}{-R_3 R_4 + R_3 R_5 + R_4 R_5 + s^2 \left(C_1 C_3 R_1 R_3 R_4 R_5 + C_1 C_4 R_1 R_3 R_4 R_5\right) + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R_4 R_5 + C_3 R_3 R_4 R_5 + C_4 R_3 R_4 R_5\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_1} \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{C_3+C_4} \sqrt{-R_3 R_4+R_3 R_5+R_4 R_5}}{C_1 R_1 R_3 R_4-C_1 R_1 R_3 R_5-C_1 R_1 R_4 R_5-C_3 R_3 R_4 R_5-C_4 R_3 R_4 R_5}$
wo: $\frac{\sqrt{-R_3 R_4+R_3 R_5+R_4 R_5}}{\sqrt{C_1 C_3 R_1 R_3 R_4 R_5+C_1 C_4 R_1 R_3 R_4 R_5}}$
bandwidth: $-\frac{C_1 R_1 R_3 R_4-C_1 R_1 R_3 R_5-C_1 R_1 R_4 R_5-C_3 R_3 R_4 R_5-C_4 R_3 R_4 R_5}{\sqrt{C_1} \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_5} \sqrt{C_3+C_4} \sqrt{C_1 C_3 R_1 R_3 R_4 R_5+C_1 C_4 R_1 R_3 R_4 R_5}}$
K-LP: $-\frac{R_1 R_4 R_6}{R_3 R_4-R_3 R_5-R_4 R_5}$
K-HP: 0
K-BP: $-\frac{C_3 R_1 R_3 R_4 R_6}{C_1 R_1 R_3 R_4-C_1 R_1 R_3 R_5-C_1 R_1 R_4 R_5-C_3 R_3 R_4 R_5-C_4 R_3 R_4 R_5}$
Qz: None
Wz: None

9.134 X-INVALID-NUMER-134 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^2 \left(C_1 C_3 R_1 R_3 R_4 + C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4\right) + s \left(C_1 R_1 R_3 + C_1 R_1 R_4 + C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 R_3+C_1 R_1 R_4+C_3 R_3 R_4+C_4 R_3 R_4-C_5 R_3 R_4}$
wo: $\sqrt{R_3+R_4} \sqrt{\frac{1}{C_1 C_3 R_1 R_3 R_4+C_1 C_4 R_1 R_3 R_4-C_1 C_5 R_1 R_3 R_4}}$
bandwidth: $\frac{\sqrt{R_3+R_4}(C_1 R_1 R_3+C_1 R_1 R_4+C_3 R_3 R_4+C_4 R_3 R_4-C_5 R_3 R_4) \sqrt{\frac{1}{C_1 C_3 R_1 R_3 R_4+C_1 C_4 R_1 R_3 R_4-C_1 C_5 R_1 R_3 R_4}}}{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}$
K-LP: 0
K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3+C_1 C_4-C_1 C_5}$
K-BP: $\frac{C_5 R_1 R_4 R_6}{C_1 R_1 R_3+C_1 R_1 R_4+C_3 R_3 R_4+C_4 R_3 R_4-C_5 R_3 R_4}$
Qz: None
Wz: None

9.135 X-INVALID-NUMER-135 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 s + C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s^2 \left(C_1 C_3 C_6 R_1 R_3 R_4 + C_1 C_4 C_6 R_1 R_3 R_4 - C_1 C_5 C_6 R_1 R_3 R_4\right) + s \left(C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 + C_3 C_6 R_3 R_4 + C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 R_3 + C_1 R_1 R_4 + C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4}$

wo: $\sqrt{R_3 + R_4} \sqrt{\frac{1}{C_1 C_3 R_1 R_3 R_4 + C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4}}$

bandwidth: $\frac{\sqrt{R_3+R_4} \left(C_1 R_1 R_3 + C_1 R_1 R_4 + C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4\right) \sqrt{\frac{1}{C_1 C_3 R_1 R_3 R_4 + C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4}}}{\sqrt{C_1} C_3 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_4 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_5 \sqrt{R_1} \sqrt{R_3} \sqrt{R_4} \sqrt{R_3+R_4} \sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: $\frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4}$

K-HP: 0

K-BP: $\frac{C_3 C_5 R_1 R_3 R_4}{C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_4 + C_3 C_6 R_3 R_4 + C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4}$

Qz: None

Wz: None

10 X-INVALID-ORDER

10.1 X-INVALID-ORDER-1 $Z(s) = (R_1,\ \infty,\ R_3,\ R_4,\ R_5,\ R_6)$

$$H(s) = \frac{R_1 R_4 R_6}{-R_3 R_4 + R_3 R_5 + R_4 R_5}$$

10.2 X-INVALID-ORDER-2 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_1 R_4}{s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.3 X-INVALID-ORDER-3 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_1 R_4 R_6 s + R_1 R_4}{s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.4 X-INVALID-ORDER-4 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{R_1 R_4 R_6}{-R_3 R_4 + R_3 R_5 + R_4 R_5 + s \left(-C_6 R_3 R_4 R_6 + C_6 R_3 R_5 R_6 + C_6 R_4 R_5 R_6\right)}$$

10.5 X-INVALID-ORDER-5 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{-C_5 R_3 R_4 s + R_3 + R_4}$$

10.6 X-INVALID-ORDER-6 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4}{-C_5 C_6 R_3 R_4 s + C_6 R_3 + C_6 R_4}$$

10.7 X-INVALID-ORDER-7 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{-C_5 C_6 R_3 R_4 s + C_6 R_3 + C_6 R_4}$$

10.8 X-INVALID-ORDER-8 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s\left(-C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5\right)}$$

10.9 X-INVALID-ORDER-9 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s\left(-C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

10.10 X-INVALID-ORDER-10 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_6 s + C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s\left(-C_5 C_6 R_3 R_4 + C_5 C_6 R_3 R_5 + C_5 C_6 R_4 R_5\right)}$$

10.11 X-INVALID-ORDER-11 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_5 R_6 s + R_1 R_4 R_6}{-C_5 R_3 R_4 R_5 s - R_3 R_4 + R_3 R_5 + R_4 R_5}$$

10.12 X-INVALID-ORDER-12 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_5 s + R_1 R_4}{-C_5 C_6 R_3 R_4 R_5 s^2 + s\left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.13 X-INVALID-ORDER-13 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s + 1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_4 R_5 R_6 s^2 + R_1 R_4 + s\left(C_5 R_1 R_4 R_5 + C_6 R_1 R_4 R_6\right)}{-C_5 C_6 R_3 R_4 R_5 s^2 + s\left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.14 X-INVALID-ORDER-14 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_1 R_6}{C_4 R_3 R_5 s - R_3 + R_5}$$

10.15 X-INVALID-ORDER-15 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_1}{C_4 C_6 R_3 R_5 s^2 + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.16 X-INVALID-ORDER-16 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_1 R_6 s + R_1}{C_4 C_6 R_3 R_5 s^2 + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.17 X-INVALID-ORDER-17 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{s\left(C_4 R_3 - C_5 R_3\right) + 1}$$

10.18 X-INVALID-ORDER-18 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1}{C_6 + s\left(C_4 C_6 R_3 - C_5 C_6 R_3\right)}$$

10.19 X-INVALID-ORDER-19 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_6 s + C_5 R_1}{C_6 + s\left(C_4 C_6 R_3 - C_5 C_6 R_3\right)}$$

10.20 X-INVALID-ORDER-20 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{C_4 C_5 C_6 R_3 R_5 R_6 s^3 + s^2\left(C_4 C_5 R_3 R_5 + C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6 + C_5 C_6 R_5 R_6\right) + s\left(C_4 R_3 - C_5 R_3 + C_5 R_5 + C_6 R_6\right) + 1}$$

10.21 X-INVALID-ORDER-21 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_5 R_6 s + R_1 R_6}{-R_3 + R_5 + s\left(C_4 R_3 R_5 - C_5 R_3 R_5\right)}$$

10.22 X-INVALID-ORDER-22 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_5 s + R_1}{s^2\left(C_4 C_6 R_3 R_5 - C_5 C_6 R_3 R_5\right) + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.23 X-INVALID-ORDER-23 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_5 R_6 s^2 + R_1 + s\left(C_5 R_1 R_5 + C_6 R_1 R_6\right)}{s^2\left(C_4 C_6 R_3 R_5 - C_5 C_6 R_3 R_5\right) + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.24 X-INVALID-ORDER-24 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_4 R_1 R_4 R_6 s + R_1 R_6}{-R_3 + R_5 + s\left(-C_4 R_3 R_4 + C_4 R_3 R_5 + C_4 R_4 R_5\right)}$$

10.25 X-INVALID-ORDER-25 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 R_1 R_4 s + R_1}{s^2\left(-C_4 C_6 R_3 R_4 + C_4 C_6 R_3 R_5 + C_4 C_6 R_4 R_5\right) + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.26 X-INVALID-ORDER-26 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_6 R_1 R_4 R_6 s^2 + R_1 + s\left(C_4 R_1 R_4 + C_6 R_1 R_6\right)}{s^2\left(-C_4 C_6 R_3 R_4 + C_4 C_6 R_3 R_5 + C_4 C_6 R_4 R_5\right) + s\left(-C_6 R_3 + C_6 R_5\right)}$$

10.27 X-INVALID-ORDER-27 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_1 R_6 s}{-C_4 C_5 C_6 R_3 R_4 R_6 s^3 + s^2 \left(-C_4 C_5 R_3 R_4 + C_4 C_6 R_3 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_3 R_6\right) + s \left(C_4 R_3 + C_4 R_4 - C_5 R_3 + C_6 R_6\right) + 1}$$

10.28 X-INVALID-ORDER-28 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_1 R_6 s}{s^3 \left(-C_4 C_5 C_6 R_3 R_4 R_6 + C_4 C_5 C_6 R_3 R_5 R_6 + C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_4 C_5 R_3 R_4 + C_4 C_5 R_3 R_5 + C_4 C_5 R_4 R_5 + C_4 C_6 R_3 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_3 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_4 R_3 + C_4 R_4 - C_5 R_3 + C_5 R_5 + C_6 R_6\right) + 1}$$

10.29 X-INVALID-ORDER-29 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_5 s^2 + R_1 + s \left(C_4 R_1 R_4 + C_5 R_1 R_5\right)}{-C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_4 C_6 R_3 R_4 + C_4 C_6 R_3 R_5 + C_4 C_6 R_4 R_5 - C_5 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.30 X-INVALID-ORDER-30 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + R_1 + s^2 \left(C_4 C_5 R_1 R_4 R_5 + C_4 C_6 R_1 R_4 R_6 + C_5 C_6 R_1 R_5 R_6\right) + s \left(C_4 R_1 R_4 + C_5 R_1 R_5 + C_6 R_1 R_6\right)}{-C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_4 C_6 R_3 R_4 + C_4 C_6 R_3 R_5 + C_4 C_6 R_4 R_5 - C_5 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.31 X-INVALID-ORDER-31 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_5 R_6 s^2 + R_1 R_6 + s \left(C_4 R_1 R_4 R_6 + C_5 R_1 R_5 R_6\right)}{-C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^3 - R_3 + R_5 + s^2 \left(-C_4 C_5 R_3 R_4 R_5 - C_4 C_6 R_3 R_4 R_6 + C_4 C_6 R_3 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_3 R_5 R_6\right) + s \left(-C_4 R_3 R_4 + C_4 R_3 R_5 + C_4 R_4 R_5 - C_5 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6\right)}$$

10.32 X-INVALID-ORDER-32 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_1 R_4 R_6}{C_4 R_3 R_4 R_5 s - R_3 R_4 + R_3 R_5 + R_4 R_5}$$

10.33 X-INVALID-ORDER-33 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_1 R_4}{C_4 C_6 R_3 R_4 R_5 s^2 + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.34 X-INVALID-ORDER-34 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_1 R_4 R_6 s + R_1 R_4}{C_4 C_6 R_3 R_4 R_5 s^2 + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.35 X-INVALID-ORDER-35 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s \left(C_4 R_3 R_4 - C_5 R_3 R_4\right)}$$

10.36 X-INVALID-ORDER-36 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s \left(C_4 C_6 R_3 R_4 - C_5 C_6 R_3 R_4\right)}$$

10.37 X-INVALID-ORDER-37 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_4R_6s + C_5R_1R_4}{C_6R_3 + C_6R_4 + s\left(C_4C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

10.38 X-INVALID-ORDER-38 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{C_4C_5C_6R_3R_4R_5R_6s^3 + R_3 + R_4 + s^2\left(C_4C_5R_3R_4R_5 + C_4C_6R_3R_4R_6 - C_5C_6R_3R_4R_6 + C_5C_6R_3R_5R_6 + C_5C_6R_4R_5R_6\right) + s\left(C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5 + C_6R_3R_6 + C_6R_4R_6\right)}$$

10.39 X-INVALID-ORDER-39 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_5R_1R_4R_5R_6s + R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s\left(C_4R_3R_4R_5 - C_5R_3R_4R_5\right)}$$

10.40 X-INVALID-ORDER-40 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5R_1R_4R_5s + R_1R_4}{s^2\left(C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.41 X-INVALID-ORDER-41 $Z(s) = \left(R_1,\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_4R_5R_6s^2 + R_1R_4 + s\left(C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^2\left(C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.42 X-INVALID-ORDER-42 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_3R_4R_5s - R_4 + R_5}$$

10.43 X-INVALID-ORDER-43 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_4}{C_3C_6R_4R_5s - C_6R_4 + C_6R_5}$$

10.44 X-INVALID-ORDER-44 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_4R_6s + C_3R_1R_4}{C_3C_6R_4R_5s - C_6R_4 + C_6R_5}$$

10.45 X-INVALID-ORDER-45 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s\left(C_3R_4 - C_5R_4\right) + 1}$$

10.46 X-INVALID-ORDER-46 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s\left(C_3C_6R_4 - C_5C_6R_4\right)}$$

10.47 X-INVALID-ORDER-47 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s\left(C_3 C_6 R_4 - C_5 C_6 R_4\right)}$$

10.48 X-INVALID-ORDER-48 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{C_3 C_5 C_6 R_4 R_5 R_6 s^3 + s^2\left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s\left(C_3 R_4 - C_5 R_4 + C_5 R_5 + C_6 R_6\right) + 1}$$

10.49 X-INVALID-ORDER-49 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s\left(C_3 R_4 R_5 - C_5 R_4 R_5\right)}$$

10.50 X-INVALID-ORDER-50 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

10.51 X-INVALID-ORDER-51 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 + s\left(C_3 C_5 R_1 R_4 R_5 + C_3 C_6 R_1 R_4 R_6\right)}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

10.52 X-INVALID-ORDER-52 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_6 s}{s\left(C_3 R_5 + C_4 R_5\right) - 1}$$

10.53 X-INVALID-ORDER-53 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1}{-C_6 + s\left(C_3 C_6 R_5 + C_4 C_6 R_5\right)}$$

10.54 X-INVALID-ORDER-54 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_6 s + C_3 R_1}{-C_6 + s\left(C_3 C_6 R_5 + C_4 C_6 R_5\right)}$$

10.55 X-INVALID-ORDER-55 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5}$$

10.56 X-INVALID-ORDER-56 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$$

10.57 X-INVALID-ORDER-57 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$$

10.58 X-INVALID-ORDER-58 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s\left(C_3 C_6 R_6 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

10.59 X-INVALID-ORDER-59 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s\left(C_3 C_5 R_5 + C_4 C_5 R_5\right)}$$

10.60 X-INVALID-ORDER-60 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

10.61 X-INVALID-ORDER-61 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

10.62 X-INVALID-ORDER-62 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s\left(C_3 R_5 + C_4 R_5 - C_5 R_5\right) - 1}$$

10.63 X-INVALID-ORDER-63 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 s + C_3 R_1}{-C_6 + s\left(C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.64 X-INVALID-ORDER-64 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_5 R_6 s^2 + C_3 R_1 + s\left(C_3 C_5 R_1 R_5 + C_3 C_6 R_1 R_6\right)}{-C_6 + s\left(C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.65 X-INVALID-ORDER-65 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_1 R_6 s}{C_3 C_4 C_6 R_4 R_5 R_6 s^3 + s^2\left(C_3 C_4 R_4 R_5 + C_3 C_6 R_5 R_6 - C_4 C_6 R_4 R_6 + C_4 C_6 R_5 R_6\right) + s\left(C_3 R_5 - C_4 R_4 + C_4 R_5 - C_6 R_6\right) - 1}$$

10.66 X-INVALID-ORDER-66 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s\left(C_3 C_4 R_4 - C_4 C_5 R_4\right)}$$

10.67 X-INVALID-ORDER-67 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_4 - C_4 C_5 C_6 R_4\right)}$$

10.68 X-INVALID-ORDER-68 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 + s\left(C_3 C_4 C_5 R_1 R_4 + C_3 C_5 C_6 R_1 R_6\right)}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s\left(C_3 C_4 C_6 R_4 - C_4 C_5 C_6 R_4\right)}$$

10.69 X-INVALID-ORDER-69 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 C_4 C_5 C_6 R_4 R_5 R_6 s^3 + C_3 + C_4 - C_5 + s^2\left(C_3 C_4 C_5 R_4 R_5 + C_3 C_4 C_6 R_4 R_6 + C_3 C_5 C_6 R_5 R_6 - C_4 C_5 C_6 R_4 R_6 + C_4 C_5 C_6 R_5 R_6\right) + s\left(C_3 C_4 R_4 + C_3 C_5 R_5 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

10.70 X-INVALID-ORDER-70 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 R_6 s + s^2\left(C_3 C_4 R_1 R_4 R_6 + C_3 C_5 R_1 R_5 R_6\right)}{s^2\left(C_3 C_4 R_4 R_5 - C_4 C_5 R_4 R_5\right) + s\left(C_3 R_5 - C_4 R_4 + C_4 R_5 - C_5 R_5\right) - 1}$$

10.71 X-INVALID-ORDER-71 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 + s^2\left(C_3 C_4 C_5 R_1 R_4 R_5 + C_3 C_4 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_1 R_5 R_6\right) + s\left(C_3 C_4 R_1 R_4 + C_3 C_5 R_1 R_5 + C_3 C_6 R_1 R_6\right)}{-C_6 + s^2\left(C_3 C_4 C_6 R_4 R_5 - C_4 C_5 C_6 R_4 R_5\right) + s\left(C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.72 X-INVALID-ORDER-72 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 R_6 s + s^2\left(C_3 C_4 R_1 R_4 R_6 + C_3 C_5 R_1 R_5 R_6\right)}{s^3\left(C_3 C_4 C_6 R_4 R_5 R_6 - C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_3 C_4 R_4 R_5 + C_3 C_6 R_5 R_6 - C_4 C_5 R_4 R_5 - C_4 C_6 R_4 R_6 + C_4 C_6 R_5 R_6 - C_5 C_6 R_5 R_6\right) + s\left(C_3 R_5 - C_4 R_4 + C_4 R_5 - C_5 R_5 - C_6 R_6\right) - 1}$$

10.73 X-INVALID-ORDER-73 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s\left(C_3 R_4 R_5 + C_4 R_4 R_5\right)}$$

10.74 X-INVALID-ORDER-74 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5\right)}$$

10.75 X-INVALID-ORDER-75 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_4 R_6 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5\right)}$$

10.76 X-INVALID-ORDER-76 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s\left(C_3 R_4 + C_4 R_4 - C_5 R_4\right) + 1}$$

10.77 X-INVALID-ORDER-77 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_6 + s\left(C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4\right)}$$

10.78 X-INVALID-ORDER-78 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s\left(C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4\right)}$$

10.79 X-INVALID-ORDER-79 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^3\left(C_3 C_5 C_6 R_4 R_5 R_6 + C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6 + C_4 C_5 R_4 R_5 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s\left(C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5 + C_6 R_6\right) + 1}$$

10.80 X-INVALID-ORDER-80 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s\left(C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5\right)}$$

10.81 X-INVALID-ORDER-81 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

10.82 X-INVALID-ORDER-82 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 + s\left(C_3 C_5 R_1 R_4 R_5 + C_3 C_6 R_1 R_4 R_6\right)}{-C_6 R_4 + C_6 R_5 + s\left(C_3 C_6 R_4 R_5 + C_4 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

10.83 X-INVALID-ORDER-83 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s\left(-C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5\right)}$$

10.84 X-INVALID-ORDER-84 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(-C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5\right)}$$

10.85 X-INVALID-ORDER-85 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_4 R_6 s + C_3 R_1 R_4}{-C_6 R_4 + C_6 R_5 + s\left(-C_3 C_6 R_3 R_4 + C_3 C_6 R_3 R_5 + C_3 C_6 R_4 R_5\right)}$$

10.86 X-INVALID-ORDER-86 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{-C_3 C_5 C_6 R_3 R_4 R_6 s^3 + s^2\left(-C_3 C_5 R_3 R_4 + C_3 C_6 R_3 R_6 + C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6\right) + s\left(C_3 R_3 + C_3 R_4 - C_5 R_4 + C_6 R_6\right) + 1}$$

10.87 X-INVALID-ORDER-87 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^3 \left(-C_3 C_5 C_6 R_3 R_4 R_6 + C_3 C_5 C_6 R_3 R_5 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_3 C_5 R_3 R_4 + C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + C_3 C_6 R_3 R_6 + C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5 + C_6 R_6\right) + 1}$$

10.88 X-INVALID-ORDER-88 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 - R_4 + R_5 + s^2 \left(-C_3 C_5 R_3 R_4 R_5 - C_3 C_6 R_3 R_4 R_6 + C_3 C_6 R_3 R_5 R_6 + C_3 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}$$

10.89 X-INVALID-ORDER-89 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_6 s}{C_3 C_4 C_6 R_3 R_5 R_6 s^3 + s^2 \left(C_3 C_4 R_3 R_5 - C_3 C_6 R_3 R_6 + C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6\right) + s \left(-C_3 R_3 + C_3 R_5 + C_4 R_5 - C_6 R_6\right) - 1}$$

10.90 X-INVALID-ORDER-90 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s \left(C_3 C_4 R_3 - C_3 C_5 R_3\right)}$$

10.91 X-INVALID-ORDER-91 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s \left(C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3\right)}$$

10.92 X-INVALID-ORDER-92 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s \left(C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3\right)}$$

10.93 X-INVALID-ORDER-93 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 C_4 C_5 C_6 R_3 R_5 R_6 s^3 + C_3 + C_4 - C_5 + s^2 \left(C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_6 R_3 R_6 - C_3 C_5 C_6 R_3 R_6 + C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6\right) + s \left(C_3 C_4 R_3 - C_3 C_5 R_3 + C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

10.94 X-INVALID-ORDER-94 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^3 \left(C_3 C_4 C_6 R_3 R_5 R_6 - C_3 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5 - C_3 C_6 R_3 R_6 + C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6 - C_5 C_6 R_5 R_6\right) + s \left(-C_3 R_3 + C_3 R_5 + C_4 R_5 - C_5 R_5 - C_6 R_6\right) - 1}$$

10.95 X-INVALID-ORDER-95 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_1 R_6 s}{s^3 \left(-C_3 C_4 C_6 R_3 R_4 R_6 + C_3 C_4 C_6 R_3 R_5 R_6 + C_3 C_4 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_3 C_4 R_3 R_4 + C_3 C_4 R_3 R_5 + C_3 C_4 R_4 R_5 - C_3 C_6 R_3 R_6 + C_3 C_6 R_5 R_6 - C_4 C_6 R_4 R_6 + C_4 C_6 R_5 R_6\right) + s \left(-C_3 R_3 + C_3 R_5 - C_4 R_4 + C_4 R_5 - C_6 R_6\right) - 1}$$

10.96 X-INVALID-ORDER-96 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{-C_3 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_3 + C_4 - C_5 + s^2 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 C_6 R_3 R_6 + C_3 C_4 C_6 R_4 R_6 - C_3 C_5 C_6 R_3 R_6 - C_4 C_5 C_6 R_4 R_6\right) + s \left(C_3 C_4 R_3 + C_3 C_4 R_4 - C_3 C_5 R_3 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}$$

10.97 X-INVALID-ORDER-97 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^3 \left(-C_3 C_4 C_5 C_6 R_3 R_4 R_6 + C_3 C_4 C_5 C_6 R_3 R_5 R_6 + C_3 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_3 C_4 C_5 R_3 R_4 + C_3 C_4 C_5 R_3 R_5 + C_3 C_4 C_5 R_4 R_5 + C_3 C_4 C_6 R_3 R_6 + C_3 C_4 C_6 R_4 R_6 - C_3 C_5 C_6 R_3 R_6 + C_3 C_5 C_6 R_5 R_6 - C_4 C_5 C_6 R_4 R_6 + C_4 C_5 C_6 R_5 R_6\right) + s \left(C_3 C_4 R_3 + C_3$$

10.98 X-INVALID-ORDER-98 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 R_6 s + s^2 \left(C_3 C_4 R_1 R_4 R_6 + C_3 C_5 R_1 R_5 R_6\right)}{-C_3 C_4 C_5 R_3 R_4 R_5 s^3 + s^2 \left(-C_3 C_4 R_3 R_4 + C_3 C_4 R_3 R_5 + C_3 C_4 R_4 R_5 - C_3 C_5 R_3 R_5 - C_4 C_5 R_4 R_5\right) + s \left(-C_3 R_3 + C_3 R_5 - C_4 R_4 + C_4 R_5 - C_5 R_5\right) - 1}$$

10.99 X-INVALID-ORDER-99 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_5 s^2 + C_3 R_1 + s \left(C_3 C_4 R_1 R_4 + C_3 C_5 R_1 R_5\right)}{-C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 - C_6 + s^2 \left(-C_3 C_4 C_6 R_3 R_4 + C_3 C_4 C_6 R_3 R_5 + C_3 C_4 C_6 R_4 R_5 - C_3 C_5 C_6 R_3 R_5 - C_4 C_5 C_6 R_4 R_5\right) + s \left(-C_3 C_6 R_3 + C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.100 X-INVALID-ORDER-100 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 + s^2 \left(C_3 C_4 C_5 R_1 R_4 R_5 + C_3 C_4 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_1 R_5 R_6\right) + s \left(C_3 C_4 R_1 R_4 + C_3 C_5 R_1 R_5 + C_3 C_6 R_1 R_6\right)}{-C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 - C_6 + s^2 \left(-C_3 C_4 C_6 R_3 R_4 + C_3 C_4 C_6 R_3 R_5 + C_3 C_4 C_6 R_4 R_5 - C_3 C_5 C_6 R_3 R_5 - C_4 C_5 C_6 R_4 R_5\right) + s \left(-C_3 C_6 R_3 + C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.101 X-INVALID-ORDER-101 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_1 R_6 s + s^2 \left(C_3 C_4 R_1 R_4 R_6 + C_3 C_5 R_1 R_5 R_6\right)}{-C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + s^3 \left(-C_3 C_4 C_5 R_3 R_4 R_5 - C_3 C_4 C_6 R_3 R_4 R_6 + C_3 C_4 C_6 R_3 R_5 R_6 + C_3 C_4 C_6 R_4 R_5 R_6 - C_3 C_5 C_6 R_3 R_5 R_6 - C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_3 C_4 R_3 R_4 + C_3 C_4 R_3 R_5 + C_3 C_4 R_4 R_5 - C_3 C_5 R_3 R_5 - C_3 C_6 R_3 R_6 + C_3 C_6 R_5 R_6 - C_4 C_5 R_4 R_5 - C_4 C_6 R$

10.102 X-INVALID-ORDER-102 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_4 R_6 s}{C_3 C_4 C_6 R_3 R_4 R_5 R_6 s^3 - R_4 + R_5 + s^2 \left(C_3 C_4 R_3 R_4 R_5 - C_3 C_6 R_3 R_4 R_6 + C_3 C_6 R_3 R_5 R_6 + C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6\right) + s \left(-C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5 + C_4 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}$$

10.103 X-INVALID-ORDER-103 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^3 \left(C_3 C_4 C_6 R_3 R_4 R_6 - C_3 C_5 C_6 R_3 R_4 R_6\right) + s^2 \left(C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4 + C_3 C_6 R_3 R_6 + C_3 C_6 R_4 R_6 + C_4 C_6 R_4 R_6 - C_5 C_6 R_4 R_6\right) + s \left(C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4 + C_6 R_6\right) + 1}$$

10.104 X-INVALID-ORDER-104 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{C_3 C_4 C_5 R_3 R_4 R_5 s^3 + s^2 \left(C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4 + C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + C_4 C_5 R_4 R_5\right) + s \left(C_3 R_3 + C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5\right) + 1}$$

10.105 X-INVALID-ORDER-105 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_6 + s^2 \left(C_3 C_4 C_6 R_3 R_4 - C_3 C_5 C_6 R_3 R_4 + C_3 C_5 C_6 R_3 R_5 + C_3 C_5 C_6 R_4 R_5 + C_4 C_5 C_6 R_4 R_5\right) + s \left(C_3 C_6 R_3 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.106 X-INVALID-ORDER-106 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_6 + s^2 \left(C_3 C_4 C_6 R_3 R_4 - C_3 C_5 C_6 R_3 R_4 + C_3 C_5 C_6 R_3 R_5 + C_3 C_5 C_6 R_4 R_5 + C_4 C_5 C_6 R_4 R_5\right) + s \left(C_3 C_6 R_3 + C_3 C_6 R_4 + C_4 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.107 X-INVALID-ORDER-107 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_4 C_6 R_3 R_4 R_6 - C_3 C_5 C_6 R_3 R_4 R_6 + C_3 C_5 C_6 R_3 R_5 R_6 + C_3 C_5 C_6 R_4 R_5 R_6 + C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_3 C_4 R_3 R_4 - C_3 C_5 R_3 R_4 + C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5 + C_3 C_6 R_3 R_6 + C_3 C_6 R_4 R_6 + C_4 C_5 R_4 R_5 + C_4 C_6 R_4 R_6 +$$

10.108 X-INVALID-ORDER-108 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^3 \left(C_3 C_4 C_6 R_3 R_4 R_5 R_6 - C_3 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5 - C_3 C_6 R_3 R_4 R_6 + C_3 C_6 R_3 R_5 R_6 + C_3 C_6 R_4 R_5 R_6 + C_4 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5 + C_4 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R$$

10.109 X-INVALID-ORDER-109 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 R_6 s + R_1 R_4 R_6}{C_3 R_3 R_4 R_5 s - R_3 R_4 + R_3 R_5 + R_4 R_5}$$

10.110 X-INVALID-ORDER-110 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 s + R_1 R_4}{C_3 C_6 R_3 R_4 R_5 s^2 + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.111 X-INVALID-ORDER-111 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_3 R_4 R_6 s^2 + R_1 R_4 + s \left(C_3 R_1 R_3 R_4 + C_6 R_1 R_4 R_6\right)}{C_3 C_6 R_3 R_4 R_5 s^2 + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.112 X-INVALID-ORDER-112 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s \left(C_3 R_3 R_4 - C_5 R_3 R_4\right)}$$

10.113 X-INVALID-ORDER-113 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 s + C_5 R_1 R_4}{C_6 R_3 + C_6 R_4 + s \left(C_3 C_6 R_3 R_4 - C_5 C_6 R_3 R_4\right)}$$

10.114 X-INVALID-ORDER-114 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 + s \left(C_3 C_5 R_1 R_3 R_4 + C_5 C_6 R_1 R_4 R_6\right)}{C_6 R_3 + C_6 R_4 + s \left(C_3 C_6 R_3 R_4 - C_5 C_6 R_3 R_4\right)}$$

10.115 X-INVALID-ORDER-115 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + R_3 + R_4 + s^2 \left(C_3 C_5 R_3 R_4 R_5 + C_3 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6 + C_5 C_6 R_3 R_5 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s \left(C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5 + C_6 R_3 R_6 + C_6 R_4 R_6\right)}$$

10.116 X-INVALID-ORDER-116 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_5 R_6 s^2 + R_1 R_4 R_6 + s \left(C_3 R_1 R_3 R_4 R_6 + C_5 R_1 R_4 R_5 R_6\right)}{-R_3 R_4 + R_3 R_5 + R_4 R_5 + s \left(C_3 R_3 R_4 R_5 - C_5 R_3 R_4 R_5\right)}$$

10.117 X-INVALID-ORDER-117 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5\right)}{s^2\left(C_3C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.118 X-INVALID-ORDER-118 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_5R_6s^3 + R_1R_4 + s^2\left(C_3C_5R_1R_3R_4R_5 + C_3C_6R_1R_3R_4R_6 + C_5C_6R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^2\left(C_3C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.119 X-INVALID-ORDER-119 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_3R_6s + R_1R_6}{-R_3 + R_5 + s\left(C_3R_3R_5 + C_4R_3R_5\right)}$$

10.120 X-INVALID-ORDER-120 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_3s + R_1}{s^2\left(C_3C_6R_3R_5 + C_4C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.121 X-INVALID-ORDER-121 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_3R_6s^2 + R_1 + s\left(C_3R_1R_3 + C_6R_1R_6\right)}{s^2\left(C_3C_6R_3R_5 + C_4C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.122 X-INVALID-ORDER-122 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s\left(C_3R_3 + C_4R_3 - C_5R_3\right) + 1}$$

10.123 X-INVALID-ORDER-123 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3s + C_5R_1}{C_6 + s\left(C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3\right)}$$

10.124 X-INVALID-ORDER-124 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_6s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_5C_6R_1R_6\right)}{C_6 + s\left(C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3\right)}$$

10.125 X-INVALID-ORDER-125 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^3\left(C_3C_5C_6R_3R_5R_6 + C_4C_5C_6R_3R_5R_6\right) + s^2\left(C_3C_5R_3R_5 + C_3C_6R_3R_6 + C_4C_5R_3R_5 + C_4C_6R_3R_6 - C_5C_6R_3R_6 + C_5C_6R_5R_6\right) + s\left(C_3R_3 + C_4R_3 - C_5R_3 + C_5R_5 + C_6R_6\right) + 1}$$

10.126 X-INVALID-ORDER-126 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s\left(C_3R_3R_5 + C_4R_3R_5 - C_5R_3R_5\right)}$$

10.127 X-INVALID-ORDER-127 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5s^2 + R_1 + s\left(C_3R_1R_3 + C_5R_1R_5\right)}{s^2\left(C_3C_6R_3R_5 + C_4C_6R_3R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.128 X-INVALID-ORDER-128 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_5R_6s^3 + R_1 + s^2\left(C_3C_5R_1R_3R_5 + C_3C_6R_1R_3R_6 + C_5C_6R_1R_5R_6\right) + s\left(C_3R_1R_3 + C_5R_1R_5 + C_6R_1R_6\right)}{s^2\left(C_3C_6R_3R_5 + C_4C_6R_3R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.129 X-INVALID-ORDER-129 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4s^2 + R_1 + s\left(C_3R_1R_3 + C_4R_1R_4\right)}{C_3C_4C_6R_3R_4R_5s^3 + s^2\left(C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.130 X-INVALID-ORDER-130 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_6R_1R_3R_4R_6s^3 + R_1 + s^2\left(C_3C_4R_1R_3R_4 + C_3C_6R_1R_3R_6 + C_4C_6R_1R_4R_6\right) + s\left(C_3R_1R_3 + C_4R_1R_4 + C_6R_1R_6\right)}{C_3C_4C_6R_3R_4R_5s^3 + s^2\left(C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.131 X-INVALID-ORDER-131 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6\right)}{C_3C_4C_6R_3R_4R_5R_6s^3 - R_3 + R_5 + s^2\left(C_3C_4R_3R_4R_5 + C_3C_6R_3R_5R_6 - C_4C_6R_3R_4R_6 + C_4C_6R_3R_5R_6 + C_4C_6R_4R_5R_6\right) + s\left(C_3R_3R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

10.132 X-INVALID-ORDER-132 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{s^2\left(C_3C_4R_3R_4 - C_4C_5R_3R_4\right) + s\left(C_3R_3 + C_4R_3 + C_4R_4 - C_5R_3\right) + 1}$$

10.133 X-INVALID-ORDER-133 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_3R_4R_6s^3 + C_5R_1 + s^2\left(C_3C_4C_5R_1R_3R_4 + C_3C_5C_6R_1R_3R_6 + C_4C_5C_6R_1R_4R_6\right) + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{C_6 + s^2\left(C_3C_4C_6R_3R_4 - C_4C_5C_6R_3R_4\right) + s\left(C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

10.134 X-INVALID-ORDER-134 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{s^3\left(C_3C_4C_6R_3R_4R_6 - C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_3C_4R_3R_4 + C_3C_6R_3R_6 - C_4C_5R_3R_4 + C_4C_6R_3R_6 + C_4C_6R_4R_6 - C_5C_6R_3R_6\right) + s\left(C_3R_3 + C_4R_3 + C_4R_4 - C_5R_3 + C_6R_6\right) + 1}$$

10.135 X-INVALID-ORDER-135 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{C_3C_4C_5R_3R_4R_5s^3 + s^2\left(C_3C_4R_3R_4 + C_3C_5R_3R_5 - C_4C_5R_3R_4 + C_4C_5R_3R_5 + C_4C_5R_4R_5\right) + s\left(C_3R_3 + C_4R_3 + C_4R_4 - C_5R_3 + C_5R_5\right) + 1}$$

10.136 X-INVALID-ORDER-136 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4\right)}{C_3C_4C_5C_6R_3R_4R_5s^3 + C_6 + s^2\left(C_3C_4C_6R_3R_4 + C_3C_5C_6R_3R_5 - C_4C_5C_6R_3R_4 + C_4C_5C_6R_3R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.137 X-INVALID-ORDER-137 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_3R_4R_6s^3 + C_5R_1 + s^2\left(C_3C_4C_5R_1R_3R_4 + C_3C_5C_6R_1R_3R_6 + C_4C_5C_6R_1R_4R_6\right) + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{C_3C_4C_5C_6R_3R_4R_5s^3 + C_6 + s^2\left(C_3C_4C_6R_3R_4 + C_3C_5C_6R_3R_5 - C_4C_5C_6R_3R_4 + C_4C_5C_6R_3R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.138 X-INVALID-ORDER-138 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{C_3C_4C_5C_6R_3R_4R_5R_6s^4 + s^3\left(C_3C_4C_5R_3R_4R_5 + C_3C_4C_6R_3R_4R_6 + C_3C_5C_6R_3R_5R_6 - C_4C_5C_6R_3R_4R_6 + C_4C_5C_6R_3R_5R_6 + C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_3C_4R_3R_4 + C_3C_5R_3R_5 + C_3C_6R_3R_6 - C_4C_5R_3R_4 + C_4C_5R_3R_5 + C_4C_5R_4R_5 + C_4C_6R_3R_6 + C_4C_6R_4R_6 -$$

10.139 X-INVALID-ORDER-139 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_5R_6s^3 + R_1R_6 + s^2\left(C_3C_4R_1R_3R_4R_6 + C_3C_5R_1R_3R_5R_6 + C_4C_5R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s^2\left(C_3C_4R_3R_4R_5 - C_4C_5R_3R_4R_5\right) + s\left(C_3R_3R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5 - C_5R_3R_5\right)}$$

10.140 X-INVALID-ORDER-140 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_5s^3 + R_1 + s^2\left(C_3C_4R_1R_3R_4 + C_3C_5R_1R_3R_5 + C_4C_5R_1R_4R_5\right) + s\left(C_3R_1R_3 + C_4R_1R_4 + C_5R_1R_5\right)}{s^3\left(C_3C_4C_6R_3R_4R_5 - C_4C_5C_6R_3R_4R_5\right) + s^2\left(C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.141 X-INVALID-ORDER-141 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_3R_4R_5R_6s^4 + R_1 + s^3\left(C_3C_4C_5R_1R_3R_4R_5 + C_3C_4C_6R_1R_3R_4R_6 + C_3C_5C_6R_1R_3R_5R_6 + C_4C_5C_6R_1R_4R_5R_6\right) + s^2\left(C_3C_4R_1R_3R_4 + C_3C_5R_1R_3R_5 + C_3C_6R_1R_3R_6 + C_4C_5R_1R_4R_5 + C_4C_6R_1R_4R_6 + C_5C_6R_1R_5R_6\right) + s\left(C_3R_1R_3 + C_4R_1R_4 + C_5$$
$$s^3\left(C_3C_4C_6R_3R_4R_5 - C_4C_5C_6R_3R_4R_5\right) + s^2\left(C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)$$

10.142 X-INVALID-ORDER-142 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_5R_6s^3 + R_1R_6 + s^2\left(C_3C_4R_1R_3R_4R_6 + C_3C_5R_1R_3R_5R_6 + C_4C_5R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s^3\left(C_3C_4C_6R_3R_4R_5R_6 - C_4C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_3C_4R_3R_4R_5 + C_3C_6R_3R_5R_6 - C_4C_5R_3R_4R_5 - C_4C_6R_3R_4R_6 + C_4C_6R_3R_5R_6 + C_4C_6R_4R_5R_6 - C_5C_6R_3R_5R_6\right) + s\left(C_3R_3R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5 - C_5R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

10.143 X-INVALID-ORDER-143 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_3R_4R_6s + R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s\left(C_3R_3R_4R_5 + C_4R_3R_4R_5\right)}$$

10.144 X-INVALID-ORDER-144 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_3R_4s + R_1R_4}{s^2\left(C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.145 X-INVALID-ORDER-145 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_3R_4R_6s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_6R_1R_4R_6\right)}{s^2\left(C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.146 X-INVALID-ORDER-146 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s\left(C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4\right)}$$

10.147 X-INVALID-ORDER-147 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4s + C_5R_1R_4}{C_6R_3 + C_6R_4 + s\left(C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

10.148 X-INVALID-ORDER-148 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_6R_3 + C_6R_4 + s\left(C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

10.149 X-INVALID-ORDER-149 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^3\left(C_3C_5C_6R_3R_4R_5R_6 + C_4C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_3C_5R_3R_4R_5 + C_3C_6R_3R_4R_6 + C_4C_5R_3R_4R_5 + C_4C_6R_3R_4R_6 - C_5C_6R_3R_4R_6 + C_5C_6R_3R_5R_6 + C_5C_6R_4R_5R_6\right) + s\left(C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5 + C_6R_3R_6 + C_6R_4R_6\right)}$$

10.150 X-INVALID-ORDER-150 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s\left(C_3R_3R_4R_5 + C_4R_3R_4R_5 - C_5R_3R_4R_5\right)}$$

10.151 X-INVALID-ORDER-151 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5\right)}{s^2\left(C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.152 X-INVALID-ORDER-152 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_5R_6s^3 + R_1R_4 + s^2\left(C_3C_5R_1R_3R_4R_5 + C_3C_6R_1R_3R_4R_6 + C_5C_6R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^2\left(C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.153 X-INVALID-ORDER-153 $Z(s) = \left(\frac{1}{C_1s},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{R_4R_6}{s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.154 X-INVALID-ORDER-154 $Z(s) = \left(\frac{1}{C_1s},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{R_4}{s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.155 X-INVALID-ORDER-155 $Z(s) = \left(\frac{1}{C_1s},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_6R_4R_6s + R_4}{s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.156 X-INVALID-ORDER-156 $Z(s) = \left(\frac{1}{C_1s},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{R_4R_6}{s^2\left(-C_1C_6R_3R_4R_6 + C_1C_6R_3R_5R_6 + C_1C_6R_4R_5R_6\right) + s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.157 X-INVALID-ORDER-157 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_4 R_6}{-C_1 C_5 R_3 R_4 s + C_1 R_3 + C_1 R_4}$$

10.158 X-INVALID-ORDER-158 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4}{-C_1 C_5 C_6 R_3 R_4 s^2 + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.159 X-INVALID-ORDER-159 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_6 s + C_5 R_4}{-C_1 C_5 C_6 R_3 R_4 s^2 + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.160 X-INVALID-ORDER-160 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s\left(-C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

10.161 X-INVALID-ORDER-161 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4}{s^2\left(-C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.162 X-INVALID-ORDER-162 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_6 s + C_5 R_4}{s^2\left(-C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.163 X-INVALID-ORDER-163 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_4 R_5 R_6 s + R_4 R_6}{-C_1 C_5 R_3 R_4 R_5 s^2 + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.164 X-INVALID-ORDER-164 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4 R_5 s + R_4}{-C_1 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.165 X-INVALID-ORDER-165 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_5 R_6 s^2 + R_4 + s\left(C_5 R_4 R_5 + C_6 R_4 R_6\right)}{-C_1 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.166 X-INVALID-ORDER-166 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_5 R_6 s + R_4 R_6}{-C_1 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + s^2\left(-C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.167 X-INVALID-ORDER-167 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_6}{C_1 C_4 R_3 R_5 s^2 + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.168 X-INVALID-ORDER-168 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{1}{C_1 C_4 C_6 R_3 R_5 s^3 + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.169 X-INVALID-ORDER-169 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_6 s + 1}{C_1 C_4 C_6 R_3 R_5 s^3 + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.170 X-INVALID-ORDER-170 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{R_6}{C_1 C_4 C_6 R_3 R_5 R_6 s^3 + s^2\left(C_1 C_4 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.171 X-INVALID-ORDER-171 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_6}{C_1 + s\left(C_1 C_4 R_3 - C_1 C_5 R_3\right)}$$

10.172 X-INVALID-ORDER-172 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5}{C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.173 X-INVALID-ORDER-173 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_6 s + C_5}{C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.174 X-INVALID-ORDER-174 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5}{C_1 C_4 C_5 C_6 R_3 R_5 s^3 + C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.175 X-INVALID-ORDER-175 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_6 s + C_5}{C_1 C_4 C_5 C_6 R_3 R_5 s^3 + C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.176 X-INVALID-ORDER-176 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_6}{C_1 C_4 C_5 C_6 R_3 R_5 R_6 s^3 + C_1 + s^2\left(C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.177 X-INVALID-ORDER-177 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_5 R_6 s + R_6}{s^2 \left(C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.178 X-INVALID-ORDER-178 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_5 s + 1}{s^3 \left(C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.179 X-INVALID-ORDER-179 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_5 R_6 s^2 + s \left(C_5 R_5 + C_6 R_6\right) + 1}{s^3 \left(C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.180 X-INVALID-ORDER-180 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_5 R_6 s + R_6}{s^3 \left(C_1 C_4 C_6 R_3 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.181 X-INVALID-ORDER-181 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_4 R_4 R_6 s + R_6}{s^2 \left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.182 X-INVALID-ORDER-182 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 R_4 s + 1}{s^3 \left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.183 X-INVALID-ORDER-183 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_6 R_4 R_6 s^2 + s \left(C_4 R_4 + C_6 R_6\right) + 1}{s^3 \left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.184 X-INVALID-ORDER-184 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 R_4 R_6 s + R_6}{s^3 \left(-C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.185 X-INVALID-ORDER-185 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_4 s + C_5}{-C_1 C_4 C_5 C_6 R_3 R_4 s^3 + C_1 C_6 s + s^2 \left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.186 X-INVALID-ORDER-186 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 C_6 R_4 R_6 s^2 + C_5 + s \left(C_4 C_5 R_4 + C_5 C_6 R_6\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 s^3 + C_1 C_6 s + s^2 \left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.187 X-INVALID-ORDER-187 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_6 s + C_5 R_6}{-C_1 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 + s^2 \left(-C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_6 R_3 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s \left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

10.188 X-INVALID-ORDER-188 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_4 s + C_5}{C_1 C_6 s + s^3 \left(-C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.189 X-INVALID-ORDER-189 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 C_6 R_4 R_6 s^2 + C_5 + s \left(C_4 C_5 R_4 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^3 \left(-C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.190 X-INVALID-ORDER-190 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_6 s + C_5 R_6}{C_1 + s^3 \left(-C_1 C_4 C_5 C_6 R_3 R_4 R_6 + C_1 C_4 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_5 R_4 R_5 + C_1 C_4 C_6 R_3 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.191 X-INVALID-ORDER-191 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_5 R_6 s^2 + R_6 + s \left(C_4 R_4 R_6 + C_5 R_5 R_6\right)}{-C_1 C_4 C_5 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.192 X-INVALID-ORDER-192 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_5 s^2 + s \left(C_4 R_4 + C_5 R_5\right) + 1}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + s^3 \left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.193 X-INVALID-ORDER-193 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 C_6 R_4 R_5 R_6 s^3 + s^2 \left(C_4 C_5 R_4 R_5 + C_4 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_4 R_4 + C_5 R_5 + C_6 R_6\right) + 1}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + s^3 \left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.194 X-INVALID-ORDER-194 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_4 C_5 R_4 R_5 R_6 s^2 + R_6 + s \left(C_4 R_4 R_6 + C_5 R_5 R_6\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + s^3 \left(-C_1 C_4 C_5 R_3 R_4 R_5 - C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.195 X-INVALID-ORDER-195 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{R_4 R_6}{C_1 C_4 R_3 R_4 R_5 s^2 + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.196 X-INVALID-ORDER-196 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_4}{C_1 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.197 X-INVALID-ORDER-197 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_4 R_6 s + R_4}{C_1 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.198 X-INVALID-ORDER-198 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{R_4 R_6}{C_1 C_4 C_6 R_3 R_4 R_5 R_6 s^3 + s^2 \left(C_1 C_4 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.199 X-INVALID-ORDER-199 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s \left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.200 X-INVALID-ORDER-200 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4}{s^2 \left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.201 X-INVALID-ORDER-201 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_6 s + C_5 R_4}{s^2 \left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.202 X-INVALID-ORDER-202 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.203 X-INVALID-ORDER-203 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_6 s + C_5 R_4}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.204 X-INVALID-ORDER-204 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_6}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + C_1 R_3 + C_1 R_4 + s^2 \left(C_1 C_4 C_5 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

10.205 X-INVALID-ORDER-205 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_5 R_4 R_5 R_6 s + R_4 R_6}{s^2 \left(C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.206 X-INVALID-ORDER-206 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_4 R_5 s + R_4}{s^3 \left(C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.207 X-INVALID-ORDER-207 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_4 R_5 R_6 s^2 + R_4 + s\left(C_5 R_4 R_5 + C_6 R_4 R_6\right)}{s^3\left(C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.208 X-INVALID-ORDER-208 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_4 R_5 R_6 s + R_4 R_6}{s^3\left(C_1 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2\left(C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.209 X-INVALID-ORDER-209 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_4 R_6}{C_1 C_3 R_4 R_5 s - C_1 R_4 + C_1 R_5}$$

10.210 X-INVALID-ORDER-210 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_4}{C_1 C_3 C_6 R_4 R_5 s^2 + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.211 X-INVALID-ORDER-211 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_4 R_6 s + C_3 R_4}{C_1 C_3 C_6 R_4 R_5 s^2 + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.212 X-INVALID-ORDER-212 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s\left(C_1 C_3 R_4 - C_1 C_5 R_4\right)}$$

10.213 X-INVALID-ORDER-213 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.214 X-INVALID-ORDER-214 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.215 X-INVALID-ORDER-215 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 C_3 C_5 C_6 R_4 R_5 R_6 s^3 + C_1 + s^2\left(C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.216 X-INVALID-ORDER-216 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s\left(C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

10.217 X-INVALID-ORDER-217 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 s + C_3 R_4}{s^2 \left(C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.218 X-INVALID-ORDER-218 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_5 R_6 s^2 + C_3 R_4 + s \left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^2 \left(C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.219 X-INVALID-ORDER-219 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_6}{-C_1 + s \left(C_1 C_3 R_5 + C_1 C_4 R_5\right)}$$

10.220 X-INVALID-ORDER-220 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.221 X-INVALID-ORDER-221 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_6 s + C_3}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.222 X-INVALID-ORDER-222 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$$

10.223 X-INVALID-ORDER-223 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5}{s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.224 X-INVALID-ORDER-224 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_6 s + C_3 C_5}{s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.225 X-INVALID-ORDER-225 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s \left(C_1 C_3 C_6 R_6 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.226 X-INVALID-ORDER-226 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s \left(C_1 C_3 C_5 R_5 + C_1 C_4 C_5 R_5\right)}$$

10.227 X-INVALID-ORDER-227 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5}{s^2 \left(C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.228 X-INVALID-ORDER-228 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_6 s + C_3 C_5}{s^2 \left(C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.229 X-INVALID-ORDER-229 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_5 R_6 s + C_3 R_6}{-C_1 + s \left(C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

10.230 X-INVALID-ORDER-230 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_5 s + C_3}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.231 X-INVALID-ORDER-231 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_5 R_6 s^2 + C_3 + s \left(C_3 C_5 R_5 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.232 X-INVALID-ORDER-232 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 R_4 s + C_3}{C_1 C_3 C_4 C_6 R_4 R_5 s^3 - C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.233 X-INVALID-ORDER-233 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_6 R_4 R_6 s^2 + C_3 + s \left(C_3 C_4 R_4 + C_3 C_6 R_6\right)}{C_1 C_3 C_4 C_6 R_4 R_5 s^3 - C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.234 X-INVALID-ORDER-234 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_4 R_6 s + C_3 R_6}{C_1 C_3 C_4 C_6 R_4 R_5 R_6 s^3 - C_1 + s^2 \left(C_1 C_3 C_4 R_4 R_5 + C_1 C_3 C_6 R_5 R_6 - C_1 C_4 C_6 R_4 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.235 X-INVALID-ORDER-235 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s \left(C_1 C_3 C_4 R_4 - C_1 C_4 C_5 R_4\right)}$$

10.236 X-INVALID-ORDER-236 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 s + C_3 C_5}{s^2 \left(C_1 C_3 C_4 C_6 R_4 - C_1 C_4 C_5 C_6 R_4\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.237 X-INVALID-ORDER-237 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_4R_6s^2 + C_3C_5 + s\left(C_3C_4C_5R_4 + C_3C_5C_6R_6\right)}{s^2\left(C_1C_3C_4C_6R_4 - C_1C_4C_5C_6R_4\right) + s\left(C_1C_3C_6 + C_1C_4C_6 - C_1C_5C_6\right)}$$

10.238 X-INVALID-ORDER-238 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_4s + C_3C_5}{C_1C_3C_4C_5C_6R_4R_5s^3 + s^2\left(C_1C_3C_4C_6R_4 + C_1C_3C_5C_6R_5 - C_1C_4C_5C_6R_4 + C_1C_4C_5C_6R_5\right) + s\left(C_1C_3C_6 + C_1C_4C_6 - C_1C_5C_6\right)}$$

10.239 X-INVALID-ORDER-239 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_4R_6s^2 + C_3C_5 + s\left(C_3C_4C_5R_4 + C_3C_5C_6R_6\right)}{C_1C_3C_4C_5C_6R_4R_5s^3 + s^2\left(C_1C_3C_4C_6R_4 + C_1C_3C_5C_6R_5 - C_1C_4C_5C_6R_4 + C_1C_4C_5C_6R_5\right) + s\left(C_1C_3C_6 + C_1C_4C_6 - C_1C_5C_6\right)}$$

10.240 X-INVALID-ORDER-240 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_6s + C_3C_5R_6}{C_1C_3C_4C_5C_6R_4R_5R_6s^3 + C_1C_3 + C_1C_4 - C_1C_5 + s^2\left(C_1C_3C_4C_5R_4R_5 + C_1C_3C_4C_6R_4R_6 + C_1C_3C_5C_6R_5R_6 - C_1C_4C_5C_6R_4R_6 + C_1C_4C_5C_6R_5R_6\right) + s\left(C_1C_3C_4R_4 + C_1C_3C_5R_5 + C_1C_3C_6R_6 - C_1C_4C_5R_4 + C_1C_4C_5R_5 + C_1C_4C_6R_6 - C_1C_5C_6R_6\right)}$$

10.241 X-INVALID-ORDER-241 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_5s^2 + C_3 + s\left(C_3C_4R_4 + C_3C_5R_5\right)}{-C_1C_6s + s^3\left(C_1C_3C_4C_6R_4R_5 - C_1C_4C_5C_6R_4R_5\right) + s^2\left(C_1C_3C_6R_5 - C_1C_4C_6R_4 + C_1C_4C_6R_5 - C_1C_5C_6R_5\right)}$$

10.242 X-INVALID-ORDER-242 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_4R_5R_6s^3 + C_3 + s^2\left(C_3C_4C_5R_4R_5 + C_3C_4C_6R_4R_6 + C_3C_5C_6R_5R_6\right) + s\left(C_3C_4R_4 + C_3C_5R_5 + C_3C_6R_6\right)}{-C_1C_6s + s^3\left(C_1C_3C_4C_6R_4R_5 - C_1C_4C_5C_6R_4R_5\right) + s^2\left(C_1C_3C_6R_5 - C_1C_4C_6R_4 + C_1C_4C_6R_5 - C_1C_5C_6R_5\right)}$$

10.243 X-INVALID-ORDER-243 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_5R_6s^2 + C_3R_6 + s\left(C_3C_4R_4R_6 + C_3C_5R_5R_6\right)}{-C_1 + s^3\left(C_1C_3C_4C_6R_4R_5R_6 - C_1C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_1C_3C_4R_4R_5 + C_1C_3C_6R_5R_6 - C_1C_4C_5R_4R_5 - C_1C_4C_6R_4R_6 + C_1C_4C_6R_5R_6 - C_1C_5C_6R_5R_6\right) + s\left(C_1C_3R_5 - C_1C_4R_4 + C_1C_4R_5 - C_1C_5R_5 - C_1C_6R_6\right)}$$

10.244 X-INVALID-ORDER-244 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_4R_6}{-C_1R_4 + C_1R_5 + s\left(C_1C_3R_4R_5 + C_1C_4R_4R_5\right)}$$

10.245 X-INVALID-ORDER-245 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3R_4}{s^2\left(C_1C_3C_6R_4R_5 + C_1C_4C_6R_4R_5\right) + s\left(-C_1C_6R_4 + C_1C_6R_5\right)}$$

10.246 X-INVALID-ORDER-246 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_6R_4R_6s + C_3R_4}{s^2\left(C_1C_3C_6R_4R_5 + C_1C_4C_6R_4R_5\right) + s\left(-C_1C_6R_4 + C_1C_6R_5\right)}$$

10.247 X-INVALID-ORDER-247 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s\left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4\right)}$$

10.248 X-INVALID-ORDER-248 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.249 X-INVALID-ORDER-249 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.250 X-INVALID-ORDER-250 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^3\left(C_1 C_3 C_5 C_6 R_4 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_4 R_6 + C_1 C_4 C_5 R_4 R_5 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.251 X-INVALID-ORDER-251 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

10.252 X-INVALID-ORDER-252 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 s + C_3 R_4}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.253 X-INVALID-ORDER-253 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_5 R_6 s^2 + C_3 R_4 + s\left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.254 X-INVALID-ORDER-254 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5\right)}$$

10.255 X-INVALID-ORDER-255 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_4}{s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.256 X-INVALID-ORDER-256 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_4 R_6 s + C_3 R_4}{s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.257 X-INVALID-ORDER-257 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{-C_1 C_3 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 + s^2 \left(-C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

10.258 X-INVALID-ORDER-258 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^3 \left(-C_1 C_3 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_3 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.259 X-INVALID-ORDER-259 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 s + C_3 R_4}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.260 X-INVALID-ORDER-260 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_5 R_6 s^2 + C_3 R_4 + s \left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.261 X-INVALID-ORDER-261 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 - C_1 R_4 + C_1 R_5 + s^2 \left(-C_1 C_3 C_5 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

10.262 X-INVALID-ORDER-262 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3}{C_1 C_3 C_4 C_6 R_3 R_5 s^3 - C_1 C_6 s + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.263 X-INVALID-ORDER-263 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_6 s + C_3}{C_1 C_3 C_4 C_6 R_3 R_5 s^3 - C_1 C_6 s + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.264 X-INVALID-ORDER-264 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_6}{C_1 C_3 C_4 C_6 R_3 R_5 R_6 s^3 - C_1 + s^2 \left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.265 X-INVALID-ORDER-265 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s \left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3\right)}$$

10.266 X-INVALID-ORDER-266 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5}{s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.267 X-INVALID-ORDER-267 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_6 s + C_3 C_5}{s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.268 X-INVALID-ORDER-268 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.269 X-INVALID-ORDER-269 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_6 s + C_3 C_5}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.270 X-INVALID-ORDER-270 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_6}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 R_6 s^3 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2 \left(C_1 C_3 C_4 C_5 R_3 R_5 + C_1 C_3 C_4 C_6 R_3 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 + C_1 C_3 C_5 C_6 R_5 R_6 + C_1 C_4 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3 + C_1 C_3 C_5 R_5 + C_1 C_3 C_6 R_6 + C_1 C_4 C_5 R_5 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.271 X-INVALID-ORDER-271 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_5 s + C_3}{-C_1 C_6 s + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 - C_1 C_3 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.272 X-INVALID-ORDER-272 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_5 R_6 s^2 + C_3 + s \left(C_3 C_5 R_5 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 - C_1 C_3 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.273 X-INVALID-ORDER-273 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_5 R_6 s + C_3 R_6}{-C_1 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6 - C_1 C_5 C_6 R_5 R_6\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5 - C_1 C_6 R_6\right)}$$

10.274 X-INVALID-ORDER-274 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 R_4 s + C_3}{-C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.275 X-INVALID-ORDER-275 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_6 R_4 R_6 s^2 + C_3 + s \left(C_3 C_4 R_4 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.276 X-INVALID-ORDER-276 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_4 R_6 s + C_3 R_6}{-C_1 + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 - C_1 C_4 C_6 R_4 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.277 X-INVALID-ORDER-277 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 s + C_3 C_5}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 - C_1 C_4 C_5 C_6 R_4\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.278 X-INVALID-ORDER-278 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_4 R_6 s^2 + C_3 C_5 + s \left(C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 - C_1 C_4 C_5 C_6 R_4\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.279 X-INVALID-ORDER-279 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_6 s + C_3 C_5 R_6}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2 \left(-C_1 C_3 C_4 C_5 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_6 + C_1 C_3 C_4 C_6 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 - C_1 C_4 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 C_4 R_3 + C_1 C_3 C_4 R_4 - C_1 C_3 C_5 R_3 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.280 X-INVALID-ORDER-280 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 s + C_3 C_5}{s^3 \left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 + C_1 C_3 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.281 X-INVALID-ORDER-281 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_4 R_6 s^2 + C_3 C_5 + s \left(C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{s^3 \left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 + C_1 C_3 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.282 X-INVALID-ORDER-282 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^3 \left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 C_4 C_5 R_3 R_4 + C_1 C_3 C_4 C_5 R_3 R_5 + C_1 C_3 C_4 C_5 R_4 R_5 + C_1 C_3 C_4 C_6 R_3 R_6 + C_1 C_3 C_4 C_6 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 + C_1 C_3 C_5 C_6 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 C_4 R_3 + C_1 C_3 C_4 R_4 - C_1 C_3 C_5 R_3 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.283 X-INVALID-ORDER-283 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_5 R_6 s^2 + C_3 R_6 + s \left(C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 C_3 C_4 C_5 R_3 R_4 R_5 s^3 - C_1 + s^2 \left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_4 C_5 R_4 R_5\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

10.284 X-INVALID-ORDER-284 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_5 s^2 + C_3 + s \left(C_3 C_4 R_4 + C_3 C_5 R_5\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 - C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.285 X-INVALID-ORDER-285 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_4 R_5 R_6 s^3 + C_3 + s^2 \left(C_3 C_4 C_5 R_4 R_5 + C_3 C_4 C_6 R_4 R_6 + C_3 C_5 C_6 R_5 R_6\right) + s \left(C_3 C_4 R_4 + C_3 C_5 R_5 + C_3 C_6 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 - C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.286 X-INVALID-ORDER-286 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_4 R_5 R_6 s^2 + C_3 R_6 + s \left(C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 - C_1 + s^3 \left(-C_1 C_3 C_4 C_5 R_3 R_4 R_5 - C_1 C_3 C_4 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_6 R_4 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_3 C_6 R_3 R_6\right.$$

10.287 X-INVALID-ORDER-287 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_4}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.288 X-INVALID-ORDER-288 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_4 R_6 s + C_3 R_4}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.289 X-INVALID-ORDER-289 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_4 R_6}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 s^3 - C_1 R_4 + C_1 R_5 + s^2 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

10.290 X-INVALID-ORDER-290 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

10.291 X-INVALID-ORDER-291 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 C_3 C_4 C_5 R_3 R_4 R_5 s^3 + C_1 + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_4 C_5 R_4 R_5\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5\right)}$$

10.292 X-INVALID-ORDER-292 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

10.293 X-INVALID-ORDER-293 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_6 s + C_3 C_5 R_4}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

10.294 X-INVALID-ORDER-294 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_6 s}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + C_1 + s^3 \left(C_1 C_3 C_4 C_5 R_3 R_4 R_5 + C_1 C_3 C_4 C_6 R_3 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_3 C_5 C_6 R_4 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1$$

10.295 X-INVALID-ORDER-295 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 s + C_3 R_4}{s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.296 X-INVALID-ORDER-296 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_4 R_5 R_6 s^2 + C_3 R_4 + s \left(C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.297 X-INVALID-ORDER-297 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_4 R_5 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_5 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1}$$

10.298 X-INVALID-ORDER-298 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_3 R_4 R_6 s + R_4 R_6}{C_1 C_3 R_3 R_4 R_5 s^2 + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.299 X-INVALID-ORDER-299 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_3 R_4 s + R_4}{C_1 C_3 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.300 X-INVALID-ORDER-300 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_3 R_4 R_6 s^2 + R_4 + s \left(C_3 R_3 R_4 + C_6 R_4 R_6\right)}{C_1 C_3 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.301 X-INVALID-ORDER-301 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_3 R_4 R_6 s + R_4 R_6}{C_1 C_3 C_6 R_3 R_4 R_5 R_6 s^3 + s^2 \left(C_1 C_3 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.302 X-INVALID-ORDER-302 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s \left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.303 X-INVALID-ORDER-303 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 s + C_5 R_4}{s^2 \left(C_1 C_3 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.304 X-INVALID-ORDER-304 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_6 s^2 + C_5 R_4 + s \left(C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{s^2 \left(C_1 C_3 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.305 X-INVALID-ORDER-305 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 s + C_5 R_4}{C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(C_1 C_3 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.306 X-INVALID-ORDER-306 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_6 s^2 + C_5 R_4 + s \left(C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(C_1 C_3 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.307 X-INVALID-ORDER-307 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + C_1 R_3 + C_1 R_4 + s^2 \left(C_1 C_3 C_5 R_3 R_4 R_5 + C_1 C_3 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

10.308 X-INVALID-ORDER-308 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 R_6 s^2 + R_4 R_6 + s \left(C_3 R_3 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^2 \left(C_1 C_3 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.309 X-INVALID-ORDER-309 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 s^2 + R_4 + s \left(C_3 R_3 R_4 + C_5 R_4 R_5\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.310 X-INVALID-ORDER-310 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + R_4 + s^2 \left(C_3 C_5 R_3 R_4 R_5 + C_3 C_6 R_3 R_4 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s \left(C_3 R_3 R_4 + C_5 R_4 R_5 + C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.311 X-INVALID-ORDER-311 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 R_6 s^2 + R_4 R_6 + s \left(C_3 R_3 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.312 X-INVALID-ORDER-312 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_3 R_6 s + R_6}{s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.313 X-INVALID-ORDER-313 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_3 s + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.314 X-INVALID-ORDER-314 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_3 R_6 s^2 + s \left(C_3 R_3 + C_6 R_6\right) + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.315 X-INVALID-ORDER-315 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_3 R_6 s + R_6}{s^3 \left(C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.316 X-INVALID-ORDER-316 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_6 s + C_5 R_6}{C_1 + s \left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3\right)}$$

10.317 X-INVALID-ORDER-317 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 s + C_5}{C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.318 X-INVALID-ORDER-318 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_6 s^2 + C_5 + s \left(C_3 C_5 R_3 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.319 X-INVALID-ORDER-319 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 s + C_5}{C_1 C_6 s + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_3 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.320 X-INVALID-ORDER-320 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_6 s^2 + C_5 + s \left(C_3 C_5 R_3 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_3 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.321 X-INVALID-ORDER-321 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_6 s + C_5 R_6}{C_1 + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.322 X-INVALID-ORDER-322 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_5 R_6 s^2 + R_6 + s \left(C_3 R_3 R_6 + C_5 R_5 R_6\right)}{s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.323 X-INVALID-ORDER-323 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_5 s^2 + s \left(C_3 R_3 + C_5 R_5\right) + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.324 X-INVALID-ORDER-324 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_5 R_6 s^3 + s^2 \left(C_3 C_5 R_3 R_5 + C_3 C_6 R_3 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_3 R_3 + C_5 R_5 + C_6 R_6\right) + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.325 X-INVALID-ORDER-325 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_5 R_6 s^2 + R_6 + s \left(C_3 R_3 R_6 + C_5 R_5 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.326 X-INVALID-ORDER-326 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 C_4 R_3 R_4 R_6 s^2 + R_6 + s \left(C_3 R_3 R_6 + C_4 R_4 R_6\right)}{C_1 C_3 C_4 R_3 R_4 R_5 s^3 + s^2 \left(C_1 C_3 R_3 R_5 - C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.327 X-INVALID-ORDER-327 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 R_3 R_4 s^2 + s\left(C_3 R_3 + C_4 R_4\right) + 1}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^4 + s^3\left(C_1 C_3 C_6 R_3 R_5 - C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.328 X-INVALID-ORDER-328 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_6 R_3 R_4 R_6 s^3 + s^2\left(C_3 C_4 R_3 R_4 + C_3 C_6 R_3 R_6 + C_4 C_6 R_4 R_6\right) + s\left(C_3 R_3 + C_4 R_4 + C_6 R_6\right) + 1}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^4 + s^3\left(C_1 C_3 C_6 R_3 R_5 - C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.329 X-INVALID-ORDER-329 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_3 R_4 R_6 s^2 + R_6 + s\left(C_3 R_3 R_6 + C_4 R_4 R_6\right)}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 s^4 + s^3\left(C_1 C_3 C_4 R_3 R_4 R_5 + C_1 C_3 C_6 R_3 R_5 R_6 - C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 R_3 R_5 - C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.330 X-INVALID-ORDER-330 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 s^2 + C_5 + s\left(C_3 C_5 R_3 + C_4 C_5 R_4\right)}{C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_4 C_5 C_6 R_3 R_4\right) + s^2\left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.331 X-INVALID-ORDER-331 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_5 + s^2\left(C_3 C_4 C_5 R_3 R_4 + C_3 C_5 C_6 R_3 R_6 + C_4 C_5 C_6 R_4 R_6\right) + s\left(C_3 C_5 R_3 + C_4 C_5 R_4 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_4 C_5 C_6 R_3 R_4\right) + s^2\left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.332 X-INVALID-ORDER-332 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_6 s^2 + C_5 R_6 + s\left(C_3 C_5 R_3 R_6 + C_4 C_5 R_4 R_6\right)}{C_1 + s^3\left(C_1 C_3 C_4 C_6 R_3 R_4 R_6 - C_1 C_4 C_5 C_6 R_3 R_4 R_6\right) + s^2\left(C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_6 R_3 R_6 - C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_6 R_3 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

10.333 X-INVALID-ORDER-333 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_6 s^2 + C_5 R_6 + s\left(C_3 C_5 R_3 R_6 + C_4 C_5 R_4 R_6\right)}{C_1 C_3 C_4 C_5 R_3 R_4 R_5 s^3 + C_1 + s^2\left(C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 - C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_5 R_4 R_5\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

10.334 X-INVALID-ORDER-334 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 s^2 + C_5 + s\left(C_3 C_5 R_3 + C_4 C_5 R_4\right)}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.335 X-INVALID-ORDER-335 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_5 + s^2\left(C_3 C_4 C_5 R_3 R_4 + C_3 C_5 C_6 R_3 R_6 + C_4 C_5 C_6 R_4 R_6\right) + s\left(C_3 C_5 R_3 + C_4 C_5 R_4 + C_5 C_6 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.336 X-INVALID-ORDER-336 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_6 s^2 + C_5 R_6 + s\left(C_3 C_5 R_3 R_6 + C_4 C_5 R_4 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + C_1 + s^3\left(C_1 C_3 C_4 C_5 R_3 R_4 R_5 + C_1 C_3 C_4 C_6 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_3 R_5 R_6 - C_1 C_4 C_5 C_6 R_3 R_4 R_6 + C_1 C_4 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_6 R_3 R_6 - C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_5 R_3 R_5 + C_1\right.$$

10.337 X-INVALID-ORDER-337 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_5 R_6 s^3 + R_6 + s^2 \left(C_3 C_4 R_3 R_4 R_6 + C_3 C_5 R_3 R_5 R_6 + C_4 C_5 R_4 R_5 R_6\right) + s \left(C_3 R_3 R_6 + C_4 R_4 R_6 + C_5 R_5 R_6\right)}{s^3 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_4 C_5 R_3 R_4 R_5\right) + s^2 \left(C_1 C_3 R_3 R_5 - C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.338 X-INVALID-ORDER-338 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_5 s^3 + s^2 \left(C_3 C_4 R_3 R_4 + C_3 C_5 R_3 R_5 + C_4 C_5 R_4 R_5\right) + s \left(C_3 R_3 + C_4 R_4 + C_5 R_5\right) + 1}{s^4 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^3 \left(C_1 C_3 C_6 R_3 R_5 - C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.339 X-INVALID-ORDER-339 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + s^3 \left(C_3 C_4 C_5 R_3 R_4 R_5 + C_3 C_4 C_6 R_3 R_4 R_6 + C_3 C_5 C_6 R_3 R_5 R_6 + C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_3 C_4 R_3 R_4 + C_3 C_5 R_3 R_5 + C_3 C_6 R_3 R_6 + C_4 C_5 R_4 R_5 + C_4 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_3 R_3 + C_4 R_4 + C_5 R_5 + C_6 R_6\right) + 1}{s^4 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^3 \left(C_1 C_3 C_6 R_3 R_5 - C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.340 X-INVALID-ORDER-340 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_3 R_4 R_5 R_6 s^3 + R_6 + s^2 \left(C_3 C_4 R_3 R_4 R_6 + C_3 C_5 R_3 R_5 R_6 + C_4 C_5 R_4 R_5 R_6\right) + s \left(C_3 R_3 R_6 + C_4 R_4 R_6 + C_5 R_5 R_6\right)}{s^4 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^3 \left(C_1 C_3 C_4 R_3 R_4 R_5 + C_1 C_3 C_6 R_3 R_5 R_6 - C_1 C_4 C_5 R_3 R_4 R_5 - C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_5 - C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5\right)}$$

10.341 X-INVALID-ORDER-341 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 R_3 R_4 R_6 s + R_4 R_6}{s^2 \left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.342 X-INVALID-ORDER-342 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_3 R_4 s + R_4}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.343 X-INVALID-ORDER-343 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_3 R_4 R_6 s^2 + R_4 + s \left(C_3 R_3 R_4 + C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.344 X-INVALID-ORDER-344 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_3 R_4 R_6 s + R_4 R_6}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 R_6 + C_1 C_4 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.345 X-INVALID-ORDER-345 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s \left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.346 X-INVALID-ORDER-346 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 s + C_5 R_4}{s^2 \left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.347 X-INVALID-ORDER-347 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_6 s^2 + C_5 R_4 + s\left(C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{s^2\left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.348 X-INVALID-ORDER-348 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 s + C_5 R_4}{s^3\left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 + C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.349 X-INVALID-ORDER-349 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_6 s^2 + C_5 R_4 + s\left(C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{s^3\left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 + C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.350 X-INVALID-ORDER-350 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s^3\left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6 + C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_5 R_3 R_4 R_5 + C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_4 C_5 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

10.351 X-INVALID-ORDER-351 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 R_6 s^2 + R_4 R_6 + s\left(C_3 R_3 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^2\left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.352 X-INVALID-ORDER-352 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 s^2 + R_4 + s\left(C_3 R_3 R_4 + C_5 R_4 R_5\right)}{s^3\left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.353 X-INVALID-ORDER-353 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + R_4 + s^2\left(C_3 C_5 R_3 R_4 R_5 + C_3 C_6 R_3 R_4 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s\left(C_3 R_3 R_4 + C_5 R_4 R_5 + C_6 R_4 R_6\right)}{s^3\left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.354 X-INVALID-ORDER-354 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_3 R_4 R_5 R_6 s^2 + R_4 R_6 + s\left(C_3 R_3 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^3\left(C_1 C_3 C_6 R_3 R_4 R_5 R_6 + C_1 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.355 X-INVALID-ORDER-355 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 R_1 R_4 R_6 s + R_4 R_6}{s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.356 X-INVALID-ORDER-356 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 R_1 R_4 s + R_4}{s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.357 X-INVALID-ORDER-357 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_6 R_1 R_4 R_6 s^2 + R_4 + s\left(C_1 R_1 R_4 + C_6 R_4 R_6\right)}{s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.358 X-INVALID-ORDER-358 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 R_1 R_4 R_6 s + R_4 R_6}{s^2\left(-C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.359 X-INVALID-ORDER-359 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{-C_1 C_5 R_3 R_4 s + C_1 R_3 + C_1 R_4}$$

10.360 X-INVALID-ORDER-360 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 s + C_5 R_4}{-C_1 C_5 C_6 R_3 R_4 s^2 + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.361 X-INVALID-ORDER-361 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_6 s^2 + C_5 R_4 + s\left(C_1 C_5 R_1 R_4 + C_5 C_6 R_4 R_6\right)}{-C_1 C_5 C_6 R_3 R_4 s^2 + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.362 X-INVALID-ORDER-362 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s\left(-C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

10.363 X-INVALID-ORDER-363 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 s + C_5 R_4}{s^2\left(-C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.364 X-INVALID-ORDER-364 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_6 s^2 + C_5 R_4 + s\left(C_1 C_5 R_1 R_4 + C_5 C_6 R_4 R_6\right)}{s^2\left(-C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.365 X-INVALID-ORDER-365 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 R_6 s^2 + R_4 R_6 + s\left(C_1 R_1 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{-C_1 C_5 R_3 R_4 R_5 s^2 + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.366 X-INVALID-ORDER-366 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 s^2 + R_4 + s\left(C_1 R_1 R_4 + C_5 R_4 R_5\right)}{-C_1 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.367 X-INVALID-ORDER-367 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + R_4 + s^2 \left(C_1 C_5 R_1 R_4 R_5 + C_1 C_6 R_1 R_4 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s \left(C_1 R_1 R_4 + C_5 R_4 R_5 + C_6 R_4 R_6\right)}{-C_1 C_5 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.368 X-INVALID-ORDER-368 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 R_6 s^2 + R_4 R_6 + s \left(C_1 R_1 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{-C_1 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + s^2 \left(-C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.369 X-INVALID-ORDER-369 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 R_1 R_6 s + R_6}{C_1 C_4 R_3 R_5 s^2 + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.370 X-INVALID-ORDER-370 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 R_1 s + 1}{C_1 C_4 C_6 R_3 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.371 X-INVALID-ORDER-371 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_6 R_1 R_6 s^2 + s \left(C_1 R_1 + C_6 R_6\right) + 1}{C_1 C_4 C_6 R_3 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.372 X-INVALID-ORDER-372 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 R_1 R_6 s + R_6}{C_1 C_4 C_6 R_3 R_5 R_6 s^3 + s^2 \left(C_1 C_4 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.373 X-INVALID-ORDER-373 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_6 s + C_5 R_6}{C_1 + s \left(C_1 C_4 R_3 - C_1 C_5 R_3\right)}$$

10.374 X-INVALID-ORDER-374 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 s + C_5}{C_1 C_6 s + s^2 \left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.375 X-INVALID-ORDER-375 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_6 s^2 + C_5 + s \left(C_1 C_5 R_1 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^2 \left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.376 X-INVALID-ORDER-376 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 s + C_5}{C_1 C_4 C_5 C_6 R_3 R_5 s^3 + C_1 C_6 s + s^2 \left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.377 X-INVALID-ORDER-377 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_6 s^2 + C_5 + s\left(C_1 C_5 R_1 + C_5 C_6 R_6\right)}{C_1 C_4 C_5 C_6 R_3 R_5 s^3 + C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.378 X-INVALID-ORDER-378 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_6 s + C_5 R_6}{C_1 C_4 C_5 C_6 R_3 R_5 R_6 s^3 + C_1 + s^2\left(C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.379 X-INVALID-ORDER-379 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_5 R_6 s^2 + R_6 + s\left(C_1 R_1 R_6 + C_5 R_5 R_6\right)}{s^2\left(C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.380 X-INVALID-ORDER-380 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_5 s^2 + s\left(C_1 R_1 + C_5 R_5\right) + 1}{s^3\left(C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.381 X-INVALID-ORDER-381 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_5 R_6 s^3 + s^2\left(C_1 C_5 R_1 R_5 + C_1 C_6 R_1 R_6 + C_5 C_6 R_5 R_6\right) + s\left(C_1 R_1 + C_5 R_5 + C_6 R_6\right) + 1}{s^3\left(C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.382 X-INVALID-ORDER-382 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_5 R_6 s^2 + R_6 + s\left(C_1 R_1 R_6 + C_5 R_5 R_6\right)}{s^3\left(C_1 C_4 C_6 R_3 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2\left(C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.383 X-INVALID-ORDER-383 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_4 R_1 R_4 R_6 s^2 + R_6 + s\left(C_1 R_1 R_6 + C_4 R_4 R_6\right)}{s^2\left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.384 X-INVALID-ORDER-384 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 R_1 R_4 s^2 + s\left(C_1 R_1 + C_4 R_4\right) + 1}{s^3\left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.385 X-INVALID-ORDER-385 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_6 R_1 R_4 R_6 s^3 + s^2\left(C_1 C_4 R_1 R_4 + C_1 C_6 R_1 R_6 + C_4 C_6 R_4 R_6\right) + s\left(C_1 R_1 + C_4 R_4 + C_6 R_6\right) + 1}{s^3\left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.386 X-INVALID-ORDER-386 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_4 R_1 R_4 R_6 s^2 + R_6 + s\left(C_1 R_1 R_6 + C_4 R_4 R_6\right)}{s^3\left(-C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s^2\left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.387 X-INVALID-ORDER-387 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 s^2 + C_5 + s\left(C_1 C_5 R_1 + C_4 C_5 R_4\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 s^3 + C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.388 X-INVALID-ORDER-388 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_5 + s^2\left(C_1 C_4 C_5 R_1 R_4 + C_1 C_5 C_6 R_1 R_6 + C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_5 R_1 + C_4 C_5 R_4 + C_5 C_6 R_6\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 s^3 + C_1 C_6 s + s^2\left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3\right)}$$

10.389 X-INVALID-ORDER-389 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_6 + s\left(C_1 C_5 R_1 R_6 + C_4 C_5 R_4 R_6\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 + s^2\left(-C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_6 R_3 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s\left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

10.390 X-INVALID-ORDER-390 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 s^2 + C_5 + s\left(C_1 C_5 R_1 + C_4 C_5 R_4\right)}{C_1 C_6 s + s^3\left(-C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.391 X-INVALID-ORDER-391 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_5 + s^2\left(C_1 C_4 C_5 R_1 R_4 + C_1 C_5 C_6 R_1 R_6 + C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_5 R_1 + C_4 C_5 R_4 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^3\left(-C_1 C_4 C_5 C_6 R_3 R_4 + C_1 C_4 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_4 C_6 R_3 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.392 X-INVALID-ORDER-392 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 R_6 s^2 + C_5 R_6 + s\left(C_1 C_5 R_1 R_6 + C_4 C_5 R_4 R_6\right)}{C_1 + s^3\left(-C_1 C_4 C_5 C_6 R_3 R_4 R_6 + C_1 C_4 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(-C_1 C_4 C_5 R_3 R_4 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_5 R_4 R_5 + C_1 C_4 C_6 R_3 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_4 R_3 + C_1 C_4 R_4 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.393 X-INVALID-ORDER-393 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + R_6 + s^2\left(C_1 C_4 R_1 R_4 R_6 + C_1 C_5 R_1 R_5 R_6 + C_4 C_5 R_4 R_5 R_6\right) + s\left(C_1 R_1 R_6 + C_4 R_4 R_6 + C_5 R_5 R_6\right)}{-C_1 C_4 C_5 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.394 X-INVALID-ORDER-394 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 R_5 s^3 + s^2\left(C_1 C_4 R_1 R_4 + C_1 C_5 R_1 R_5 + C_4 C_5 R_4 R_5\right) + s\left(C_1 R_1 + C_4 R_4 + C_5 R_5\right) + 1}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + s^3\left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.395 X-INVALID-ORDER-395 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^4 + s^3\left(C_1 C_4 C_5 R_1 R_4 R_5 + C_1 C_4 C_6 R_1 R_4 R_6 + C_1 C_5 C_6 R_1 R_5 R_6 + C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_4 R_1 R_4 + C_1 C_5 R_1 R_5 + C_1 C_6 R_1 R_6 + C_4 C_5 R_4 R_5 + C_4 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s\left(C_1 R_1 + C_4 R_4 + C_5 R_5 + C_6 R_6\right) + 1}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^4 + s^3\left(-C_1 C_4 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2\left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.396 X-INVALID-ORDER-396 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + R_6 + s^2\left(C_1 C_4 R_1 R_4 R_6 + C_1 C_5 R_1 R_5 R_6 + C_4 C_5 R_4 R_5 R_6\right) + s\left(C_1 R_1 R_6 + C_4 R_4 R_6 + C_5 R_5 R_6\right)}{-C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + s^3\left(-C_1 C_4 C_5 R_3 R_4 R_5 - C_1 C_4 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_5 R_6\right) + s^2\left(-C_1 C_4 R_3 R_4 + C_1 C_4 R_3 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s\left(-C_1 R_3 + C_1 R_5\right)}$$

10.397 X-INVALID-ORDER-397 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 R_1 R_4 R_6 s + R_4 R_6}{C_1 C_4 R_3 R_4 R_5 s^2 + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.398 X-INVALID-ORDER-398 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 R_1 R_4 s + R_4}{C_1 C_4 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.399 X-INVALID-ORDER-399 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_6 R_1 R_4 R_6 s^2 + R_4 + s\left(C_1 R_1 R_4 + C_6 R_4 R_6\right)}{C_1 C_4 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.400 X-INVALID-ORDER-400 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 R_1 R_4 R_6 s + R_4 R_6}{C_1 C_4 C_6 R_3 R_4 R_5 R_6 s^3 + s^2\left(C_1 C_4 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.401 X-INVALID-ORDER-401 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{C_1 R_3 + C_1 R_4 + s\left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.402 X-INVALID-ORDER-402 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 s + C_5 R_4}{s^2\left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.403 X-INVALID-ORDER-403 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_6 s^2 + C_5 R_4 + s\left(C_1 C_5 R_1 R_4 + C_5 C_6 R_4 R_6\right)}{s^2\left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.404 X-INVALID-ORDER-404 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 s + C_5 R_4}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.405 X-INVALID-ORDER-405 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_6 s^2 + C_5 R_4 + s\left(C_1 C_5 R_1 R_4 + C_5 C_6 R_4 R_6\right)}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.406 X-INVALID-ORDER-406 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_6 s + C_5 R_4 R_6}{C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^3 + C_1 R_3 + C_1 R_4 + s^2\left(C_1 C_4 C_5 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

10.407 X-INVALID-ORDER-407 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 R_6 s^2 + R_4 R_6 + s\left(C_1 R_1 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^2\left(C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.408 X-INVALID-ORDER-408 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 s^2 + R_4 + s\left(C_1 R_1 R_4 + C_5 R_4 R_5\right)}{s^3\left(C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.409 X-INVALID-ORDER-409 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + R_4 + s^2\left(C_1 C_5 R_1 R_4 R_5 + C_1 C_6 R_1 R_4 R_6 + C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 R_1 R_4 + C_5 R_4 R_5 + C_6 R_4 R_6\right)}{s^3\left(C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2\left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.410 X-INVALID-ORDER-410 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3,\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_5 R_1 R_4 R_5 R_6 s^2 + R_4 R_6 + s\left(C_1 R_1 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^3\left(C_1 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2\left(C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.411 X-INVALID-ORDER-411 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{C_1 C_3 R_4 R_5 s - C_1 R_4 + C_1 R_5}$$

10.412 X-INVALID-ORDER-412 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 s + C_3 R_4}{C_1 C_3 C_6 R_4 R_5 s^2 + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.413 X-INVALID-ORDER-413 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_4 R_6 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_6 R_4 R_6\right)}{C_1 C_3 C_6 R_4 R_5 s^2 + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.414 X-INVALID-ORDER-414 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s\left(C_1 C_3 R_4 - C_1 C_5 R_4\right)}$$

10.415 X-INVALID-ORDER-415 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.416 X-INVALID-ORDER-416 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s\left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.417 X-INVALID-ORDER-417 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 C_3 C_5 C_6 R_4 R_5 R_6 s^3 + C_1 + s^2 \left(C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.418 X-INVALID-ORDER-418 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s \left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 R_4 + C_1 R_5 + s \left(C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

10.419 X-INVALID-ORDER-419 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 s^2 + C_3 R_4 + s \left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5\right)}{s^2 \left(C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.420 X-INVALID-ORDER-420 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_4 + s^2 \left(C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s \left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^2 \left(C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.421 X-INVALID-ORDER-421 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_6 s + C_3 R_6}{-C_1 + s \left(C_1 C_3 R_5 + C_1 C_4 R_5\right)}$$

10.422 X-INVALID-ORDER-422 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 s + C_3}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.423 X-INVALID-ORDER-423 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_6 s^2 + C_3 + s \left(C_1 C_3 R_1 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.424 X-INVALID-ORDER-424 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$$

10.425 X-INVALID-ORDER-425 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 s + C_3 C_5}{s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.426 X-INVALID-ORDER-426 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_6 s^2 + C_3 C_5 + s \left(C_1 C_3 C_5 R_1 + C_3 C_5 C_6 R_6\right)}{s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.427 X-INVALID-ORDER-427 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_6 R_6 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.428 X-INVALID-ORDER-428 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_5 R_5 + C_1 C_4 C_5 R_5\right)}$$

10.429 X-INVALID-ORDER-429 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 s + C_3 C_5}{s^2\left(C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.430 X-INVALID-ORDER-430 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_6 s^2 + C_3 C_5 + s\left(C_1 C_3 C_5 R_1 + C_3 C_5 C_6 R_6\right)}{s^2\left(C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.431 X-INVALID-ORDER-431 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s\left(C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

10.432 X-INVALID-ORDER-432 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 s^2 + C_3 + s\left(C_1 C_3 R_1 + C_3 C_5 R_5\right)}{-C_1 C_6 s + s^2\left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.433 X-INVALID-ORDER-433 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_5 R_6 s^3 + C_3 + s^2\left(C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_3 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_1 + C_3 C_5 R_5 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^2\left(C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.434 X-INVALID-ORDER-434 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 s^2 + C_3 + s\left(C_1 C_3 R_1 + C_3 C_4 R_4\right)}{C_1 C_3 C_4 C_6 R_4 R_5 s^3 - C_1 C_6 s + s^2\left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.435 X-INVALID-ORDER-435 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_6 R_1 R_4 R_6 s^3 + C_3 + s^2\left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_6 R_1 R_6 + C_3 C_4 C_6 R_4 R_6\right) + s\left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_6 R_6\right)}{C_1 C_3 C_4 C_6 R_4 R_5 s^3 - C_1 C_6 s + s^2\left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.436 X-INVALID-ORDER-436 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6\right)}{C_1 C_3 C_4 C_6 R_4 R_5 R_6 s^3 - C_1 + s^2\left(C_1 C_3 C_4 R_4 R_5 + C_1 C_3 C_6 R_5 R_6 - C_1 C_4 C_6 R_4 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.437 X-INVALID-ORDER-437 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_4 - C_1 C_4 C_5 R_4\right)}$$

10.438 X-INVALID-ORDER-438 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 s^2 + C_3 C_5 + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4\right)}{s^2\left(C_1 C_3 C_4 C_6 R_4 - C_1 C_4 C_5 C_6 R_4\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.439 X-INVALID-ORDER-439 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_3 C_5 + s^2\left(C_1 C_3 C_4 C_5 R_1 R_4 + C_1 C_3 C_5 C_6 R_1 R_6 + C_3 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{s^2\left(C_1 C_3 C_4 C_6 R_4 - C_1 C_4 C_5 C_6 R_4\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.440 X-INVALID-ORDER-440 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 s^2 + C_3 C_5 + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4\right)}{C_1 C_3 C_4 C_5 C_6 R_4 R_5 s^3 + s^2\left(C_1 C_3 C_4 C_6 R_4 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.441 X-INVALID-ORDER-441 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_3 C_5 + s^2\left(C_1 C_3 C_4 C_5 R_1 R_4 + C_1 C_3 C_5 C_6 R_1 R_6 + C_3 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_4 R_5 s^3 + s^2\left(C_1 C_3 C_4 C_6 R_4 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.442 X-INVALID-ORDER-442 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_4 R_5 R_6 s^3 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(C_1 C_3 C_4 C_5 R_4 R_5 + C_1 C_3 C_4 C_6 R_4 R_6 + C_1 C_3 C_5 C_6 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_6 + C_1 C_4 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 C_4 R_4 + C_1 C_3 C_5 R_5 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.443 X-INVALID-ORDER-443 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_6 + s^2\left(C_1 C_3 C_4 R_1 R_4 R_6 + C_1 C_3 C_5 R_1 R_5 R_6 + C_3 C_4 C_5 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s^2\left(C_1 C_3 C_4 R_4 R_5 - C_1 C_4 C_5 R_4 R_5\right) + s\left(C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

10.444 X-INVALID-ORDER-444 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 s^3 + C_3 + s^2\left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_5 R_1 R_5 + C_3 C_4 C_5 R_4 R_5\right) + s\left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_5 R_5\right)}{-C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.445 X-INVALID-ORDER-445 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^4 + C_3 + s^3\left(C_1 C_3 C_4 C_5 R_1 R_4 R_5 + C_1 C_3 C_4 C_6 R_1 R_4 R_6 + C_1 C_3 C_5 C_6 R_1 R_5 R_6 + C_3 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_3 C_4 C_5 R_4 R_5 + C_3 C_4 C_6 R_4 R_6 + C_3 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_5\right.}{-C_1 C_6 s + s^3\left(C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.446 X-INVALID-ORDER-446 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_6 + s^2\left(C_1 C_3 C_4 R_1 R_4 R_6 + C_1 C_3 C_5 R_1 R_5 R_6 + C_3 C_4 C_5 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s^3\left(C_1 C_3 C_4 C_6 R_4 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_4 R_4 R_5 + C_1 C_3 C_6 R_5 R_6 - C_1 C_4 C_5 R_4 R_5 - C_1 C_4 C_6 R_4 R_6 + C_1 C_4 C_6 R_5 R_6 - C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_5 R_5 - C_1 C_6 R_6\right)}$$

10.447 X-INVALID-ORDER-447 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5\right)}$$

10.448 X-INVALID-ORDER-448 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 s + C_3 R_4}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.449 X-INVALID-ORDER-449 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_4 R_6 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_6 R_4 R_6\right)}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.450 X-INVALID-ORDER-450 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s\left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4\right)}$$

10.451 X-INVALID-ORDER-451 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.452 X-INVALID-ORDER-452 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s\left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_6 + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

10.453 X-INVALID-ORDER-453 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s^3\left(C_1 C_3 C_5 C_6 R_4 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_4 R_6 + C_1 C_4 C_5 R_4 R_5 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.454 X-INVALID-ORDER-454 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 R_4 + C_1 R_5 + s\left(C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

10.455 X-INVALID-ORDER-455 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5\right)}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.456 X-INVALID-ORDER-456 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_4 + s^2\left(C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^2\left(C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.457 X-INVALID-ORDER-457 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{-C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5\right)}$$

10.458 X-INVALID-ORDER-458 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 s + C_3 R_4}{s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.459 X-INVALID-ORDER-459 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_4 R_6 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_6 R_4 R_6\right)}{s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.460 X-INVALID-ORDER-460 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{-C_1 C_3 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 + s^2\left(-C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

10.461 X-INVALID-ORDER-461 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s^3\left(-C_1 C_3 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_3 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(-C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_3 + C_1 C_3 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.462 X-INVALID-ORDER-462 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5\right)}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.463 X-INVALID-ORDER-463 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_4 + s^2\left(C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 s^3 + s^2\left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.464 X-INVALID-ORDER-464 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6 s^3 - C_1 R_4 + C_1 R_5 + s^2\left(-C_1 C_3 C_5 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

10.465 X-INVALID-ORDER-465 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 s + C_3}{C_1 C_3 C_4 C_6 R_3 R_5 s^3 - C_1 C_6 s + s^2\left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.466 X-INVALID-ORDER-466 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_6 s^2 + C_3 + s\left(C_1 C_3 R_1 + C_3 C_6 R_6\right)}{C_1 C_3 C_4 C_6 R_3 R_5 s^3 - C_1 C_6 s + s^2\left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5\right)}$$

10.467 X-INVALID-ORDER-467 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_6 s + C_3 R_6}{C_1 C_3 C_4 C_6 R_3 R_5 R_6 s^3 - C_1 + s^2 \left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.468 X-INVALID-ORDER-468 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s \left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3\right)}$$

10.469 X-INVALID-ORDER-469 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 s + C_3 C_5}{s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.470 X-INVALID-ORDER-470 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_6 s^2 + C_3 C_5 + s \left(C_1 C_3 C_5 R_1 + C_3 C_5 C_6 R_6\right)}{s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.471 X-INVALID-ORDER-471 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 s + C_3 C_5}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.472 X-INVALID-ORDER-472 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_6 s^2 + C_3 C_5 + s \left(C_1 C_3 C_5 R_1 + C_3 C_5 C_6 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 s^3 + s^2 \left(C_1 C_3 C_4 C_6 R_3 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 + C_1 C_4 C_5 C_6 R_5\right) + s \left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.473 X-INVALID-ORDER-473 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_6 s + C_3 C_5 R_6}{C_1 C_3 C_4 C_5 C_6 R_3 R_5 R_6 s^3 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2 \left(C_1 C_3 C_4 C_5 R_3 R_5 + C_1 C_3 C_4 C_6 R_3 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 + C_1 C_3 C_5 C_6 R_5 R_6 + C_1 C_4 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 C_4 R_3 - C_1 C_3 C_5 R_3 + C_1 C_3 C_5 R_5 + C_1 C_3 C_6 R_6 + C_1 C_4 C_5 R_5 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.474 X-INVALID-ORDER-474 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 s^2 + C_3 + s \left(C_1 C_3 R_1 + C_3 C_5 R_5\right)}{-C_1 C_6 s + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 - C_1 C_3 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.475 X-INVALID-ORDER-475 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_5 R_6 s^3 + C_3 + s^2 \left(C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_3 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_1 + C_3 C_5 R_5 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 - C_1 C_3 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.476 X-INVALID-ORDER-476 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_6 + s \left(C_1 C_3 R_1 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6 - C_1 C_5 C_6 R_5 R_6\right) + s \left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5 - C_1 C_6 R_6\right)}$$

10.477 X-INVALID-ORDER-477 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 s^2 + C_3 + s\left(C_1 C_3 R_1 + C_3 C_4 R_4\right)}{-C_1 C_6 s + s^3\left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.478 X-INVALID-ORDER-478 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_6 R_1 R_4 R_6 s^3 + C_3 + s^2\left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_6 R_1 R_6 + C_3 C_4 C_6 R_4 R_6\right) + s\left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_6 R_6\right)}{-C_1 C_6 s + s^3\left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5\right) + s^2\left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5\right)}$$

10.479 X-INVALID-ORDER-479 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6\right)}{-C_1 + s^3\left(-C_1 C_3 C_4 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_6 R_4 R_5 R_6\right) + s^2\left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_5 R_6 - C_1 C_4 C_6 R_4 R_6 + C_1 C_4 C_6 R_5 R_6\right) + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_6 R_6\right)}$$

10.480 X-INVALID-ORDER-480 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 s^2 + C_3 C_5 + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 s^3 + s^2\left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 - C_1 C_4 C_5 C_6 R_4\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.481 X-INVALID-ORDER-481 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_3 C_5 + s^2\left(C_1 C_3 C_4 C_5 R_1 R_4 + C_1 C_3 C_5 C_6 R_1 R_6 + C_3 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 s^3 + s^2\left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 - C_1 C_4 C_5 C_6 R_4\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.482 X-INVALID-ORDER-482 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_6 s^3 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(-C_1 C_3 C_4 C_5 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_6 + C_1 C_3 C_4 C_6 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 - C_1 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_4 R_3 + C_1 C_3 C_4 R_4 - C_1 C_3 C_5 R_3 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

10.483 X-INVALID-ORDER-483 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 s^2 + C_3 C_5 + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4\right)}{s^3\left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 + C_1 C_3 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.484 X-INVALID-ORDER-484 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_6 s^3 + C_3 C_5 + s^2\left(C_1 C_3 C_4 C_5 R_1 R_4 + C_1 C_3 C_5 C_6 R_1 R_6 + C_3 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_5 R_1 + C_3 C_4 C_5 R_4 + C_3 C_5 C_6 R_6\right)}{s^3\left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 + C_1 C_3 C_4 C_5 C_6 R_4 R_5\right) + s^2\left(C_1 C_3 C_4 C_6 R_3 + C_1 C_3 C_4 C_6 R_4 - C_1 C_3 C_5 C_6 R_3 + C_1 C_3 C_5 C_6 R_5 - C_1 C_4 C_5 C_6 R_4 + C_1 C_4 C_5 C_6 R_5\right) + s\left(C_1 C_3 C_6 + C_1 C_4 C_6 - C_1 C_5 C_6\right)}$$

10.485 X-INVALID-ORDER-485 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^3\left(-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_5 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2\left(-C_1 C_3 C_4 C_5 R_3 R_4 + C_1 C_3 C_4 C_5 R_3 R_5 + C_1 C_3 C_4 C_5 R_4 R_5 + C_1 C_3 C_4 C_6 R_3 R_6 + C_1 C_3 C_4 C_6 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_6 + C_1 C_3 C_5 C_6 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_6\right)}$$

10.486 X-INVALID-ORDER-486 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_6 + s^2\left(C_1 C_3 C_4 R_1 R_4 R_6 + C_1 C_3 C_5 R_1 R_5 R_6 + C_3 C_4 C_5 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 C_3 C_4 C_5 R_3 R_4 R_5 s^3 - C_1 + s^2\left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_4 C_5 R_4 R_5\right) + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

10.487 X-INVALID-ORDER-487 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 s^3 + C_3 + s^2 \left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_5 R_1 R_5 + C_3 C_4 C_5 R_4 R_5\right) + s \left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_5 R_5\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 - C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.488 X-INVALID-ORDER-488 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 C_6 R_1 R_4 R_5 R_6 s^4 + C_3 + s^3 \left(C_1 C_3 C_4 C_5 R_1 R_4 R_5 + C_1 C_3 C_4 C_6 R_1 R_4 R_6 + C_1 C_3 C_5 C_6 R_1 R_5 R_6 + C_3 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_1 R_4 + C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_3 C_4 C_5 R_4 R_5 + C_3 C_4 C_6 R_4 R_6 + C_3 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_1 + C_3 C_4 R_4 + C_3 C_5 R_5\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^4 - C_1 C_6 s + s^3 \left(-C_1 C_3 C_4 C_6 R_3 R_4 + C_1 C_3 C_4 C_6 R_3 R_5 + C_1 C_3 C_4 C_6 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_5 - C_1 C_4 C_5 C_6 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_5 - C_1 C_4 C_6 R_4 + C_1 C_4 C_6 R_5 - C_1 C_5 C_6 R_5\right)}$$

10.489 X-INVALID-ORDER-489 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_5 R_6 s^3 + C_3 R_6 + s^2 \left(C_1 C_3 C_4 R_1 R_4 R_6 + C_1 C_3 C_5 R_1 R_5 R_6 + C_3 C_4 C_5 R_4 R_5 R_6\right) + s \left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 - C_1 + s^3 \left(-C_1 C_3 C_4 C_5 R_3 R_4 R_5 - C_1 C_3 C_4 C_6 R_3 R_4 R_6 + C_1 C_3 C_4 C_6 R_3 R_5 R_6 + C_1 C_3 C_4 C_6 R_4 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_5 R_6 - C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5 - C_1 C_3 C_5 R_3 R_5 - C_1 C_3 C_6 R_3 R_6\right.$$

10.490 X-INVALID-ORDER-490 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 s + C_3 R_4}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.491 X-INVALID-ORDER-491 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_4 R_6 s^2 + C_3 R_4 + s \left(C_1 C_3 R_1 R_4 + C_3 C_6 R_4 R_6\right)}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.492 X-INVALID-ORDER-492 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_4 R_6 s + C_3 R_4 R_6}{C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 s^3 - C_1 R_4 + C_1 R_5 + s^2 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6\right) + s \left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

10.493 X-INVALID-ORDER-493 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_6 R_3 R_6 + C_1 C_3 C_6 R_4 R_6 + C_1 C_4 C_6 R_4 R_6 - C_1 C_5 C_6 R_4 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_6 R_6\right)}$$

10.494 X-INVALID-ORDER-494 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 C_3 C_4 C_5 R_3 R_4 R_5 s^3 + C_1 + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_4 C_5 R_4 R_5\right) + s \left(C_1 C_3 R_3 + C_1 C_3 R_4 + C_1 C_4 R_4 - C_1 C_5 R_4 + C_1 C_5 R_5\right)}$$

10.495 X-INVALID-ORDER-495 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 s + C_3 C_5 R_4}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

10.496 X-INVALID-ORDER-496 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s \left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 s^3 + C_1 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4 + C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

10.497 X-INVALID-ORDER-497 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 R_6 s}{C_1 C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6 s^4 + C_1 + s^3 \left(C_1 C_3 C_4 C_5 R_3 R_4 R_5 + C_1 C_3 C_4 C_6 R_3 R_4 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 - C_1 C_3 C_5 R_3 R_4 + C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_5 R_4 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1$$

10.498 X-INVALID-ORDER-498 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 s^2 + C_3 R_4 + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5\right)}{s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.499 X-INVALID-ORDER-499 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^3 + C_3 R_4 + s^2 \left(C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_1 R_4 + C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 - C_1 C_3 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_3 R_4 + C_1 C_3 C_6 R_3 R_5 + C_1 C_3 C_6 R_4 R_5 + C_1 C_4 C_6 R_4 R_5 - C_1 C_5 C_6 R_4 R_5\right) + s\left(-C_1 C_6 R_4 + C_1 C_6 R_5\right)}$$

10.500 X-INVALID-ORDER-500 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 R_4 + C_1 R_5 + s^3 \left(C_1 C_3 C_4 C_6 R_3 R_4 R_5 R_6 - C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_5 R_3 R_4 R_5 - C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_3 C_6 R_4 R_5 R_6 + C_1 C_4 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1\right.$$

10.501 X-INVALID-ORDER-501 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_3 R_4 R_6 s^2 + R_4 R_6 + s\left(C_1 R_1 R_4 R_6 + C_3 R_3 R_4 R_6\right)}{C_1 C_3 R_3 R_4 R_5 s^2 + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.502 X-INVALID-ORDER-502 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_3 R_4 s^2 + R_4 + s\left(C_1 R_1 R_4 + C_3 R_3 R_4\right)}{C_1 C_3 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.503 X-INVALID-ORDER-503 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_3 R_4 R_6 s^3 + R_4 + s^2 \left(C_1 C_3 R_1 R_3 R_4 + C_1 C_6 R_1 R_4 R_6 + C_3 C_6 R_3 R_4 R_6\right) + s\left(C_1 R_1 R_4 + C_3 R_3 R_4 + C_6 R_4 R_6\right)}{C_1 C_3 C_6 R_3 R_4 R_5 s^3 + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.504 X-INVALID-ORDER-504 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_3 R_4 R_6 s^2 + R_4 R_6 + s\left(C_1 R_1 R_4 R_6 + C_3 R_3 R_4 R_6\right)}{C_1 C_3 C_6 R_3 R_4 R_5 R_6 s^3 + s^2 \left(C_1 C_3 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s\left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.505 X-INVALID-ORDER-505 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s\left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s\left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.506 X-INVALID-ORDER-506 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 s^2 + C_5 R_4 + s\left(C_1 C_5 R_1 R_4 + C_3 C_5 R_3 R_4\right)}{s^2 \left(C_1 C_3 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s\left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.507 X-INVALID-ORDER-507 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_3R_4R_6s^3 + C_5R_4 + s^2\left(C_1C_3C_5R_1R_3R_4 + C_1C_5C_6R_1R_4R_6 + C_3C_5C_6R_3R_4R_6\right) + s\left(C_1C_5R_1R_4 + C_3C_5R_3R_4 + C_5C_6R_4R_6\right)}{s^2\left(C_1C_3C_6R_3R_4 - C_1C_5C_6R_3R_4\right) + s\left(C_1C_6R_3 + C_1C_6R_4\right)}$$

10.508 X-INVALID-ORDER-508 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4s^2 + C_5R_4 + s\left(C_1C_5R_1R_4 + C_3C_5R_3R_4\right)}{C_1C_3C_5C_6R_3R_4R_5s^3 + s^2\left(C_1C_3C_6R_3R_4 - C_1C_5C_6R_3R_4 + C_1C_5C_6R_3R_5 + C_1C_5C_6R_4R_5\right) + s\left(C_1C_6R_3 + C_1C_6R_4\right)}$$

10.509 X-INVALID-ORDER-509 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_3R_4R_6s^3 + C_5R_4 + s^2\left(C_1C_3C_5R_1R_3R_4 + C_1C_5C_6R_1R_4R_6 + C_3C_5C_6R_3R_4R_6\right) + s\left(C_1C_5R_1R_4 + C_3C_5R_3R_4 + C_5C_6R_4R_6\right)}{C_1C_3C_5C_6R_3R_4R_5s^3 + s^2\left(C_1C_3C_6R_3R_4 - C_1C_5C_6R_3R_4 + C_1C_5C_6R_3R_5 + C_1C_5C_6R_4R_5\right) + s\left(C_1C_6R_3 + C_1C_6R_4\right)}$$

10.510 X-INVALID-ORDER-510 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4R_6s^2 + C_5R_4R_6 + s\left(C_1C_5R_1R_4R_6 + C_3C_5R_3R_4R_6\right)}{C_1C_3C_5C_6R_3R_4R_5R_6s^3 + C_1R_3 + C_1R_4 + s^2\left(C_1C_3C_5R_3R_4R_5 + C_1C_3C_6R_3R_4R_6 - C_1C_5C_6R_3R_4R_6 + C_1C_5C_6R_3R_5R_6 + C_1C_5C_6R_4R_5R_6\right) + s\left(C_1C_3R_3R_4 - C_1C_5R_3R_4 + C_1C_5R_3R_5 + C_1C_5R_4R_5 + C_1C_6R_3R_6 + C_1C_6R_4R_6\right)}$$

10.511 X-INVALID-ORDER-511 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4R_5R_6s^3 + R_4R_6 + s^2\left(C_1C_3R_1R_3R_4R_6 + C_1C_5R_1R_4R_5R_6 + C_3C_5R_3R_4R_5R_6\right) + s\left(C_1R_1R_4R_6 + C_3R_3R_4R_6 + C_5R_4R_5R_6\right)}{s^2\left(C_1C_3R_3R_4R_5 - C_1C_5R_3R_4R_5\right) + s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.512 X-INVALID-ORDER-512 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4R_5s^3 + R_4 + s^2\left(C_1C_3R_1R_3R_4 + C_1C_5R_1R_4R_5 + C_3C_5R_3R_4R_5\right) + s\left(C_1R_1R_4 + C_3R_3R_4 + C_5R_4R_5\right)}{s^3\left(C_1C_3C_6R_3R_4R_5 - C_1C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.513 X-INVALID-ORDER-513 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_3R_4R_5R_6s^4 + R_4 + s^3\left(C_1C_3C_5R_1R_3R_4R_5 + C_1C_3C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_4R_5R_6 + C_3C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4 + C_1C_5R_1R_4R_5 + C_1C_6R_1R_4R_6 + C_3C_5R_3R_4R_5 + C_3C_6R_3R_4R_6 + C_5C_6R_4R_5R_6\right) + s\left(C_1R_1R_4 + C_3R_3R_4 + C_5\right.}{s^3\left(C_1C_3C_6R_3R_4R_5 - C_1C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.514 X-INVALID-ORDER-514 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4R_5R_6s^3 + R_4R_6 + s^2\left(C_1C_3R_1R_3R_4R_6 + C_1C_5R_1R_4R_5R_6 + C_3C_5R_3R_4R_5R_6\right) + s\left(C_1R_1R_4R_6 + C_3R_3R_4R_6 + C_5R_4R_5R_6\right)}{s^3\left(C_1C_3C_6R_3R_4R_5R_6 - C_1C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_3R_4R_5 - C_1C_5R_3R_4R_5 - C_1C_6R_3R_4R_6 + C_1C_6R_3R_5R_6 + C_1C_6R_4R_5R_6\right) + s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.515 X-INVALID-ORDER-515 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1C_3R_1R_3R_6s^2 + R_6 + s\left(C_1R_1R_6 + C_3R_3R_6\right)}{s^2\left(C_1C_3R_3R_5 + C_1C_4R_3R_5\right) + s\left(-C_1R_3 + C_1R_5\right)}$$

10.516 X-INVALID-ORDER-516 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3R_1R_3s^2 + s\left(C_1R_1 + C_3R_3\right) + 1}{s^3\left(C_1C_3C_6R_3R_5 + C_1C_4C_6R_3R_5\right) + s^2\left(-C_1C_6R_3 + C_1C_6R_5\right)}$$

10.517 X-INVALID-ORDER-517 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_3 R_6 s^3 + s^2 \left(C_1 C_3 R_1 R_3 + C_1 C_6 R_1 R_6 + C_3 C_6 R_3 R_6\right) + s \left(C_1 R_1 + C_3 R_3 + C_6 R_6\right) + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.518 X-INVALID-ORDER-518 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_3 R_6 s^2 + R_6 + s \left(C_1 R_1 R_6 + C_3 R_3 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_5 R_6 + C_1 C_4 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5 - C_1 C_6 R_3 R_6 + C_1 C_6 R_5 R_6\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.519 X-INVALID-ORDER-519 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_6 s^2 + C_5 R_6 + s \left(C_1 C_5 R_1 R_6 + C_3 C_5 R_3 R_6\right)}{C_1 + s \left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3\right)}$$

10.520 X-INVALID-ORDER-520 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 s^2 + C_5 + s \left(C_1 C_5 R_1 + C_3 C_5 R_3\right)}{C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.521 X-INVALID-ORDER-521 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_3 R_6 s^3 + C_5 + s^2 \left(C_1 C_3 C_5 R_1 R_3 + C_1 C_5 C_6 R_1 R_6 + C_3 C_5 C_6 R_3 R_6\right) + s \left(C_1 C_5 R_1 + C_3 C_5 R_3 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3\right)}$$

10.522 X-INVALID-ORDER-522 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 s^2 + C_5 + s \left(C_1 C_5 R_1 + C_3 C_5 R_3\right)}{C_1 C_6 s + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_3 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.523 X-INVALID-ORDER-523 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_3 R_6 s^3 + C_5 + s^2 \left(C_1 C_3 C_5 R_1 R_3 + C_1 C_5 C_6 R_1 R_6 + C_3 C_5 C_6 R_3 R_6\right) + s \left(C_1 C_5 R_1 + C_3 C_5 R_3 + C_5 C_6 R_6\right)}{C_1 C_6 s + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 + C_1 C_4 C_5 C_6 R_3 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 + C_1 C_4 C_6 R_3 - C_1 C_5 C_6 R_3 + C_1 C_5 C_6 R_5\right)}$$

10.524 X-INVALID-ORDER-524 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_6 s^2 + C_5 R_6 + s \left(C_1 C_5 R_1 R_6 + C_3 C_5 R_3 R_6\right)}{C_1 + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 C_5 R_3 R_5 + C_1 C_3 C_6 R_3 R_6 + C_1 C_4 C_5 R_3 R_5 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6 + C_1 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5 + C_1 C_6 R_6\right)}$$

10.525 X-INVALID-ORDER-525 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_5 R_6 s^3 + R_6 + s^2 \left(C_1 C_3 R_1 R_3 R_6 + C_1 C_5 R_1 R_5 R_6 + C_3 C_5 R_3 R_5 R_6\right) + s \left(C_1 R_1 R_6 + C_3 R_3 R_6 + C_5 R_5 R_6\right)}{s^2 \left(C_1 C_3 R_3 R_5 + C_1 C_4 R_3 R_5 - C_1 C_5 R_3 R_5\right) + s \left(-C_1 R_3 + C_1 R_5\right)}$$

10.526 X-INVALID-ORDER-526 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_5 s^3 + s^2 \left(C_1 C_3 R_1 R_3 + C_1 C_5 R_1 R_5 + C_3 C_5 R_3 R_5\right) + s \left(C_1 R_1 + C_3 R_3 + C_5 R_5\right) + 1}{s^3 \left(C_1 C_3 C_6 R_3 R_5 + C_1 C_4 C_6 R_3 R_5 - C_1 C_5 C_6 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_3 + C_1 C_6 R_5\right)}$$

10.527 X-INVALID-ORDER-527 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_3R_5R_6s^4 + s^3\left(C_1C_3C_5R_1R_3R_5 + C_1C_3C_6R_1R_3R_6 + C_1C_5C_6R_1R_5R_6 + C_3C_5C_6R_3R_5R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_5R_1R_5 + C_1C_6R_1R_6 + C_3C_5R_3R_5 + C_3C_6R_3R_6 + C_5C_6R_5R_6\right) + s\left(C_1R_1 + C_3R_3 + C_5R_5 + C_6R_6\right) + 1}{s^3\left(C_1C_3C_6R_3R_5 + C_1C_4C_6R_3R_5 - C_1C_5C_6R_3R_5\right) + s^2\left(-C_1C_6R_3 + C_1C_6R_5\right)}$$

10.528 X-INVALID-ORDER-528 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_5R_6s^3 + R_6 + s^2\left(C_1C_3R_1R_3R_6 + C_1C_5R_1R_5R_6 + C_3C_5R_3R_5R_6\right) + s\left(C_1R_1R_6 + C_3R_3R_6 + C_5R_5R_6\right)}{s^3\left(C_1C_3C_6R_3R_5R_6 + C_1C_4C_6R_3R_5R_6 - C_1C_5C_6R_3R_5R_6\right) + s^2\left(C_1C_3R_3R_5 + C_1C_4R_3R_5 - C_1C_5R_3R_5 - C_1C_6R_3R_6 + C_1C_6R_5R_6\right) + s\left(-C_1R_3 + C_1R_5\right)}$$

10.529 X-INVALID-ORDER-529 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1C_3C_4R_1R_3R_4R_6s^3 + R_6 + s^2\left(C_1C_3R_1R_3R_6 + C_1C_4R_1R_4R_6 + C_3C_4R_3R_4R_6\right) + s\left(C_1R_1R_6 + C_3R_3R_6 + C_4R_4R_6\right)}{C_1C_3C_4R_3R_4R_5s^3 + s^2\left(C_1C_3R_3R_5 - C_1C_4R_3R_4 + C_1C_4R_3R_5 + C_1C_4R_4R_5\right) + s\left(-C_1R_3 + C_1R_5\right)}$$

10.530 X-INVALID-ORDER-530 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4R_1R_3R_4s^3 + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_4 + C_3C_4R_3R_4\right) + s\left(C_1R_1 + C_3R_3 + C_4R_4\right) + 1}{C_1C_3C_4C_6R_3R_4R_5s^4 + s^3\left(C_1C_3C_6R_3R_5 - C_1C_4C_6R_3R_4 + C_1C_4C_6R_3R_5 + C_1C_4C_6R_4R_5\right) + s^2\left(-C_1C_6R_3 + C_1C_6R_5\right)}$$

10.531 X-INVALID-ORDER-531 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_6R_1R_3R_4R_6s^4 + s^3\left(C_1C_3C_4R_1R_3R_4 + C_1C_3C_6R_1R_3R_6 + C_1C_4C_6R_1R_4R_6 + C_3C_4C_6R_3R_4R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_4 + C_1C_6R_1R_6 + C_3C_4R_3R_4 + C_3C_6R_3R_6 + C_4C_6R_4R_6\right) + s\left(C_1R_1 + C_3R_3 + C_4R_4 + C_6R_6\right) + 1}{C_1C_3C_4C_6R_3R_4R_5s^4 + s^3\left(C_1C_3C_6R_3R_5 - C_1C_4C_6R_3R_4 + C_1C_4C_6R_3R_5 + C_1C_4C_6R_4R_5\right) + s^2\left(-C_1C_6R_3 + C_1C_6R_5\right)}$$

10.532 X-INVALID-ORDER-532 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_4R_1R_3R_4R_6s^3 + R_6 + s^2\left(C_1C_3R_1R_3R_6 + C_1C_4R_1R_4R_6 + C_3C_4R_3R_4R_6\right) + s\left(C_1R_1R_6 + C_3R_3R_6 + C_4R_4R_6\right)}{C_1C_3C_4C_6R_3R_4R_5R_6s^4 + s^3\left(C_1C_3C_4R_3R_4R_5 + C_1C_3C_6R_3R_5R_6 - C_1C_4C_6R_3R_4R_6 + C_1C_4C_6R_3R_5R_6 + C_1C_4C_6R_4R_5R_6\right) + s^2\left(C_1C_3R_3R_5 - C_1C_4R_3R_4 + C_1C_4R_3R_5 + C_1C_4R_4R_5 - C_1C_6R_3R_6 + C_1C_6R_5R_6\right) + s\left(-C_1R_3 + C_1R_5\right)}$$

10.533 X-INVALID-ORDER-533 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_6 + s^2\left(C_1C_3C_5R_1R_3R_6 + C_1C_4C_5R_1R_4R_6 + C_3C_4C_5R_3R_4R_6\right) + s\left(C_1C_5R_1R_6 + C_3C_5R_3R_6 + C_4C_5R_4R_6\right)}{C_1 + s^2\left(C_1C_3C_4R_3R_4 - C_1C_4C_5R_3R_4\right) + s\left(C_1C_3R_3 + C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3\right)}$$

10.534 X-INVALID-ORDER-534 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4s^3 + C_5 + s^2\left(C_1C_3C_5R_1R_3 + C_1C_4C_5R_1R_4 + C_3C_4C_5R_3R_4\right) + s\left(C_1C_5R_1 + C_3C_5R_3 + C_4C_5R_4\right)}{C_1C_6s + s^3\left(C_1C_3C_4C_6R_3R_4 - C_1C_4C_5C_6R_3R_4\right) + s^2\left(C_1C_3C_6R_3 + C_1C_4C_6R_3 + C_1C_4C_6R_4 - C_1C_5C_6R_3\right)}$$

10.535 X-INVALID-ORDER-535 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5C_6R_1R_3R_4R_6s^4 + C_5 + s^3\left(C_1C_3C_4C_5R_1R_3R_4 + C_1C_3C_5C_6R_1R_3R_6 + C_1C_4C_5C_6R_1R_4R_6 + C_3C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3C_5R_1R_3 + C_1C_4C_5R_1R_4 + C_1C_5C_6R_1R_6 + C_3C_4C_5R_3R_4 + C_3C_5C_6R_3R_6 + C_4C_5C_6R_4R_6\right) + s\left(C_1C_5R_1 + C_3C_5R_3 + C_4C_5\right.$$
$$\left.C_1C_6s + s^3\left(C_1C_3C_4C_6R_3R_4 - C_1C_4C_5C_6R_3R_4\right) + s^2\left(C_1C_3C_6R_3 + C_1C_4C_6R_3 + C_1C_4C_6R_4 - C_1C_5C_6R_3\right)\right.$$

10.536 X-INVALID-ORDER-536 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_6 + s^2\left(C_1C_3C_5R_1R_3R_6 + C_1C_4C_5R_1R_4R_6 + C_3C_4C_5R_3R_4R_6\right) + s\left(C_1C_5R_1R_6 + C_3C_5R_3R_6 + C_4C_5R_4R_6\right)}{C_1 + s^3\left(C_1C_3C_4C_6R_3R_4R_6 - C_1C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3C_4R_3R_4 + C_1C_3C_6R_3R_6 - C_1C_4C_5R_3R_4 + C_1C_4C_6R_3R_6 + C_1C_4C_6R_4R_6 - C_1C_5C_6R_3R_6\right) + s\left(C_1C_3R_3 + C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3 + C_1C_6R_6\right)}$$

10.537 X-INVALID-ORDER-537 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_6 + s^2\left(C_1C_3C_5R_1R_3R_6 + C_1C_4C_5R_1R_4R_6 + C_3C_4C_5R_3R_4R_6\right) + s\left(C_1C_5R_1R_6 + C_3C_5R_3R_6 + C_4C_5R_4R_6\right)}{C_1C_3C_4C_5R_3R_4R_5s^3 + C_1 + s^2\left(C_1C_3C_4R_3R_4 + C_1C_3C_5R_3R_5 - C_1C_4C_5R_3R_4 + C_1C_4C_5R_3R_5 + C_1C_4C_5R_4R_5\right) + s\left(C_1C_3R_3 + C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3 + C_1C_5R_5\right)}$$

10.538 X-INVALID-ORDER-538 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4s^3 + C_5 + s^2\left(C_1C_3C_5R_1R_3 + C_1C_4C_5R_1R_4 + C_3C_4C_5R_3R_4\right) + s\left(C_1C_5R_1 + C_3C_5R_3 + C_4C_5R_4\right)}{C_1C_3C_4C_5C_6R_3R_4R_5s^4 + C_1C_6s + s^3\left(C_1C_3C_4C_6R_3R_4 + C_1C_3C_5C_6R_3R_5 - C_1C_4C_5C_6R_3R_4 + C_1C_4C_5C_6R_3R_5 + C_1C_4C_5C_6R_4R_5\right) + s^2\left(C_1C_3C_6R_3 + C_1C_4C_6R_3 + C_1C_4C_6R_4 - C_1C_5C_6R_3 + C_1C_5C_6R_5\right)}$$

10.539 X-INVALID-ORDER-539 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5C_6R_1R_3R_4R_6s^4 + C_5 + s^3\left(C_1C_3C_4C_5R_1R_3R_4 + C_1C_3C_5C_6R_1R_3R_6 + C_1C_4C_5C_6R_1R_4R_6 + C_3C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3C_5R_1R_3 + C_1C_4C_5R_1R_4 + C_1C_5C_6R_1R_6 + C_3C_4C_5R_3R_4 + C_3C_5C_6R_3R_6 + C_4C_5C_6R_4R_6\right) + s\left(C_1C_5R_1 + C_3C_5R_3 + C_4C_5\right.}{C_1C_3C_4C_5C_6R_3R_4R_5s^4 + C_1C_6s + s^3\left(C_1C_3C_4C_6R_3R_4 + C_1C_3C_5C_6R_3R_5 - C_1C_4C_5C_6R_3R_4 + C_1C_4C_5C_6R_3R_5 + C_1C_4C_5C_6R_4R_5\right) + s^2\left(C_1C_3C_6R_3 + C_1C_4C_6R_3 + C_1C_4C_6R_4 - C_1C_5C_6R_3 + C_1C_5C_6R_5\right)}$$

10.540 X-INVALID-ORDER-540 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_6 + s^2\left(C_1C_3C_5R_1R_3R_6 + C_1C_4C_5R_1R_4R_6 + C_3C_4C_5R_3R_4R_6\right) + s\left(C_1C_5R_1R_6 + C_3C_5R_3R_6 + \right.}{C_1C_3C_4C_5C_6R_3R_4R_5R_6s^4 + C_1 + s^3\left(C_1C_3C_4C_5R_3R_4R_5 + C_1C_3C_4C_6R_3R_4R_6 + C_1C_3C_5C_6R_3R_5R_6 - C_1C_4C_5C_6R_3R_4R_6 + C_1C_4C_5C_6R_3R_5R_6 + C_1C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_1C_3C_4R_3R_4 + C_1C_3C_5R_3R_5 + C_1C_3C_6R_3R_6 - C_1C_4C_5R_3R_4 + C_1C_4C_5R_3R_5 + C_1\right.}$$

10.541 X-INVALID-ORDER-541 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_5R_6s^4 + R_6 + s^3\left(C_1C_3C_4R_1R_3R_4R_6 + C_1C_3C_5R_1R_3R_5R_6 + C_1C_4C_5R_1R_4R_5R_6 + C_3C_4C_5R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_6 + C_1C_4R_1R_4R_6 + C_1C_5R_1R_5R_6 + C_3C_4R_3R_4R_6 + C_3C_5R_3R_5R_6 + C_4C_5R_4R_5R_6\right) + s\left(C_1R_1R_6 + C_3R_3R_6 + C_4\right.}{s^3\left(C_1C_3C_4R_3R_4R_5 - C_1C_4C_5R_3R_4R_5\right) + s^2\left(C_1C_3R_3R_5 - C_1C_4R_3R_4 + C_1C_4R_3R_5 + C_1C_4R_4R_5 - C_1C_5R_3R_5\right) + s\left(-C_1R_3 + C_1R_5\right)}$$

10.542 X-INVALID-ORDER-542 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_5s^4 + s^3\left(C_1C_3C_4R_1R_3R_4 + C_1C_3C_5R_1R_3R_5 + C_1C_4C_5R_1R_4R_5 + C_3C_4C_5R_3R_4R_5\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_4 + C_1C_5R_1R_5 + C_3C_4R_3R_4 + C_3C_5R_3R_5 + C_4C_5R_4R_5\right) + s\left(C_1R_1 + C_3R_3 + C_4R_4 + C_5R_5\right) + 1}{s^4\left(C_1C_3C_4C_6R_3R_4R_5 - C_1C_4C_5C_6R_3R_4R_5\right) + s^3\left(C_1C_3C_6R_3R_5 - C_1C_4C_6R_3R_4 + C_1C_4C_6R_3R_5 + C_1C_4C_6R_4R_5 - C_1C_5C_6R_3R_5\right) + s^2\left(-C_1C_6R_3 + C_1C_6R_5\right)}$$

10.543 X-INVALID-ORDER-543 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_4C_5C_6R_1R_3R_4R_5R_6s^5 + s^4\left(C_1C_3C_4C_5R_1R_3R_4R_5 + C_1C_3C_4C_6R_1R_3R_4R_6 + C_1C_3C_5C_6R_1R_3R_5R_6 + C_1C_4C_5C_6R_1R_4R_5R_6 + C_3C_4C_5C_6R_3R_4R_5R_6\right) + s^3\left(C_1C_3C_4R_1R_3R_4 + C_1C_3C_5R_1R_3R_5 + C_1C_3C_6R_1R_3R_6 + C_1C_4C_5R_1R_4R_5 + C_1C_4C_6R_1R_4R_6 + \right.}{s^4\left(C_1C_3C_4C_6R_3R_4R_5 - C_1C_4C_5C_6R_3R_4R_5\right) + s^3\left(C_1C_3C_6R_3R_5 - \right.}$$

10.544 X-INVALID-ORDER-544 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_4C_5R_1R_3R_4R_5R_6s^4 + R_6 + s^3\left(C_1C_3C_4R_1R_3R_4R_6 + C_1C_3C_5R_1R_3R_5R_6 + C_1C_4C_5R_1R_4R_5R_6 + C_3C_4C_5R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_6 + C_1C_4R_1R_4R_6 + C_1C_5R_1R_5R_6 + C_3C_4R_3R_4R_6 + C_3C_5R_3R_5R_6 + C_4C_5R_4R_5R_6\right) + s\left(C_1R_1R_\right.}{s^4\left(C_1C_3C_4C_6R_3R_4R_5R_6 - C_1C_4C_5C_6R_3R_4R_5R_6\right) + s^3\left(C_1C_3C_4R_3R_4R_5 + C_1C_3C_6R_3R_5R_6 - C_1C_4C_5R_3R_4R_5 - C_1C_4C_6R_3R_4R_6 + C_1C_4C_6R_3R_5R_6 + C_1C_4C_6R_4R_5R_6 - C_1C_5C_6R_3R_5R_6\right) + s^2\left(C_1C_3R_3R_5 - C_1C_4R_3R_4 + C_1C_4R_3R_5 + C_1C_4R_4R_5 - C_1C_5R_3R_\right.}$$

10.545 X-INVALID-ORDER-545 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1C_3R_1R_3R_4R_6s^2 + R_4R_6 + s\left(C_1R_1R_4R_6 + C_3R_3R_4R_6\right)}{s^2\left(C_1C_3R_3R_4R_5 + C_1C_4R_3R_4R_5\right) + s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.546 X-INVALID-ORDER-546 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3R_1R_3R_4s^2 + R_4 + s\left(C_1R_1R_4 + C_3R_3R_4\right)}{s^3\left(C_1C_3C_6R_3R_4R_5 + C_1C_4C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.547 X-INVALID-ORDER-547 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_6 R_1 R_3 R_4 R_6 s^3 + R_4 + s^2 \left(C_1 C_3 R_1 R_3 R_4 + C_1 C_6 R_1 R_4 R_6 + C_3 C_6 R_3 R_4 R_6\right) + s \left(C_1 R_1 R_4 + C_3 R_3 R_4 + C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.548 X-INVALID-ORDER-548 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 R_1 R_3 R_4 R_6 s^2 + R_4 R_6 + s \left(C_1 R_1 R_4 R_6 + C_3 R_3 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 R_6 + C_1 C_4 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5 - C_1 C_6 R_3 R_4 R_6 + C_1 C_6 R_3 R_5 R_6 + C_1 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.549 X-INVALID-ORDER-549 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s \left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s \left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4\right)}$$

10.550 X-INVALID-ORDER-550 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 s^2 + C_5 R_4 + s \left(C_1 C_5 R_1 R_4 + C_3 C_5 R_3 R_4\right)}{s^2 \left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.551 X-INVALID-ORDER-551 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_3 R_4 R_6 s^3 + C_5 R_4 + s^2 \left(C_1 C_3 C_5 R_1 R_3 R_4 + C_1 C_5 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 C_5 R_1 R_4 + C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{s^2 \left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.552 X-INVALID-ORDER-552 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 s^2 + C_5 R_4 + s \left(C_1 C_5 R_1 R_4 + C_3 C_5 R_3 R_4\right)}{s^3 \left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 + C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.553 X-INVALID-ORDER-553 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_3 R_4 R_6 s^3 + C_5 R_4 + s^2 \left(C_1 C_3 C_5 R_1 R_3 R_4 + C_1 C_5 C_6 R_1 R_4 R_6 + C_3 C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 C_5 R_1 R_4 + C_3 C_5 R_3 R_4 + C_5 C_6 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 + C_1 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(C_1 C_3 C_6 R_3 R_4 + C_1 C_4 C_6 R_3 R_4 - C_1 C_5 C_6 R_3 R_4 + C_1 C_5 C_6 R_3 R_5 + C_1 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_3 + C_1 C_6 R_4\right)}$$

10.554 X-INVALID-ORDER-554 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s \left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s^3 \left(C_1 C_3 C_5 C_6 R_3 R_4 R_5 R_6 + C_1 C_4 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 C_5 R_3 R_4 R_5 + C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_4 C_5 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6 + C_1 C_5 C_6 R_3 R_5 R_6 + C_1 C_5 C_6 R_4 R_5 R_6\right) + s \left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5\right.$$

10.555 X-INVALID-ORDER-555 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_5 R_6 s^3 + R_4 R_6 + s^2 \left(C_1 C_3 R_1 R_3 R_4 R_6 + C_1 C_5 R_1 R_4 R_5 R_6 + C_3 C_5 R_3 R_4 R_5 R_6\right) + s \left(C_1 R_1 R_4 R_6 + C_3 R_3 R_4 R_6 + C_5 R_4 R_5 R_6\right)}{s^2 \left(C_1 C_3 R_3 R_4 R_5 + C_1 C_4 R_3 R_4 R_5 - C_1 C_5 R_3 R_4 R_5\right) + s \left(-C_1 R_3 R_4 + C_1 R_3 R_5 + C_1 R_4 R_5\right)}$$

10.556 X-INVALID-ORDER-556 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_5 s^3 + R_4 + s^2 \left(C_1 C_3 R_1 R_3 R_4 + C_1 C_5 R_1 R_4 R_5 + C_3 C_5 R_3 R_4 R_5\right) + s \left(C_1 R_1 R_4 + C_3 R_3 R_4 + C_5 R_4 R_5\right)}{s^3 \left(C_1 C_3 C_6 R_3 R_4 R_5 + C_1 C_4 C_6 R_3 R_4 R_5 - C_1 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_3 R_4 + C_1 C_6 R_3 R_5 + C_1 C_6 R_4 R_5\right)}$$

10.557 X-INVALID-ORDER-557 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_3R_4R_5R_6s^4 + R_4 + s^3\left(C_1C_3C_5R_1R_3R_4R_5 + C_1C_3C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_4R_5R_6 + C_3C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4 + C_1C_5R_1R_4R_5 + C_1C_6R_1R_4R_6 + C_3C_5R_3R_4R_5 + C_3C_6R_3R_4R_6 + C_5C_6R_4R_5R_6\right) + s\left(C_1R_1R_4 + C_3R_3R_4 + C_5 \right.}{s^3\left(C_1C_3C_6R_3R_4R_5 + C_1C_4C_6R_3R_4R_5 - C_1C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_3R_4 + C_1C_6R_3R_5 + C_1C_6R_4R_5\right)}$$

10.558 X-INVALID-ORDER-558 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_3R_4R_5R_6s^3 + R_4R_6 + s^2\left(C_1C_3R_1R_3R_4R_6 + C_1C_5R_1R_4R_5R_6 + C_3C_5R_3R_4R_5R_6\right) + s\left(C_1R_1R_4R_6 + C_3R_3R_4R_6 + C_5R_4R_5R_6\right)}{s^3\left(C_1C_3C_6R_3R_4R_5R_6 + C_1C_4C_6R_3R_4R_5R_6 - C_1C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_3R_4R_5 + C_1C_4R_3R_4R_5 - C_1C_5R_3R_4R_5 - C_1C_6R_3R_4R_6 + C_1C_6R_3R_5R_6 + C_1C_6R_4R_5R_6\right) + s\left(-C_1R_3R_4 + C_1R_3R_5 + C_1R_4R_5\right)}$$

10.559 X-INVALID-ORDER-559 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6\right)$

$$H(s) = \frac{R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5\right)}$$

10.560 X-INVALID-ORDER-560 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_1R_4}{s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.561 X-INVALID-ORDER-561 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6R_1R_4R_6s + R_1R_4}{s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.562 X-INVALID-ORDER-562 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{-C_1C_5C_6R_1R_3R_4R_6s^3 + R_3 + R_4 + s^2\left(-C_1C_5R_1R_3R_4 + C_1C_6R_1R_3R_6 + C_1C_6R_1R_4R_6 - C_5C_6R_3R_4R_6\right) + s\left(C_1R_1R_3 + C_1R_1R_4 - C_5R_3R_4 + C_6R_3R_6 + C_6R_4R_6\right)}$$

10.563 X-INVALID-ORDER-563 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{R_3 + R_4 + s^3\left(-C_1C_5C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_3R_5R_6 + C_1C_5C_6R_1R_4R_5R_6\right) + s^2\left(-C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_1C_6R_1R_3R_6 + C_1C_6R_1R_4R_6 - C_5C_6R_3R_4R_6 + C_5C_6R_3R_5R_6 + C_5C_6R_4R_5R_6\right) + s\left(C_1R_1R_3 + C_1R_1R_4 - C_5R_3R_4 + C \right.}$$

10.564 X-INVALID-ORDER-564 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5R_1R_4R_5s + R_1R_4}{-C_1C_5C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.565 X-INVALID-ORDER-565 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5C_6R_1R_4R_5R_6s^2 + R_1R_4 + s\left(C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{-C_1C_5C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.566 X-INVALID-ORDER-566 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_5R_6s + R_1R_4R_6}{-C_1C_5C_6R_1R_3R_4R_5R_6s^3 - R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(-C_1C_5R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 - C_5R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

10.567 X-INVALID-ORDER-567 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{R_1}{C_1 C_4 C_6 R_1 R_3 R_5 s^3 + s^2 \left(-C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_5 + C_4 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.568 X-INVALID-ORDER-568 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_6 R_1 R_6 s + R_1}{C_1 C_4 C_6 R_1 R_3 R_5 s^3 + s^2 \left(-C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_5 + C_4 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.569 X-INVALID-ORDER-569 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{R_1 R_6}{C_1 C_4 C_6 R_1 R_3 R_5 R_6 s^3 - R_3 + R_5 + s^2 \left(C_1 C_4 R_1 R_3 R_5 - C_1 C_6 R_1 R_3 R_6 + C_1 C_6 R_1 R_5 R_6 + C_4 C_6 R_3 R_5 R_6\right) + s \left(-C_1 R_1 R_3 + C_1 R_1 R_5 + C_4 R_3 R_5 - C_6 R_3 R_6 + C_6 R_5 R_6\right)}$$

10.570 X-INVALID-ORDER-570 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{s^3 \left(C_1 C_4 C_6 R_1 R_3 R_6 - C_1 C_5 C_6 R_1 R_3 R_6\right) + s^2 \left(C_1 C_4 R_1 R_3 - C_1 C_5 R_1 R_3 + C_1 C_6 R_1 R_6 + C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6\right) + s \left(C_1 R_1 + C_4 R_3 - C_5 R_3 + C_6 R_6\right) + 1}$$

10.571 X-INVALID-ORDER-571 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{C_1 C_4 C_5 R_1 R_3 R_5 s^3 + s^2 \left(C_1 C_4 R_1 R_3 - C_1 C_5 R_1 R_3 + C_1 C_5 R_1 R_5 + C_4 C_5 R_3 R_5\right) + s \left(C_1 R_1 + C_4 R_3 - C_5 R_3 + C_5 R_5\right) + 1}$$

10.572 X-INVALID-ORDER-572 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1}{C_1 C_4 C_5 C_6 R_1 R_3 R_5 s^3 + C_6 + s^2 \left(C_1 C_4 C_6 R_1 R_3 - C_1 C_5 C_6 R_1 R_3 + C_1 C_5 C_6 R_1 R_5 + C_4 C_5 C_6 R_3 R_5\right) + s \left(C_1 C_6 R_1 + C_4 C_6 R_3 - C_5 C_6 R_3 + C_5 C_6 R_5\right)}$$

10.573 X-INVALID-ORDER-573 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_6 s + C_5 R_1}{C_1 C_4 C_5 C_6 R_1 R_3 R_5 s^3 + C_6 + s^2 \left(C_1 C_4 C_6 R_1 R_3 - C_1 C_5 C_6 R_1 R_3 + C_1 C_5 C_6 R_1 R_5 + C_4 C_5 C_6 R_3 R_5\right) + s \left(C_1 C_6 R_1 + C_4 C_6 R_3 - C_5 C_6 R_3 + C_5 C_6 R_5\right)}$$

10.574 X-INVALID-ORDER-574 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_5 R_1 R_6 s}{C_1 C_4 C_5 C_6 R_1 R_3 R_5 R_6 s^4 + s^3 \left(C_1 C_4 C_5 R_1 R_3 R_5 + C_1 C_4 C_6 R_1 R_3 R_6 - C_1 C_5 C_6 R_1 R_3 R_6 + C_1 C_5 C_6 R_1 R_5 R_6 + C_4 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_4 R_1 R_3 - C_1 C_5 R_1 R_3 + C_1 C_5 R_1 R_5 + C_1 C_6 R_1 R_6 + C_4 C_5 R_3 R_5 + C_4 C_6 R_3 R_6 - C_5 C_6 R_3 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_1 R_1 + C_4 R_3 -$$

10.575 X-INVALID-ORDER-575 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 R_1 R_5 s + R_1}{s^3 \left(C_1 C_4 C_6 R_1 R_3 R_5 - C_1 C_5 C_6 R_1 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_5 + C_4 C_6 R_3 R_5 - C_5 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.576 X-INVALID-ORDER-576 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3,\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_5 C_6 R_1 R_5 R_6 s^2 + R_1 + s \left(C_5 R_1 R_5 + C_6 R_1 R_6\right)}{s^3 \left(C_1 C_4 C_6 R_1 R_3 R_5 - C_1 C_5 C_6 R_1 R_3 R_5\right) + s^2 \left(-C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_5 + C_4 C_6 R_3 R_5 - C_5 C_6 R_3 R_5\right) + s \left(-C_6 R_3 + C_6 R_5\right)}$$

10.577 X-INVALID-ORDER-577 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_5R_6s + R_1R_6}{-R_3 + R_5 + s^3\left(C_1C_4C_6R_1R_3R_5R_6 - C_1C_5C_6R_1R_3R_5R_6\right) + s^2\left(C_1C_4R_1R_3R_5 - C_1C_5R_1R_3R_5 - C_1C_6R_1R_3R_6 + C_1C_6R_1R_5R_6 + C_4C_6R_3R_5R_6 - C_5C_6R_3R_5R_6\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_4R_3R_5 - C_5R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

10.578 X-INVALID-ORDER-578 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4R_1R_4s + R_1}{s^3\left(-C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.579 X-INVALID-ORDER-579 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_6R_1R_4R_6s^2 + R_1 + s\left(C_4R_1R_4 + C_6R_1R_6\right)}{s^3\left(-C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.580 X-INVALID-ORDER-580 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_4R_1R_4R_6s + R_1R_6}{-R_3 + R_5 + s^3\left(-C_1C_4C_6R_1R_3R_4R_6 + C_1C_4C_6R_1R_3R_5R_6 + C_1C_4C_6R_1R_4R_5R_6\right) + s^2\left(-C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5 - C_1C_6R_1R_3R_6 + C_1C_6R_1R_5R_6 - C_4C_6R_3R_4R_6 + C_4C_6R_3R_5R_6 + C_4C_6R_4R_5R_6\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 - C_4R_3R_4\right.$$

10.581 X-INVALID-ORDER-581 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_6s^2 + C_5R_1R_6s}{-C_1C_4C_5R_1R_3R_4s^3 + s^2\left(C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1C_5R_1R_3 - C_4C_5R_3R_4\right) + s\left(C_1R_1 + C_4R_3 + C_4R_4 - C_5R_3\right) + 1}$$

10.582 X-INVALID-ORDER-582 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5R_1R_4s + C_5R_1}{-C_1C_4C_5C_6R_1R_3R_4s^3 + C_6 + s^2\left(C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 - C_4C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

10.583 X-INVALID-ORDER-583 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5C_6R_1R_4R_6s^2 + C_5R_1 + s\left(C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{-C_1C_4C_5C_6R_1R_3R_4s^3 + C_6 + s^2\left(C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 - C_4C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

10.584 X-INVALID-ORDER-584 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_6s^2 + C_5R_1R_6s}{-C_1C_4C_5C_6R_1R_3R_4R_6s^4 + s^3\left(-C_1C_4C_5R_1R_3R_4 + C_1C_4C_6R_1R_3R_6 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_3R_6 - C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1C_5R_1R_3 + C_1C_6R_1R_6 - C_4C_5R_3R_4 + C_4C_6R_3R_6 + C_4C_6R_4R_6 - C_5C_6R_3R_6\right) + s\left(C_1R_1 + C_4$$

10.585 X-INVALID-ORDER-585 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_6s^2 + C_5R_1R_6s}{s^3\left(-C_1C_4C_5R_1R_3R_4 + C_1C_4C_5R_1R_3R_5 + C_1C_4C_5R_1R_4R_5\right) + s^2\left(C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1C_5R_1R_3 + C_1C_5R_1R_5 - C_4C_5R_3R_4 + C_4C_5R_3R_5 + C_4C_5R_4R_5\right) + s\left(C_1R_1 + C_4R_3 + C_4R_4 - C_5R_3 + C_5R_5\right) + 1}$$

10.586 X-INVALID-ORDER-586 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5R_1R_4s + C_5R_1}{C_6 + s^3\left(-C_1C_4C_5C_6R_1R_3R_4 + C_1C_4C_5C_6R_1R_3R_5 + C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 + C_1C_5C_6R_1R_5 - C_4C_5C_6R_3R_4 + C_4C_5C_6R_3R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_1C_6R_1 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.587 X-INVALID-ORDER-587 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5C_6R_1R_4R_6s^2 + C_5R_1 + s\left(C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{C_6 + s^3\left(-C_1C_4C_5C_6R_1R_3R_4 + C_1C_4C_5C_6R_1R_3R_5 + C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 + C_1C_5C_6R_1R_5 - C_4C_5C_6R_3R_4 + C_4C_5C_6R_3R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_1C_6R_1 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.588 X-INVALID-ORDER-588 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_6s^2 + C_5}{s^4\left(-C_1C_4C_5C_6R_1R_3R_4R_6 + C_1C_4C_5C_6R_1R_3R_5R_6 + C_1C_4C_5C_6R_1R_4R_5R_6\right) + s^3\left(-C_1C_4C_5R_1R_3R_4 + C_1C_4C_5R_1R_3R_5 + C_1C_4C_5R_1R_4R_5 + C_1C_4C_6R_1R_3R_6 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_3R_6 + C_1C_5C_6R_1R_5R_6 - C_4C_5C_6R_3R_4R_6 + C_4C_5C_6R_3R_5R_6 + C\right.}$$

10.589 X-INVALID-ORDER-589 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_5R_6s^2 + R_1R_6 + s\left(C_4R_1R_4R_6 + C_5R_1R_5R_6\right)}{-C_1C_4C_5R_1R_3R_4R_5s^3 - R_3 + R_5 + s^2\left(-C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5 - C_1C_5R_1R_3R_5 - C_4C_5R_3R_4R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5 - C_5R_3R_5\right)}$$

10.590 X-INVALID-ORDER-590 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_5s^2 + R_1 + s\left(C_4R_1R_4 + C_5R_1R_5\right)}{-C_1C_4C_5C_6R_1R_3R_4R_5s^4 + s^3\left(-C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5 - C_1C_5C_6R_1R_3R_5 - C_4C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.591 X-INVALID-ORDER-591 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5C_6R_1R_4R_5R_6s^3 + R_1 + s^2\left(C_4C_5R_1R_4R_5 + C_4C_6R_1R_4R_6 + C_5C_6R_1R_5R_6\right) + s\left(C_4R_1R_4 + C_5R_1R_5 + C_6R_1R_6\right)}{-C_1C_4C_5C_6R_1R_3R_4R_5s^4 + s^3\left(-C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5 - C_1C_5C_6R_1R_3R_5 - C_4C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.592 X-INVALID-ORDER-592 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_4C_5R_1R_4R_5R_6s^2 + R_1R_6 + s\left(C_4R_1R_4R_6 + C_5R_1R_5R_6\right)}{-C_1C_4C_5C_6R_1R_3R_4R_5R_6s^4 - R_3 + R_5 + s^3\left(-C_1C_4C_5R_1R_3R_4R_5 - C_1C_4C_6R_1R_3R_4R_6 + C_1C_4C_6R_1R_3R_5R_6 + C_1C_4C_6R_1R_4R_5R_6 - C_1C_5C_6R_1R_3R_5R_6 - C_4C_5C_6R_3R_4R_5R_6\right) + s^2\left(-C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5 - C_1C_5R_1R_3R_5 - C_1C_6R\right.}$$

10.593 X-INVALID-ORDER-593 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{R_1R_4}{C_1C_4C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_4C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.594 X-INVALID-ORDER-594 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_6R_1R_4R_6s + R_1R_4}{C_1C_4C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_4C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.595 X-INVALID-ORDER-595 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{R_1R_4R_6}{C_1C_4C_6R_1R_3R_4R_5R_6s^3 - R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_1C_4R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 + C_4C_6R_3R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 + C_4R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

10.596 X-INVALID-ORDER-596 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{R_3 + R_4 + s^3\left(C_1C_4C_6R_1R_3R_4R_6 - C_1C_5C_6R_1R_3R_4R_6\right) + s^2\left(C_1C_4R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_6R_1R_3R_6 + C_1C_6R_1R_4R_6 + C_4C_6R_3R_4R_6 - C_5C_6R_3R_4R_6\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_4R_3R_4 - C_5R_3R_4 + C_6R_3R_6 + C_6R_4R_6\right)}$$

10.597 X-INVALID-ORDER-597 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{C_1C_4C_5R_1R_3R_4R_5s^3 + R_3 + R_4 + s^2\left(C_1C_4R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_4C_5R_3R_4R_5\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5\right)}$$

10.598 X-INVALID-ORDER-598 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5R_1R_4}{C_1C_4C_5C_6R_1R_3R_4R_5s^3 + C_6R_3 + C_6R_4 + s^2\left(C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.599 X-INVALID-ORDER-599 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_4R_6s + C_5R_1R_4}{C_1C_4C_5C_6R_1R_3R_4R_5s^3 + C_6R_3 + C_6R_4 + s^2\left(C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.600 X-INVALID-ORDER-600 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_6s}{C_1C_4C_5C_6R_1R_3R_4R_5R_6s^4 + R_3 + R_4 + s^3\left(C_1C_4C_5R_1R_3R_4R_5 + C_1C_4C_6R_1R_3R_4R_6 - C_1C_5C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_3R_5R_6 + C_1C_5C_6R_1R_4R_5R_6 + C_4C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_4R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_1C_6R_1R_3R\right.}$$

10.601 X-INVALID-ORDER-601 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5R_1R_4R_5s + R_1R_4}{s^3\left(C_1C_4C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.602 X-INVALID-ORDER-602 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_5C_6R_1R_4R_5R_6s^2 + R_1R_4 + s\left(C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^3\left(C_1C_4C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.603 X-INVALID-ORDER-603 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3,\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_5R_1R_4R_5R_6s + R_1R_4R_6}{-R_3R_4 + R_3R_5 + R_4R_5 + s^3\left(C_1C_4C_6R_1R_3R_4R_5R_6 - C_1C_5C_6R_1R_3R_4R_5R_6\right) + s^2\left(C_1C_4R_1R_3R_4R_5 - C_1C_5R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 + C_4C_6R_3R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R\right.}$$

10.604 X-INVALID-ORDER-604 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_1C_3C_6R_1R_4R_5R_6s^3 - R_4 + R_5 + s^2\left(C_1C_3R_1R_4R_5 - C_1C_6R_1R_4R_6 + C_1C_6R_1R_5R_6 + C_3C_6R_4R_5R_6\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 + C_3R_4R_5 - C_6R_4R_6 + C_6R_5R_6\right)}$$

10.605 X-INVALID-ORDER-605 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^3\left(C_1C_3C_6R_1R_4R_6 - C_1C_5C_6R_1R_4R_6\right) + s^2\left(C_1C_3R_1R_4 - C_1C_5R_1R_4 + C_1C_6R_1R_6 + C_3C_6R_4R_6 - C_5C_6R_4R_6\right) + s\left(C_1R_1 + C_3R_4 - C_5R_4 + C_6R_6\right) + 1}$$

10.606 X-INVALID-ORDER-606 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4,\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{C_1C_3C_5R_1R_4R_5s^3 + s^2\left(C_1C_3R_1R_4 - C_1C_5R_1R_4 + C_1C_5R_1R_5 + C_3C_5R_4R_5\right) + s\left(C_1R_1 + C_3R_4 - C_5R_4 + C_5R_5\right) + 1}$$

10.607 X-INVALID-ORDER-607 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_1 C_3 C_5 C_6 R_1 R_4 R_5 s^3 + C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 + C_1 C_5 C_6 R_1 R_5 + C_3 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.608 X-INVALID-ORDER-608 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_1 C_3 C_5 C_6 R_1 R_4 R_5 s^3 + C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 + C_1 C_5 C_6 R_1 R_5 + C_3 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.609 X-INVALID-ORDER-609 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^4 + s^3 \left(C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_4 R_6 - C_1 C_5 C_6 R_1 R_4 R_6 + C_1 C_5 C_6 R_1 R_5 R_6 + C_3 C_5 C_6 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4 + C_1 C_5 R_1 R_5 + C_1 C_6 R_1 R_6 + C_3 C_5 R_4 R_5 + C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6 + C_5 C_6 R_5 R_6\right) + s \left(C_1 R_1 + C_3 R_4 + \right.}$$

10.610 X-INVALID-ORDER-610 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^3 \left(C_1 C_3 C_6 R_1 R_4 R_5 R_6 - C_1 C_5 C_6 R_1 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5 - C_1 C_6 R_1 R_4 R_6 + C_1 C_6 R_1 R_5 R_6 + C_3 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_1 R_4 + C_1 R_1 R_5 + C_3 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}$$

10.611 X-INVALID-ORDER-611 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_6 s}{s^3 \left(C_1 C_3 C_6 R_1 R_5 R_6 + C_1 C_4 C_6 R_1 R_5 R_6\right) + s^2 \left(C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_6 R_1 R_6 + C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6\right) + s \left(-C_1 R_1 + C_3 R_5 + C_4 R_5 - C_6 R_6\right) - 1}$$

10.612 X-INVALID-ORDER-612 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s \left(C_1 C_3 R_1 + C_1 C_4 R_1 - C_1 C_5 R_1\right)}$$

10.613 X-INVALID-ORDER-613 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s \left(C_1 C_3 C_6 R_1 + C_1 C_4 C_6 R_1 - C_1 C_5 C_6 R_1\right)}$$

10.614 X-INVALID-ORDER-614 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6 + s \left(C_1 C_3 C_6 R_1 + C_1 C_4 C_6 R_1 - C_1 C_5 C_6 R_1\right)}$$

10.615 X-INVALID-ORDER-615 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_3 + C_4 - C_5 + s^3 \left(C_1 C_3 C_5 C_6 R_1 R_5 R_6 + C_1 C_4 C_5 C_6 R_1 R_5 R_6\right) + s^2 \left(C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_1 C_4 C_5 R_1 R_5 + C_1 C_4 C_6 R_1 R_6 - C_1 C_5 C_6 R_1 R_6 + C_3 C_5 C_6 R_5 R_6 + C_4 C_5 C_6 R_5 R_6\right) + s \left(C_1 C_3 R_1 + C_1 C_4 R_1 - C_1 C_5 R_1 + C_3 C_5 R_5 + C_3 C_6 R_6 + C_4 C_5 R_5 + C_4 C_6 R\right.}$$

10.616 X-INVALID-ORDER-616 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^3 \left(C_1 C_3 C_6 R_1 R_5 R_6 + C_1 C_4 C_6 R_1 R_5 R_6 - C_1 C_5 C_6 R_1 R_5 R_6\right) + s^2 \left(C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5 - C_1 C_6 R_1 R_6 + C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6 - C_5 C_6 R_5 R_6\right) + s \left(-C_1 R_1 + C_3 R_5 + C_4 R_5 - C_5 R_5 - C_6 R_6\right) - 1}$$

10.617 X-INVALID-ORDER-617 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_1R_4R_6s^2 + C_3R_1R_6s}{C_1C_3C_4R_1R_4R_5s^3 + s^2\left(C_1C_3R_1R_5 - C_1C_4R_1R_4 + C_1C_4R_1R_5 + C_3C_4R_4R_5\right) + s\left(-C_1R_1 + C_3R_5 - C_4R_4 + C_4R_5\right) - 1}$$

10.618 X-INVALID-ORDER-618 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4R_1R_4s + C_3R_1}{C_1C_3C_4C_6R_1R_4R_5s^3 - C_6 + s^2\left(C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 + C_3C_4C_6R_4R_5\right) + s\left(-C_1C_6R_1 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5\right)}$$

10.619 X-INVALID-ORDER-619 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_6R_1R_4R_6s^2 + C_3R_1 + s\left(C_3C_4R_1R_4 + C_3C_6R_1R_6\right)}{C_1C_3C_4C_6R_1R_4R_5s^3 - C_6 + s^2\left(C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 + C_3C_4C_6R_4R_5\right) + s\left(-C_1C_6R_1 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5\right)}$$

10.620 X-INVALID-ORDER-620 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4R_1R_4R_6s^2 + C_3R_1R_6s}{C_1C_3C_4C_6R_1R_4R_5R_6s^4 + s^3\left(C_1C_3C_4R_1R_4R_5 + C_1C_3C_6R_1R_5R_6 - C_1C_4C_6R_1R_4R_6 + C_1C_4C_6R_1R_5R_6 + C_3C_4C_6R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_5 - C_1C_4R_1R_4 + C_1C_4R_1R_5 - C_1C_6R_1R_6 + C_3C_4R_4R_5 + C_3C_6R_5R_6 - C_4C_6R_4R_6 + C_4C_6R_5R_6\right) + s\left(-C_1R_1 + C_3R_5\right.$$

10.621 X-INVALID-ORDER-621 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^3\left(C_1C_3C_4C_6R_1R_4R_6 - C_1C_4C_5C_6R_1R_4R_6\right) + s^2\left(C_1C_3C_4R_1R_4 + C_1C_3C_6R_1R_6 - C_1C_4C_5R_1R_4 + C_1C_4C_6R_1R_6 - C_1C_5C_6R_1R_6 + C_3C_4C_6R_4R_6 - C_4C_5C_6R_4R_6\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_4 + C_3C_6R_6 - C_4C_5R_4 + C_4C_6R\right.$$

10.622 X-INVALID-ORDER-622 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1R_6s}{C_1C_3C_4C_5R_1R_4R_5s^3 + C_3 + C_4 - C_5 + s^2\left(C_1C_3C_4R_1R_4 + C_1C_3C_5R_1R_5 - C_1C_4C_5R_1R_4 + C_1C_4C_5R_1R_5 + C_3C_4C_5R_4R_5\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_4 + C_3C_5R_5 - C_4C_5R_4 + C_4C_5R_5\right)}$$

10.623 X-INVALID-ORDER-623 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4s + C_3C_5R_1}{C_1C_3C_4C_5C_6R_1R_4R_5s^3 + C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_4 + C_1C_3C_5C_6R_1R_5 - C_1C_4C_5C_6R_1R_4 + C_1C_4C_5C_6R_1R_5 + C_3C_4C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_4 + C_3C_5C_6R_5 - C_4C_5C_6R_4 + C_4C_5C_6R_5\right)}$$

10.624 X-INVALID-ORDER-624 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{C_1C_3C_4C_5C_6R_1R_4R_5s^3 + C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_4 + C_1C_3C_5C_6R_1R_5 - C_1C_4C_5C_6R_1R_4 + C_1C_4C_5C_6R_1R_5 + C_3C_4C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_4 + C_3C_5C_6R_5 - C_4C_5C_6R_4 + C_4C_5C_6R_5\right)}$$

10.625 X-INVALID-ORDER-625 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1}{C_1C_3C_4C_5C_6R_1R_4R_5R_6s^4 + C_3 + C_4 - C_5 + s^3\left(C_1C_3C_4C_5R_1R_4R_5 + C_1C_3C_4C_6R_1R_4R_6 + C_1C_3C_5C_6R_1R_5R_6 - C_1C_4C_5C_6R_1R_4R_6 + C_1C_4C_5C_6R_1R_5R_6 + C_3C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_1C_3C_4R_1R_4 + C_1C_3C_5R_1R_5 + C_1C_3C_6R_1R_6 - C_1C_4C_5R_1R_4 + C_1C_4C_5\right.$$

10.626 X-INVALID-ORDER-626 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5R_6s^3 + C_3R_1R_6s + s^2\left(C_3C_4R_1R_4R_6 + C_3C_5R_1R_5R_6\right)}{s^3\left(C_1C_3C_4R_1R_4R_5 - C_1C_4C_5R_1R_4R_5\right) + s^2\left(C_1C_3R_1R_5 - C_1C_4R_1R_4 + C_1C_4R_1R_5 - C_1C_5R_1R_5 + C_3C_4R_4R_5 - C_4C_5R_4R_5\right) + s\left(-C_1R_1 + C_3R_5 - C_4R_4 + C_4R_5 - C_5R_5\right) - 1}$$

10.627 X-INVALID-ORDER-627 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5s^2 + C_3R_1 + s\left(C_3C_4R_1R_4 + C_3C_5R_1R_5\right)}{-C_6 + s^3\left(C_1C_3C_4C_6R_1R_4R_5 - C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 - C_1C_5C_6R_1R_5 + C_3C_4C_6R_4R_5 - C_4C_5C_6R_4R_5\right) + s\left(-C_1C_6R_1 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5 - C_5C_6R_5\right)}$$

10.628 X-INVALID-ORDER-628 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_5R_6s^3 + C_3R_1 + s^2\left(C_3C_4C_5R_1R_4R_5 + C_3C_4C_6R_1R_4R_6 + C_3C_5C_6R_1R_5R_6\right) + s\left(C_3C_4R_1R_4 + C_3C_5R_1R_5 + C_3C_6R_1R_6\right)}{-C_6 + s^3\left(C_1C_3C_4C_6R_1R_4R_5 - C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 - C_1C_5C_6R_1R_5 + C_3C_4C_6R_4R_5 - C_4C_5C_6R_4R_5\right) + s\left(-C_1C_6R_1 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5 - C_5C_6R_5\right)}$$

10.629 X-INVALID-ORDER-629 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4 + \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5R_6s^3 + C_3R_1R_6s + s^2\left(C_3C_4R_1R_4R_6 + C_3C_5R_1R_5R_6\right)}{s^4\left(C_1C_3C_4C_6R_1R_4R_5R_6 - C_1C_4C_5C_6R_1R_4R_5R_6\right) + s^3\left(C_1C_3C_4R_1R_4R_5 + C_1C_3C_6R_1R_5R_6 - C_1C_4C_5R_1R_4R_5 - C_1C_4C_6R_1R_4R_6 + C_1C_4C_6R_1R_5R_6 - C_1C_5C_6R_1R_5R_6 + C_3C_4C_6R_4R_5R_6 - C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_5 - C_1C_4R_1R_4 + C_1C_4R_1R_5 - C_1\right.}$$

10.630 X-INVALID-ORDER-630 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{-R_4 + R_5 + s^3\left(C_1C_3C_6R_1R_4R_5R_6 + C_1C_4C_6R_1R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5 - C_1C_6R_1R_4R_6 + C_1C_6R_1R_5R_6 + C_3C_6R_4R_5R_6 + C_4C_6R_4R_5R_6\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 + C_3R_4R_5 + C_4R_4R_5 - C_6R_4R_6 + C_6R_5R_6\right)}$$

10.631 X-INVALID-ORDER-631 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^3\left(C_1C_3C_6R_1R_4R_6 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_4R_6\right) + s^2\left(C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4 + C_1C_6R_1R_6 + C_3C_6R_4R_6 + C_4C_6R_4R_6 - C_5C_6R_4R_6\right) + s\left(C_1R_1 + C_3R_4 + C_4R_4 - C_5R_4 + C_6R_6\right) + 1}$$

10.632 X-INVALID-ORDER-632 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^3\left(C_1C_3C_5R_1R_4R_5 + C_1C_4C_5R_1R_4R_5\right) + s^2\left(C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4 + C_1C_5R_1R_5 + C_3C_5R_4R_5 + C_4C_5R_4R_5\right) + s\left(C_1R_1 + C_3R_4 + C_4R_4 - C_5R_4 + C_5R_5\right) + 1}$$

10.633 X-INVALID-ORDER-633 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s^3\left(C_1C_3C_5C_6R_1R_4R_5 + C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_1C_5C_6R_1R_5 + C_3C_5C_6R_4R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_1C_6R_1 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4 + C_5C_6R_5\right)}$$

10.634 X-INVALID-ORDER-634 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{C_6 + s^3\left(C_1C_3C_5C_6R_1R_4R_5 + C_1C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_1C_5C_6R_1R_5 + C_3C_5C_6R_4R_5 + C_4C_5C_6R_4R_5\right) + s\left(C_1C_6R_1 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4 + C_5C_6R_5\right)}$$

10.635 X-INVALID-ORDER-635 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^4\left(C_1C_3C_5C_6R_1R_4R_5R_6 + C_1C_4C_5C_6R_1R_4R_5R_6\right) + s^3\left(C_1C_3C_5R_1R_4R_5 + C_1C_3C_6R_1R_4R_6 + C_1C_4C_5R_1R_4R_5 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_4R_6 + C_1C_5C_6R_1R_5R_6 + C_3C_5C_6R_4R_5R_6 + C_4C_5C_6R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4 + C_1\right.}$$

10.636 X-INVALID-ORDER-636 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5R_6s^2 + C_3R_1R_4R_6s}{-R_4 + R_5 + s^3\left(C_1C_3C_6R_1R_4R_5R_6 + C_1C_4C_6R_1R_4R_5R_6 - C_1C_5C_6R_1R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5 - C_1C_5R_1R_4R_5 - C_1C_6R_1R_4R_6 + C_1C_6R_1R_5R_6 + C_3C_6R_4R_5R_6 + C_4C_6R_4R_5R_6 - C_5C_6R_4R_5R_6\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 + C_3R_4R_5 + C\right.}$$

10.637 X-INVALID-ORDER-637 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_4 R_6 s}{-R_4 + R_5 + s^3 \left(-C_1 C_3 C_6 R_1 R_3 R_4 R_6 + C_1 C_3 C_6 R_1 R_3 R_5 R_6 + C_1 C_3 C_6 R_1 R_4 R_5 R_6\right) + s^2 \left(-C_1 C_3 R_1 R_3 R_4 + C_1 C_3 R_1 R_3 R_5 + C_1 C_3 R_1 R_4 R_5 - C_1 C_6 R_1 R_4 R_6 + C_1 C_6 R_1 R_5 R_6 - C_3 C_6 R_3 R_4 R_6 + C_3 C_6 R_3 R_5 R_6 + C_3 C_6 R_4 R_5 R_6\right) + s \left(-C_1 R_1 R_4 + C_1 R_1 R_5 - C_3 R_3 R_4 + \right.$$

10.638 X-INVALID-ORDER-638 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{-C_1 C_3 C_5 R_1 R_3 R_4 s^3 + s^2 \left(C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4 - C_3 C_5 R_3 R_4\right) + s \left(C_1 R_1 + C_3 R_3 + C_3 R_4 - C_5 R_4\right) + 1}$$

10.639 X-INVALID-ORDER-639 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{-C_1 C_3 C_5 C_6 R_1 R_3 R_4 s^3 + C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 - C_3 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4\right)}$$

10.640 X-INVALID-ORDER-640 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{-C_1 C_3 C_5 C_6 R_1 R_3 R_4 s^3 + C_6 + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 - C_3 C_5 C_6 R_3 R_4\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4\right)}$$

10.641 X-INVALID-ORDER-641 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{-C_1 C_3 C_5 C_6 R_1 R_3 R_4 R_6 s^4 + s^3 \left(-C_1 C_3 C_5 R_1 R_3 R_4 + C_1 C_3 C_6 R_1 R_3 R_6 + C_1 C_3 C_6 R_1 R_4 R_6 - C_1 C_5 C_6 R_1 R_4 R_6 - C_3 C_5 C_6 R_3 R_4 R_6\right) + s^2 \left(C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4 + C_1 C_6 R_1 R_6 - C_3 C_5 R_3 R_4 + C_3 C_6 R_3 R_6 + C_3 C_6 R_4 R_6 - C_5 C_6 R_4 R_6\right) + s \left(C_1 R_1 + C_3 \right.$$

10.642 X-INVALID-ORDER-642 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^3 \left(-C_1 C_3 C_5 R_1 R_3 R_4 + C_1 C_3 C_5 R_1 R_3 R_5 + C_1 C_3 C_5 R_1 R_4 R_5\right) + s^2 \left(C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_4 - C_1 C_5 R_1 R_4 + C_1 C_5 R_1 R_5 - C_3 C_5 R_3 R_4 + C_3 C_5 R_3 R_5 + C_3 C_5 R_4 R_5\right) + s \left(C_1 R_1 + C_3 R_3 + C_3 R_4 - C_5 R_4 + C_5 R_5\right) + 1}$$

10.643 X-INVALID-ORDER-643 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 s}{C_6 + s^3 \left(-C_1 C_3 C_5 C_6 R_1 R_3 R_4 + C_1 C_3 C_5 C_6 R_1 R_3 R_5 + C_1 C_3 C_5 C_6 R_1 R_4 R_5\right) + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 + C_1 C_5 C_6 R_1 R_5 - C_3 C_5 C_6 R_3 R_4 + C_3 C_5 C_6 R_3 R_5 + C_3 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.644 X-INVALID-ORDER-644 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_1 R_4 s}{C_6 + s^3 \left(-C_1 C_3 C_5 C_6 R_1 R_3 R_4 + C_1 C_3 C_5 C_6 R_1 R_3 R_5 + C_1 C_3 C_5 C_6 R_1 R_4 R_5\right) + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_4 + C_1 C_5 C_6 R_1 R_5 - C_3 C_5 C_6 R_3 R_4 + C_3 C_5 C_6 R_3 R_5 + C_3 C_5 C_6 R_4 R_5\right) + s \left(C_1 C_6 R_1 + C_3 C_6 R_3 + C_3 C_6 R_4 - C_5 C_6 R_4 + C_5 C_6 R_5\right)}$$

10.645 X-INVALID-ORDER-645 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_6 s^2}{s^4 \left(-C_1 C_3 C_5 C_6 R_1 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_1 R_3 R_5 R_6 + C_1 C_3 C_5 C_6 R_1 R_4 R_5 R_6\right) + s^3 \left(-C_1 C_3 C_5 R_1 R_3 R_4 + C_1 C_3 C_5 R_1 R_3 R_5 + C_1 C_3 C_5 R_1 R_4 R_5 + C_1 C_3 C_6 R_1 R_3 R_6 + C_1 C_3 C_6 R_1 R_4 R_6 - C_1 C_5 C_6 R_1 R_4 R_6 + C_1 C_5 C_6 R_1 R_5 R_6 - C_3 C_5 C_6 R_3 R_4 R_6 + C_3 C_5 C_6 R_3 R_5 R_6 + C$$

10.646 X-INVALID-ORDER-646 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 R_6 s}{-C_1 C_3 C_5 R_1 R_3 R_4 R_5 s^3 - R_4 + R_5 + s^2 \left(-C_1 C_3 R_1 R_3 R_4 + C_1 C_3 R_1 R_3 R_5 + C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5 - C_3 C_5 R_3 R_4 R_5\right) + s \left(-C_1 R_1 R_4 + C_1 R_1 R_5 - C_3 R_3 R_4 + C_3 R_3 R_5 + C_3 R_4 R_5 - C_5 R_4 R_5\right)}$$

10.647 X-INVALID-ORDER-647 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5s + C_3R_1R_4}{-C_1C_3C_5C_6R_1R_3R_4R_5s^3 - C_6R_4 + C_6R_5 + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 - C_1C_5C_6R_1R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

10.648 X-INVALID-ORDER-648 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_5R_6s^2 + C_3R_1R_4 + s\left(C_3C_5R_1R_4R_5 + C_3C_6R_1R_4R_6\right)}{-C_1C_3C_5C_6R_1R_3R_4R_5s^3 - C_6R_4 + C_6R_5 + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 - C_1C_5C_6R_1R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

10.649 X-INVALID-ORDER-649 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5R_6s^2 + C_3R_1R_4R_6s}{-C_1C_3C_5C_6R_1R_3R_4R_5R_6s^4 - R_4 + R_5 + s^3\left(-C_1C_3C_5R_1R_3R_4R_5 - C_1C_3C_6R_1R_3R_4R_6 + C_1C_3C_6R_1R_3R_5R_6 + C_1C_3C_6R_1R_4R_5R_6 - C_1C_5C_6R_1R_4R_5R_6 - C_3C_5C_6R_3R_4R_5R_6\right) + s^2\left(-C_1C_3R_1R_3R_4 + C_1C_3R_1R_3R_5 + C_1C_3R_1R_4R_5 - C_1C_5R_1R_4R_5 - C_1C_6R\right.}$$

10.650 X-INVALID-ORDER-650 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_6s}{C_1C_3C_4R_1R_3R_5s^3 + s^2\left(-C_1C_3R_1R_3 + C_1C_3R_1R_5 + C_1C_4R_1R_5 + C_3C_4R_3R_5\right) + s\left(-C_1R_1 - C_3R_3 + C_3R_5 + C_4R_5\right) - 1}$$

10.651 X-INVALID-ORDER-651 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1}{C_1C_3C_4C_6R_1R_3R_5s^3 - C_6 + s^2\left(-C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_5 + C_1C_4C_6R_1R_5 + C_3C_4C_6R_3R_5\right) + s\left(-C_1C_6R_1 - C_3C_6R_3 + C_3C_6R_5 + C_4C_6R_5\right)}$$

10.652 X-INVALID-ORDER-652 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_6s + C_3R_1}{C_1C_3C_4C_6R_1R_3R_5s^3 - C_6 + s^2\left(-C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_5 + C_1C_4C_6R_1R_5 + C_3C_4C_6R_3R_5\right) + s\left(-C_1C_6R_1 - C_3C_6R_3 + C_3C_6R_5 + C_4C_6R_5\right)}$$

10.653 X-INVALID-ORDER-653 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_6s}{C_1C_3C_4C_6R_1R_3R_5R_6s^4 + s^3\left(C_1C_3C_4R_1R_3R_5 - C_1C_3C_6R_1R_3R_6 + C_1C_3C_6R_1R_5R_6 + C_1C_4C_6R_1R_5R_6 + C_3C_4C_6R_3R_5R_6\right) + s^2\left(-C_1C_3R_1R_3 + C_1C_3R_1R_5 + C_1C_4R_1R_5 - C_1C_6R_1R_6 + C_3C_4R_3R_5 - C_3C_6R_3R_6 + C_3C_6R_5R_6 + C_4C_6R_5R_6\right) + s\left(-C_1R_1 - C_3\right.}$$

10.654 X-INVALID-ORDER-654 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^3\left(C_1C_3C_4C_6R_1R_3R_6 - C_1C_3C_5C_6R_1R_3R_6\right) + s^2\left(C_1C_3C_4R_1R_3 - C_1C_3C_5R_1R_3 + C_1C_3C_6R_1R_6 + C_1C_4C_6R_1R_6 - C_1C_5C_6R_1R_6 + C_3C_4C_6R_3R_6 - C_3C_5C_6R_3R_6\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_3 - C_3C_5R_3 + C_3C_6R_6 + C_4C_6R\right.}$$

10.655 X-INVALID-ORDER-655 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_6s}{C_1C_3C_4C_5R_1R_3R_5s^3 + C_3 + C_4 - C_5 + s^2\left(C_1C_3C_4R_1R_3 - C_1C_3C_5R_1R_3 + C_1C_3C_5R_1R_5 + C_1C_4C_5R_1R_5 + C_3C_4C_5R_3R_5\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_3 - C_3C_5R_3 + C_3C_5R_5 + C_4C_5R_5\right)}$$

10.656 X-INVALID-ORDER-656 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3 + \frac{1}{C_3s},\ \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1}{C_1C_3C_4C_5C_6R_1R_3R_5s^3 + C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_3 - C_1C_3C_5C_6R_1R_3 + C_1C_3C_5C_6R_1R_5 + C_1C_4C_5C_6R_1R_5 + C_3C_4C_5C_6R_3R_5\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_3 - C_3C_5C_6R_3 + C_3C_5C_6R_5 + C_4C_5C_6R_5\right)}$$

10.657 X-INVALID-ORDER-657 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_6 s + C_3 C_5 R_1}{C_1 C_3 C_4 C_5 C_6 R_1 R_3 R_5 s^3 + C_3 C_6 + C_4 C_6 - C_5 C_6 + s^2 \left(C_1 C_3 C_4 C_6 R_1 R_3 - C_1 C_3 C_5 C_6 R_1 R_3 + C_1 C_3 C_5 C_6 R_1 R_5 + C_1 C_4 C_5 C_6 R_1 R_5 + C_3 C_4 C_5 C_6 R_3 R_5\right) + s \left(C_1 C_3 C_6 R_1 + C_1 C_4 C_6 R_1 - C_1 C_5 C_6 R_1 + C_3 C_4 C_6 R_3 - C_3 C_5 C_6 R_3 + C_3 C_5 C_6 R_5 + C_4 C_5 C_6 R_5\right)}$$

10.658 X-INVALID-ORDER-658 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_6 s}{C_1 C_3 C_4 C_5 C_6 R_1 R_3 R_5 R_6 s^4 + C_3 + C_4 - C_5 + s^3 \left(C_1 C_3 C_4 C_5 R_1 R_3 R_5 + C_1 C_3 C_4 C_6 R_1 R_3 R_6 - C_1 C_3 C_5 C_6 R_1 R_3 R_6 + C_1 C_3 C_5 C_6 R_1 R_5 R_6 + C_1 C_4 C_5 C_6 R_1 R_5 R_6 + C_3 C_4 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(C_1 C_3 C_4 R_1 R_3 - C_1 C_3 C_5 R_1 R_3 + C_1 C_3 C_5 R_1 R_5 + C_1 C_3 C_6 R_1 R_6 + C_1 C_4 C_5\right.}$$

10.659 X-INVALID-ORDER-659 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^3 \left(C_1 C_3 C_4 R_1 R_3 R_5 - C_1 C_3 C_5 R_1 R_3 R_5\right) + s^2 \left(-C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5 + C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5\right) + s \left(-C_1 R_1 - C_3 R_3 + C_3 R_5 + C_4 R_5 - C_5 R_5\right) - 1}$$

10.660 X-INVALID-ORDER-660 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 s + C_3 R_1}{-C_6 + s^3 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_5 - C_1 C_3 C_5 C_6 R_1 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_5 + C_1 C_4 C_6 R_1 R_5 - C_1 C_5 C_6 R_1 R_5 + C_3 C_4 C_6 R_3 R_5 - C_3 C_5 C_6 R_3 R_5\right) + s \left(-C_1 C_6 R_1 - C_3 C_6 R_3 + C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.661 X-INVALID-ORDER-661 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_5 R_6 s^2 + C_3 R_1 + s \left(C_3 C_5 R_1 R_5 + C_3 C_6 R_1 R_6\right)}{-C_6 + s^3 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_5 - C_1 C_3 C_5 C_6 R_1 R_3 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_5 + C_1 C_4 C_6 R_1 R_5 - C_1 C_5 C_6 R_1 R_5 + C_3 C_4 C_6 R_3 R_5 - C_3 C_5 C_6 R_3 R_5\right) + s \left(-C_1 C_6 R_1 - C_3 C_6 R_3 + C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

10.662 X-INVALID-ORDER-662 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_1 R_6 s}{s^4 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_5 R_6 - C_1 C_3 C_5 C_6 R_1 R_3 R_5 R_6\right) + s^3 \left(C_1 C_3 C_4 R_1 R_3 R_5 - C_1 C_3 C_5 R_1 R_3 R_5 - C_1 C_3 C_6 R_1 R_3 R_6 + C_1 C_3 C_6 R_1 R_5 R_6 + C_1 C_4 C_6 R_1 R_5 R_6 - C_1 C_5 C_6 R_1 R_5 R_6 + C_3 C_4 C_6 R_3 R_5 R_6 - C_3 C_5 C_6 R_3 R_5 R_6\right) + s^2 \left(-C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C\right.}$$

10.663 X-INVALID-ORDER-663 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_1 R_6 s}{s^3 \left(-C_1 C_3 C_4 R_1 R_3 R_4 + C_1 C_3 C_4 R_1 R_3 R_5 + C_1 C_3 C_4 R_1 R_4 R_5\right) + s^2 \left(-C_1 C_3 R_1 R_3 + C_1 C_3 R_1 R_5 - C_1 C_4 R_1 R_4 + C_1 C_4 R_1 R_5 - C_3 C_4 R_3 R_4 + C_3 C_4 R_3 R_5 + C_3 C_4 R_4 R_5\right) + s \left(-C_1 R_1 - C_3 R_3 + C_3 R_5 - C_4 R_4 + C_4 R_5\right) - 1}$$

10.664 X-INVALID-ORDER-664 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 s + C_3 R_1}{-C_6 + s^3 \left(-C_1 C_3 C_4 C_6 R_1 R_3 R_4 + C_1 C_3 C_4 C_6 R_1 R_3 R_5 + C_1 C_3 C_4 C_6 R_1 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_5 - C_1 C_4 C_6 R_1 R_4 + C_1 C_4 C_6 R_1 R_5 - C_3 C_4 C_6 R_3 R_4 + C_3 C_4 C_6 R_3 R_5 + C_3 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_1 - C_3 C_6 R_3 + C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5\right)}$$

10.665 X-INVALID-ORDER-665 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_6 R_1 R_4 R_6 s^2 + C_3 R_1 + s \left(C_3 C_4 R_1 R_4 + C_3 C_6 R_1 R_6\right)}{-C_6 + s^3 \left(-C_1 C_3 C_4 C_6 R_1 R_3 R_4 + C_1 C_3 C_4 C_6 R_1 R_3 R_5 + C_1 C_3 C_4 C_6 R_1 R_4 R_5\right) + s^2 \left(-C_1 C_3 C_6 R_1 R_3 + C_1 C_3 C_6 R_1 R_5 - C_1 C_4 C_6 R_1 R_4 + C_1 C_4 C_6 R_1 R_5 - C_3 C_4 C_6 R_3 R_4 + C_3 C_4 C_6 R_3 R_5 + C_3 C_4 C_6 R_4 R_5\right) + s \left(-C_1 C_6 R_1 - C_3 C_6 R_3 + C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5\right)}$$

10.666 X-INVALID-ORDER-666 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 R_1 R_4 R_6 s^2 + C}{s^4 \left(-C_1 C_3 C_4 C_6 R_1 R_3 R_4 R_6 + C_1 C_3 C_4 C_6 R_1 R_3 R_5 R_6 + C_1 C_3 C_4 C_6 R_1 R_4 R_5 R_6\right) + s^3 \left(-C_1 C_3 C_4 R_1 R_3 R_4 + C_1 C_3 C_4 R_1 R_3 R_5 + C_1 C_3 C_4 R_1 R_4 R_5 - C_1 C_3 C_6 R_1 R_3 R_6 + C_1 C_3 C_6 R_1 R_5 R_6 - C_1 C_4 C_6 R_1 R_4 R_6 + C_1 C_4 C_6 R_1 R_5 R_6 - C_3 C_4 C_6 R_3 R_4 R_6 + C_3 C_4 C_6 R_3 R_5 R_6 + C\right.}$$

10.667 X-INVALID-ORDER-667 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1R_6s}{-C_1C_3C_4C_5R_1R_3R_4s^3 + C_3 + C_4 - C_5 + s^2\left(C_1C_3C_4R_1R_3 + C_1C_3C_4R_1R_4 - C_1C_3C_5R_1R_3 - C_1C_4C_5R_1R_4 - C_3C_4C_5R_3R_4\right) + s\left(C_1C_3R_1 + C_1C_4R_1 - C_1C_5R_1 + C_3C_4R_3 + C_3C_4R_4 - C_3C_5R_3 - C_4C_5R_4\right)}$$

10.668 X-INVALID-ORDER-668 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4s + C_3C_5R_1}{-C_1C_3C_4C_5C_6R_1R_3R_4s^3 + C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_3 + C_1C_3C_4C_6R_1R_4 - C_1C_3C_5C_6R_1R_3 - C_1C_4C_5C_6R_1R_4 - C_3C_4C_5C_6R_3R_4\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_3 + C_3C_4C_6R_4 - C_3C_5C_6R_3 - C_4C_5C_6R_4\right)}$$

10.669 X-INVALID-ORDER-669 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{-C_1C_3C_4C_5C_6R_1R_3R_4s^3 + C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_3 + C_1C_3C_4C_6R_1R_4 - C_1C_3C_5C_6R_1R_3 - C_1C_4C_5C_6R_1R_4 - C_3C_4C_5C_6R_3R_4\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_3 + C_3C_4C_6R_4 - C_3C_5C_6R_3 - C_4C_5C_6R_4\right)}$$

10.670 X-INVALID-ORDER-670 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5}{-C_1C_3C_4C_5C_6R_1R_3R_4R_6s^4 + C_3 + C_4 - C_5 + s^3\left(-C_1C_3C_4C_5R_1R_3R_4 + C_1C_3C_4C_6R_1R_3R_6 + C_1C_3C_4C_6R_1R_4R_6 - C_1C_3C_5C_6R_1R_3R_6 - C_1C_4C_5C_6R_1R_4R_6 - C_3C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3C_4R_1R_3 + C_1C_3C_4R_1R_4 - C_1C_3C_5R_1R_3 + C_1C_3C_6R_1R_6 - C_1C\right.}$$

10.671 X-INVALID-ORDER-671 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_6s^2 + C_3C_5R_1R_6s}{C_3 + C_4 - C_5 + s^3\left(-C_1C_3C_4C_5R_1R_3R_4 + C_1C_3C_4C_5R_1R_3R_5 + C_1C_3C_4C_5R_1R_4R_5\right) + s^2\left(C_1C_3C_4R_1R_3 + C_1C_3C_4R_1R_4 - C_1C_3C_5R_1R_3 + C_1C_3C_5R_1R_5 - C_1C_4C_5R_1R_4 + C_1C_4C_5R_1R_5 - C_3C_4C_5R_3R_4 + C_3C_4C_5R_3R_5 + C_3C_4C_5R_4R_5\right) + s\left(C_1C_3R_1 + C_1C_4\right.}$$

10.672 X-INVALID-ORDER-672 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4s + C_3C_5R_1}{C_3C_6 + C_4C_6 - C_5C_6 + s^3\left(-C_1C_3C_4C_5C_6R_1R_3R_4 + C_1C_3C_4C_5C_6R_1R_3R_5 + C_1C_3C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_4C_6R_1R_3 + C_1C_3C_4C_6R_1R_4 - C_1C_3C_5C_6R_1R_3 + C_1C_3C_5C_6R_1R_5 - C_1C_4C_5C_6R_1R_4 + C_1C_4C_5C_6R_1R_5 - C_3C_4C_5C_6R_3R_4 + C_3C_4C_5C_6R_3R_5\right.}$$

10.673 X-INVALID-ORDER-673 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{C_3C_6 + C_4C_6 - C_5C_6 + s^3\left(-C_1C_3C_4C_5C_6R_1R_3R_4 + C_1C_3C_4C_5C_6R_1R_3R_5 + C_1C_3C_4C_5C_6R_1R_4R_5\right) + s^2\left(C_1C_3C_4C_6R_1R_3 + C_1C_3C_4C_6R_1R_4 - C_1C_3C_5C_6R_1R_3 + C_1C_3C_5C_6R_1R_5 - C_1C_4C_5C_6R_1R_4 + C_1C_4C_5C_6R_1R_5 - C_3C_4C_5C_6R_3R_4 + C_3C_4C_5C_6R_3R_5\right.}$$

10.674 X-INVALID-ORDER-674 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{}{C_3 + C_4 - C_5 + s^4\left(-C_1C_3C_4C_5C_6R_1R_3R_4R_6 + C_1C_3C_4C_5C_6R_1R_3R_5R_6 + C_1C_3C_4C_5C_6R_1R_4R_5R_6\right) + s^3\left(-C_1C_3C_4C_5R_1R_3R_4 + C_1C_3C_4C_5R_1R_3R_5 + C_1C_3C_4C_5R_1R_4R_5 + C_1C_3C_4C_6R_1R_3R_6 + C_1C_3C_4C_6R_1R_4R_6 - C_1C_3C_5C_6R_1R_3R_6 + C_1C_3C_5C_6R_1R_5R\right.}$$

10.675 X-INVALID-ORDER-675 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5R_6s^3 + C_3R_1R_6s + s^2\left(C_3C_4R_1R_4R_6 + C_3C_5R_1R_5R_6\right)}{-C_1C_3C_4C_5R_1R_3R_4R_5s^4 + s^3\left(-C_1C_3C_4R_1R_3R_4 + C_1C_3C_4R_1R_3R_5 + C_1C_3C_4R_1R_4R_5 - C_1C_3C_5R_1R_3R_5 - C_1C_4C_5R_1R_4R_5 - C_3C_4C_5R_3R_4R_5\right) + s^2\left(-C_1C_3R_1R_3 + C_1C_3R_1R_5 - C_1C_4R_1R_4 + C_1C_4R_1R_5 - C_1C_5R_1R_5 - C_3C_4R_3R_4 + C_3C_4R_3R_5 + C_3C_4R\right.}$$

10.676 X-INVALID-ORDER-676 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5s^2 + C_3R_1 + s\left(C_3C_4R_1R_4 + C_3C_5R_1R_5\right)}{-C_1C_3C_4C_5C_6R_1R_3R_4R_5s^4 - C_6 + s^3\left(-C_1C_3C_4C_6R_1R_3R_4 + C_1C_3C_4C_6R_1R_3R_5 + C_1C_3C_4C_6R_1R_4R_5 - C_1C_3C_5C_6R_1R_3R_5 - C_1C_4C_5C_6R_1R_4R_5 - C_3C_4C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 - C_1C_5C_6R_1R_5\right.}$$

10.677 X-INVALID-ORDER-677 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_5R_6s^3 + C_3R_1 + s^2\left(C_3C_4C_5R_1R_4R_5 + C_3C_4C_6R_1R_4R_6 + C_3C_5C_6R_1R_5R_6\right) + s\left(C_3C_4R_1R_4 + C_3C_5R_1\right.}{-C_1C_3C_4C_5C_6R_1R_3R_4R_5s^4 - C_6 + s^3\left(-C_1C_3C_4C_6R_1R_3R_4 + C_1C_3C_4C_6R_1R_3R_5 + C_1C_3C_4C_6R_1R_4R_5 - C_1C_3C_5C_6R_1R_3R_5 - C_1C_4C_5C_6R_1R_4R_5 - C_3C_4C_5C_6R_3R_4R_5\right) + s^2\left(-C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_5 - C_1C_4C_6R_1R_4 + C_1C_4C_6R_1R_5 - C_1C_5C_6R_1R_5\right.}$$

10.678 X-INVALID-ORDER-678 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{}{-C_1C_3C_4C_5C_6R_1R_3R_4R_5R_6s^5 + s^4\left(-C_1C_3C_4C_5R_1R_3R_4R_5 - C_1C_3C_4C_6R_1R_3R_4R_6 + C_1C_3C_4C_6R_1R_3R_5R_6 + C_1C_3C_4C_6R_1R_4R_5R_6 - C_1C_3C_5C_6R_1R_3R_5R_6 - C_1C_4C_5C_6R_1R_4R_5R_6 - C_3C_4C_5C_6R_3R_4R_5R_6\right) + s^3\left(-C_1C_3C_4R_1R_3R_4 + C_1C_3C_4R_1R_3R_5 + C_1\right.}$$

10.679 X-INVALID-ORDER-679 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_1C_3C_4R_1R_3R_4R_5s^3 - R_4 + R_5 + s^2\left(-C_1C_3R_1R_3R_4 + C_1C_3R_1R_3R_5 + C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5 + C_3C_4R_3R_4R_5\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 - C_3R_3R_4 + C_3R_3R_5 + C_3R_4R_5 + C_4R_4R_5\right)}$$

10.680 X-INVALID-ORDER-680 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_4}{C_1C_3C_4C_6R_1R_3R_4R_5s^3 - C_6R_4 + C_6R_5 + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5\right)}$$

10.681 X-INVALID-ORDER-681 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_4R_6s + C_3R_1R_4}{C_1C_3C_4C_6R_1R_3R_4R_5s^3 - C_6R_4 + C_6R_5 + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5\right)}$$

10.682 X-INVALID-ORDER-682 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_4R_6s}{C_1C_3C_4C_6R_1R_3R_4R_5R_6s^4 - R_4 + R_5 + s^3\left(C_1C_3C_4R_1R_3R_4R_5 - C_1C_3C_6R_1R_3R_4R_6 + C_1C_3C_6R_1R_3R_5R_6 + C_1C_3C_6R_1R_4R_5R_6 + C_1C_4C_6R_1R_4R_5R_6 + C_3C_4C_6R_3R_4R_5R_6\right) + s^2\left(-C_1C_3R_1R_3R_4 + C_1C_3R_1R_3R_5 + C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5 - C_1C_6R_1R_4\right.}$$

10.683 X-INVALID-ORDER-683 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^3\left(C_1C_3C_4R_1R_3R_4 - C_1C_3C_5R_1R_3R_4\right) + s^2\left(C_1C_3R_1R_3 + C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4 + C_3C_4R_3R_4 - C_3C_5R_3R_4\right) + s\left(C_1R_1 + C_3R_3 + C_3R_4 + C_4R_4 - C_5R_4\right) + 1}$$

10.684 X-INVALID-ORDER-684 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_3C_5C_6R_1R_3R_4\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_3C_4C_6R_3R_4 - C_3C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4\right)}$$

10.685 X-INVALID-ORDER-685 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_3C_5C_6R_1R_3R_4\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_3C_4C_6R_3R_4 - C_3C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_3C_6R_4 + C_4C_6R_4 - C_5C_6R_4\right)}$$

10.686 X-INVALID-ORDER-686 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{s^4\left(C_1C_3C_4C_6R_1R_3R_4R_6 - C_1C_3C_5C_6R_1R_3R_4R_6\right) + s^3\left(C_1C_3C_4R_1R_3R_4 - C_1C_3C_5R_1R_3R_4 + C_1C_3C_6R_1R_3R_6 + C_1C_3C_6R_1R_4R_6 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_4R_6 + C_3C_4C_6R_3R_4R_6 - C_3C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1\right.}$$

10.687 X-INVALID-ORDER-687 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_6s^2}{C_1C_3C_4C_5R_1R_3R_4R_5s^4 + s^3\left(C_1C_3C_4R_1R_3R_4 - C_1C_3C_5R_1R_3R_4 + C_1C_3C_5R_1R_3R_5 + C_1C_3C_5R_1R_4R_5 + C_1C_4C_5R_1R_4R_5 + C_3C_4C_5R_3R_4R_5\right) + s^2\left(C_1C_3R_1R_3 + C_1C_3R_1R_4 + C_1C_4R_1R_4 - C_1C_5R_1R_4 + C_1C_5R_1R_5 + C_3C_4R_3R_4 - C_3C_5R_3R_4 + C_3C_5R_3R_5 +\right.}$$

10.688 X-INVALID-ORDER-688 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4s}{C_1C_3C_4C_5C_6R_1R_3R_4R_5s^4 + C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_3C_5C_6R_1R_3R_4 + C_1C_3C_5C_6R_1R_3R_5 + C_1C_3C_5C_6R_1R_4R_5 + C_1C_4C_5C_6R_1R_4R_5 + C_3C_4C_5C_6R_3R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_1C_5C_6R_1R_5 + C_3\right.}$$

10.689 X-INVALID-ORDER-689 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_1R_4s}{C_1C_3C_4C_5C_6R_1R_3R_4R_5s^4 + C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_3C_5C_6R_1R_3R_4 + C_1C_3C_5C_6R_1R_3R_5 + C_1C_3C_5C_6R_1R_4R_5 + C_1C_4C_5C_6R_1R_4R_5 + C_3C_4C_5C_6R_3R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_3C_6R_1R_4 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_4 + C_1C_5C_6R_1R_5 + C_3\right.}$$

10.690 X-INVALID-ORDER-690 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{}{C_1C_3C_4C_5C_6R_1R_3R_4R_5R_6s^5 + s^4\left(C_1C_3C_4C_5R_1R_3R_4R_5 + C_1C_3C_4C_6R_1R_3R_4R_6 - C_1C_3C_5C_6R_1R_3R_4R_6 + C_1C_3C_5C_6R_1R_3R_5R_6 + C_1C_3C_5C_6R_1R_4R_5R_6 + C_1C_4C_5C_6R_1R_4R_5R_6 + C_3C_4C_5C_6R_3R_4R_5R_6\right) + s^3\left(C_1C_3C_4R_1R_3R_4 - C_1C_3C_5R_1R_3R_4 + C_1C_3C_5\right.}$$

10.691 X-INVALID-ORDER-691 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5R_6s^2 + C_3R_1R_4R_6s}{-R_4 + R_5 + s^3\left(C_1C_3C_4R_1R_3R_4R_5 - C_1C_3C_5R_1R_3R_4R_5\right) + s^2\left(-C_1C_3R_1R_3R_4 + C_1C_3R_1R_3R_5 + C_1C_3R_1R_4R_5 + C_1C_4R_1R_4R_5 - C_1C_5R_1R_4R_5 + C_3C_4R_3R_4R_5 - C_3C_5R_3R_4R_5\right) + s\left(-C_1R_1R_4 + C_1R_1R_5 - C_3R_3R_4 + C_3R_3R_5 + C_3R_4R_5 + C_4R_4R_5 - C_5R_4\right.}$$

10.692 X-INVALID-ORDER-692 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_4R_5s + C_3R_1R_4}{-C_6R_4 + C_6R_5 + s^3\left(C_1C_3C_4C_6R_1R_3R_4R_5 - C_1C_3C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5 - C_1C_5C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C\right.}$$

10.693 X-INVALID-ORDER-693 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_5R_6s^2 + C_3R_1R_4 + s\left(C_3C_5R_1R_4R_5 + C_3C_6R_1R_4R_6\right)}{-C_6R_4 + C_6R_5 + s^3\left(C_1C_3C_4C_6R_1R_3R_4R_5 - C_1C_3C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_3C_6R_1R_3R_4 + C_1C_3C_6R_1R_3R_5 + C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5 - C_1C_5C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 - C_3C_6R_3R_4 + C\right.}$$

10.694 X-INVALID-ORDER-694 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{}{-R_4 + R_5 + s^4\left(C_1C_3C_4C_6R_1R_3R_4R_5R_6 - C_1C_3C_5C_6R_1R_3R_4R_5R_6\right) + s^3\left(C_1C_3C_4R_1R_3R_4R_5 - C_1C_3C_5R_1R_3R_4R_5 - C_1C_3C_6R_1R_3R_4R_6 + C_1C_3C_6R_1R_3R_5R_6 + C_1C_3C_6R_1R_4R_5R_6 + C_1C_4C_6R_1R_4R_5R_6 - C_1C_5C_6R_1R_4R_5R_6 + C_3C_4C_6R_3R_4R_5R_6 - C_3C_5C\right.}$$

10.695 X-INVALID-ORDER-695 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_3R_4s + R_1R_4}{C_1C_3C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.696 X-INVALID-ORDER-696 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_3R_4R_6s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_6R_1R_4R_6\right)}{C_1C_3C_6R_1R_3R_4R_5s^3 + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.697 X-INVALID-ORDER-697 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_3R_4R_6s + R_1R_4R_6}{C_1C_3C_6R_1R_3R_4R_5R_6s^3 - R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_1C_3R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 + C_3C_6R_3R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 + C_3R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

10.698 X-INVALID-ORDER-698 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^3\left(C_1C_3C_6R_1R_3R_4R_6 - C_1C_5C_6R_1R_3R_4R_6\right) + s^2\left(C_1C_3R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_6R_1R_3R_6 + C_1C_6R_1R_4R_6 + C_3C_6R_3R_4R_6 - C_5C_6R_3R_4R_6\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_3R_3R_4 - C_5R_3R_4 + C_6R_3R_6 + C_6R_4R_6\right)}$$

10.699 X-INVALID-ORDER-699 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{C_1C_3C_5R_1R_3R_4R_5s^3 + R_3 + R_4 + s^2\left(C_1C_3R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_3C_5R_3R_4R_5\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_3R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5\right)}$$

10.700 X-INVALID-ORDER-700 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4s + C_5R_1R_4}{C_1C_3C_5C_6R_1R_3R_4R_5s^3 + C_6R_3 + C_6R_4 + s^2\left(C_1C_3C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_3C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.701 X-INVALID-ORDER-701 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5 + \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_1C_3C_5C_6R_1R_3R_4R_5s^3 + C_6R_3 + C_6R_4 + s^2\left(C_1C_3C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_3C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.702 X-INVALID-ORDER-702 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5 + \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{C_1C_3C_5C_6R_1R_3R_4R_5R_6s^4 + R_3 + R_4 + s^3\left(C_1C_3C_5R_1R_3R_4R_5 + C_1C_3C_6R_1R_3R_4R_6 - C_1C_5C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_3R_5R_6 + C_1C_5C_6R_1R_4R_5R_6 + C_3C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_1C_6R_1R_3R\right.}$$

10.703 X-INVALID-ORDER-703 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5\right)}{s^3\left(C_1C_3C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.704 X-INVALID-ORDER-704 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_5R_6s^3 + R_1R_4 + s^2\left(C_3C_5R_1R_3R_4R_5 + C_3C_6R_1R_3R_4R_6 + C_5C_6R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^3\left(C_1C_3C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.705 X-INVALID-ORDER-705 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^3\left(C_1C_3C_6R_1R_3R_4R_5R_6 - C_1C_5C_6R_1R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4R_5 - C_1C_5R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 + C_3C_6R_3R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R\right.}$$

10.706 X-INVALID-ORDER-706 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3R_1R_3s + R_1}{s^3\left(C_1C_3C_6R_1R_3R_5 + C_1C_4C_6R_1R_3R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 + C_4C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.707 X-INVALID-ORDER-707 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_6R_1R_3R_6s^2 + R_1 + s\left(C_3R_1R_3 + C_6R_1R_6\right)}{s^3\left(C_1C_3C_6R_1R_3R_5 + C_1C_4C_6R_1R_3R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 + C_4C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.708 X-INVALID-ORDER-708 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3R_1R_3R_6s + R_1R_6}{-R_3 + R_5 + s^3\left(C_1C_3C_6R_1R_3R_5R_6 + C_1C_4C_6R_1R_3R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_5 + C_1C_4R_1R_3R_5 - C_1C_6R_1R_3R_6 + C_1C_6R_1R_5R_6 + C_3C_6R_3R_5R_6 + C_4C_6R_3R_5R_6\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_3R_3R_5 + C_4R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

10.709 X-INVALID-ORDER-709 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^3\left(C_1C_3C_6R_1R_3R_6 + C_1C_4C_6R_1R_3R_6 - C_1C_5C_6R_1R_3R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 - C_1C_5R_1R_3 + C_1C_6R_1R_6 + C_3C_6R_3R_6 + C_4C_6R_3R_6 - C_5C_6R_3R_6\right) + s\left(C_1R_1 + C_3R_3 + C_4R_3 - C_5R_3 + C_6R_6\right) + 1}$$

10.710 X-INVALID-ORDER-710 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^3\left(C_1C_3C_5R_1R_3R_5 + C_1C_4C_5R_1R_3R_5\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 - C_1C_5R_1R_3 + C_1C_5R_1R_5 + C_3C_5R_3R_5 + C_4C_5R_3R_5\right) + s\left(C_1R_1 + C_3R_3 + C_4R_3 - C_5R_3 + C_5R_5\right) + 1}$$

10.711 X-INVALID-ORDER-711 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3s + C_5R_1}{C_6 + s^3\left(C_1C_3C_5C_6R_1R_3R_5 + C_1C_4C_5C_6R_1R_3R_5\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 - C_1C_5C_6R_1R_3 + C_1C_5C_6R_1R_5 + C_3C_5C_6R_3R_5 + C_4C_5C_6R_3R_5\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.712 X-INVALID-ORDER-712 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_6s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_5C_6R_1R_6\right)}{C_6 + s^3\left(C_1C_3C_5C_6R_1R_3R_5 + C_1C_4C_5C_6R_1R_3R_5\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 - C_1C_5C_6R_1R_3 + C_1C_5C_6R_1R_5 + C_3C_5C_6R_3R_5 + C_4C_5C_6R_3R_5\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3 + C_5C_6R_5\right)}$$

10.713 X-INVALID-ORDER-713 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_6s^2 + C_5R_1R_6s}{s^4\left(C_1C_3C_5C_6R_1R_3R_5R_6 + C_1C_4C_5C_6R_1R_3R_5R_6\right) + s^3\left(C_1C_3C_5R_1R_3R_5 + C_1C_3C_6R_1R_3R_6 + C_1C_4C_5R_1R_3R_5 + C_1C_4C_6R_1R_3R_6 - C_1C_5C_6R_1R_3R_6 + C_1C_5C_6R_1R_5R_6 + C_3C_5C_6R_3R_5R_6 + C_4C_5C_6R_3R_5R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 - C_1C_5R_1R_3 + C_1\right.}$$

10.714 X-INVALID-ORDER-714 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5s^2 + R_1 + s\left(C_3R_1R_3 + C_5R_1R_5\right)}{s^3\left(C_1C_3C_6R_1R_3R_5 + C_1C_4C_6R_1R_3R_5 - C_1C_5C_6R_1R_3R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 + C_4C_6R_3R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.715 X-INVALID-ORDER-715 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_5R_6s^3 + R_1 + s^2\left(C_3C_5R_1R_3R_5 + C_3C_6R_1R_3R_6 + C_5C_6R_1R_5R_6\right) + s\left(C_3R_1R_3 + C_5R_1R_5 + C_6R_1R_6\right)}{s^3\left(C_1C_3C_6R_1R_3R_5 + C_1C_4C_6R_1R_3R_5 - C_1C_5C_6R_1R_3R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 + C_4C_6R_3R_5 - C_5C_6R_3R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.716 X-INVALID-ORDER-716 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s^3\left(C_1C_3C_6R_1R_3R_5R_6 + C_1C_4C_6R_1R_3R_5R_6 - C_1C_5C_6R_1R_3R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_5 + C_1C_4R_1R_3R_5 - C_1C_5R_1R_3R_5 - C_1C_6R_1R_3R_6 + C_1C_6R_1R_5R_6 + C_3C_6R_3R_5R_6 + C_4C_6R_3R_5R_6 - C_5C_6R_3R_5R_6\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_3R_3R_5 + C\right.}$$

10.717 X-INVALID-ORDER-717 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6\right)}{C_1C_3C_4R_1R_3R_4R_5s^3 - R_3 + R_5 + s^2\left(C_1C_3R_1R_3R_5 - C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5 + C_3C_4R_3R_4R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_3R_3R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5\right)}$$

10.718 X-INVALID-ORDER-718 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4s^2 + R_1 + s\left(C_3R_1R_3 + C_4R_1R_4\right)}{C_1C_3C_4C_6R_1R_3R_4R_5s^4 + s^3\left(C_1C_3C_6R_1R_3R_5 - C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.719 X-INVALID-ORDER-719 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_6R_1R_3R_4R_6s^3 + R_1 + s^2\left(C_3C_4R_1R_3R_4 + C_3C_6R_1R_3R_6 + C_4C_6R_1R_4R_6\right) + s\left(C_3R_1R_3 + C_4R_1R_4 + C_6R_1R_6\right)}{C_1C_3C_4C_6R_1R_3R_4R_5s^4 + s^3\left(C_1C_3C_6R_1R_3R_5 - C_1C_4C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_5 + C_1C_4C_6R_1R_4R_5 + C_3C_4C_6R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3 + C_1C_6R_1R_5 + C_3C_6R_3R_5 - C_4C_6R_3R_4 + C_4C_6R_3R_5 + C_4C_6R_4R_5\right) + s\left(-C_6R_3 + C_6R_5\right)}$$

10.720 X-INVALID-ORDER-720 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5,\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6\right)}{C_1C_3C_4C_6R_1R_3R_4R_5R_6s^4 - R_3 + R_5 + s^3\left(C_1C_3C_4R_1R_3R_4R_5 + C_1C_3C_6R_1R_3R_5R_6 - C_1C_4C_6R_1R_3R_4R_6 + C_1C_4C_6R_1R_3R_5R_6 + C_1C_4C_6R_1R_4R_5R_6 + C_3C_4C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_5 - C_1C_4R_1R_3R_4 + C_1C_4R_1R_3R_5 + C_1C_4R_1R_4R_5 - C_1C_6R_1R_3R\right.}$$

10.721 X-INVALID-ORDER-721 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{s^3\left(C_1C_3C_4R_1R_3R_4 - C_1C_4C_5R_1R_3R_4\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1C_5R_1R_3 + C_3C_4R_3R_4 - C_4C_5R_3R_4\right) + s\left(C_1R_1 + C_3R_3 + C_4R_3 + C_4R_4 - C_5R_3\right) + 1}$$

10.722 X-INVALID-ORDER-722 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4\right)}{C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_4C_5C_6R_1R_3R_4\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 + C_3C_4C_6R_3R_4 - C_4C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

10.723 X-INVALID-ORDER-723 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6 + \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_3R_4R_6s^3 + C_5R_1 + s^2\left(C_3C_4C_5R_1R_3R_4 + C_3C_5C_6R_1R_3R_6 + C_4C_5C_6R_1R_4R_6\right) + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 - C_1C_4C_5C_6R_1R_3R_4\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 + C_3C_4C_6R_3R_4 - C_4C_5C_6R_3R_4\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

10.724 X-INVALID-ORDER-724 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{s^4\left(C_1C_3C_4C_6R_1R_3R_4R_6 - C_1C_4C_5C_6R_1R_3R_4R_6\right) + s^3\left(C_1C_3C_4R_1R_3R_4 + C_1C_3C_6R_1R_3R_6 - C_1C_4C_5R_1R_3R_4 + C_1C_4C_6R_1R_3R_6 + C_1C_4C_6R_1R_4R_6 - C_1C_5C_6R_1R_3R_6 + C_3C_4C_6R_3R_4R_6 - C_4C_5C_6R_3R_4R_6\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1\right.}$$

10.725 X-INVALID-ORDER-725 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4R_6s^3 + C_5R_1R_6s + s^2\left(C_3C_5R_1R_3R_6 + C_4C_5R_1R_4R_6\right)}{C_1C_3C_4C_5R_1R_3R_4R_5s^4 + s^3\left(C_1C_3C_4R_1R_3R_4 + C_1C_3C_5R_1R_3R_5 - C_1C_4C_5R_1R_3R_4 + C_1C_4C_5R_1R_3R_5 + C_1C_4C_5R_1R_4R_5 + C_3C_4C_5R_3R_4R_5\right) + s^2\left(C_1C_3R_1R_3 + C_1C_4R_1R_3 + C_1C_4R_1R_4 - C_1C_5R_1R_3 + C_1C_5R_1R_5 + C_3C_4R_3R_4 + C_3C_5R_3R_5 - C_4C_5R_3R_4 +\right.}$$

10.726 X-INVALID-ORDER-726 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4 + \frac{1}{C_4s},\ R_5 + \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4\right)}{C_1C_3C_4C_5C_6R_1R_3R_4R_5s^4 + C_6 + s^3\left(C_1C_3C_4C_6R_1R_3R_4 + C_1C_3C_5C_6R_1R_3R_5 - C_1C_4C_5C_6R_1R_3R_4 + C_1C_4C_5C_6R_1R_3R_5 + C_1C_4C_5C_6R_1R_4R_5 + C_3C_4C_5C_6R_3R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 + C_1C_4C_6R_1R_4 - C_1C_5C_6R_1R_3 + C_1C_5C_6R_1R_5 + C_3\right.}$$

10.727 X-INVALID-ORDER-727 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_1 R_3 R_4 R_6 s^3 + C_5 R_1 + s^2 \left(C_3 C_4 C_5 R_1 R_3 R_4 + C_3 C_5 C_6 R_1 R_3 R_6 + C_4 C_5 C_6 R_1 R_4 R_6\right) + s \left(C_3 C_5 R_1 R_3 + C_4 C_5 R_1 R_4 + \right.}{C_1 C_3 C_4 C_5 C_6 R_1 R_3 R_4 R_5 s^4 + C_6 + s^3 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_4 + C_1 C_3 C_5 C_6 R_1 R_3 R_5 - C_1 C_4 C_5 C_6 R_1 R_3 R_4 + C_1 C_4 C_5 C_6 R_1 R_3 R_5 + C_1 C_4 C_5 C_6 R_1 R_4 R_5 + C_3 C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(C_1 C_3 C_6 R_1 R_3 + C_1 C_4 C_6 R_1 R_3 + C_1 C_4 C_6 R_1 R_4 - C_1 C_5 C_6 R_1 R_3 + C_1 C_5 C_6 R_1 R_5 + C_3$$

10.728 X-INVALID-ORDER-728 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{}{C_1 C_3 C_4 C_5 C_6 R_1 R_3 R_4 R_5 R_6 s^5 + s^4 \left(C_1 C_3 C_4 C_5 R_1 R_3 R_4 R_5 + C_1 C_3 C_4 C_6 R_1 R_3 R_4 R_6 + C_1 C_3 C_5 C_6 R_1 R_3 R_5 R_6 - C_1 C_4 C_5 C_6 R_1 R_3 R_4 R_6 + C_1 C_4 C_5 C_6 R_1 R_3 R_5 R_6 + C_1 C_4 C_5 C_6 R_1 R_4 R_5 R_6 + C_3 C_4 C_5 C_6 R_3 R_4 R_5 R_6\right) + s^3 \left(C_1 C_3 C_4 R_1 R_3 R_4 + C_1 C_3 C_5 R_1 R_3 R_5 + C_1 C_3 C_6$$

10.729 X-INVALID-ORDER-729 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_3 R_4 R_5 R_6 s^3 + R_1 R_6 + s^2 \left(C_3 C_4 R_1 R_3 R_4 R_6 + C_3 C_5 R_1 R_3 R_5 R_6 + C_4 C_5 R_1 R_4 R_5 R_6\right) + s \left(C_3 R_1 R_3 R_6 + C_4 R_1 R_4 R_6 + C_5 R_1 R_5 R_6\right)}{-R_3 + R_5 + s^3 \left(C_1 C_3 C_4 R_1 R_3 R_4 R_5 - C_1 C_4 C_5 R_1 R_3 R_4 R_5\right) + s^2 \left(C_1 C_3 R_1 R_3 R_5 - C_1 C_4 R_1 R_3 R_4 + C_1 C_4 R_1 R_3 R_5 + C_1 C_4 R_1 R_4 R_5 - C_1 C_5 R_1 R_3 R_5 + C_3 C_4 R_3 R_4 R_5 - C_4 C_5 R_3 R_4 R_5\right) + s \left(-C_1 R_1 R_3 + C_1 R_1 R_5 + C_3 R_3 R_5 - C_4 R_3 R_4 + C_4 R_3 R_5 + C_4 R_4 R_5 - C_5 R_3 R$

10.730 X-INVALID-ORDER-730 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_3 R_4 R_5 s^3 + R_1 + s^2 \left(C_3 C_4 R_1 R_3 R_4 + C_3 C_5 R_1 R_3 R_5 + C_4 C_5 R_1 R_4 R_5\right) + s \left(C_3 R_1 R_3 + C_4 R_1 R_4 + C_5 R_1 R_5\right)}{s^4 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_4 R_5 - C_1 C_4 C_5 C_6 R_1 R_3 R_4 R_5\right) + s^3 \left(C_1 C_3 C_6 R_1 R_3 R_5 - C_1 C_4 C_6 R_1 R_3 R_4 + C_1 C_4 C_6 R_1 R_3 R_5 + C_1 C_4 C_6 R_1 R_4 R_5 - C_1 C_5 C_6 R_1 R_3 R_5 + C_3 C_4 C_6 R_3 R_4 R_5 - C_4 C_5 C_6 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_1 R_3 + C_1 C_6 R_1 R_5 + C_3 C_6 R_3 R_5 - C_4 C_6 R_3 R_4 + C_4 C_6$

10.731 X-INVALID-ORDER-731 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_5 C_6 R_1 R_3 R_4 R_5 R_6 s^4 + R_1 + s^3 \left(C_3 C_4 C_5 R_1 R_3 R_4 R_5 + C_3 C_4 C_6 R_1 R_3 R_4 R_6 + C_3 C_5 C_6 R_1 R_3 R_5 R_6 + C_4 C_5 C_6 R_1 R_4 R_5 R_6\right) + s^2 \left(C_3 C_4 R_1 R_3 R_4 + C_3 C_5 R_1 R_3 R_5 + C_3 C_6 R_1 R_3 R_6 + C_4 C_5 R_1 R_4 R_5 + C_4 C_6 R_1 R_4 R_6 + C_5 C_6 R_1 R_5 R_6\right) + s \left(C_3 R_1 R$$

10.732 X-INVALID-ORDER-732 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_4 C_5 R_1 R_3 R_4 R_5 R_6 s}{-R_3 + R_5 + s^4 \left(C_1 C_3 C_4 C_6 R_1 R_3 R_4 R_5 R_6 - C_1 C_4 C_5 C_6 R_1 R_3 R_4 R_5 R_6\right) + s^3 \left(C_1 C_3 C_4 R_1 R_3 R_4 R_5 + C_1 C_3 C_6 R_1 R_3 R_5 R_6 - C_1 C_4 C_5 R_1 R_3 R_4 R_5 - C_1 C_4 C_6 R_1 R_3 R_4 R_6 + C_1 C_4 C_6 R_1 R_3 R_5 R_6 + C_1 C_4 C_6 R_1 R_4 R_5 R_6 - C_1 C_5 C_6 R_1 R_3 R_5 R_6 + C_3 C_4 C_6 R_3 R_4 R_5 R_6 - C_4 C_5 C$$

10.733 X-INVALID-ORDER-733 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 s + R_1 R_4}{s^3 \left(C_1 C_3 C_6 R_1 R_3 R_4 R_5 + C_1 C_4 C_6 R_1 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_1 R_3 R_4 + C_1 C_6 R_1 R_3 R_5 + C_1 C_6 R_1 R_4 R_5 + C_3 C_6 R_3 R_4 R_5 + C_4 C_6 R_3 R_4 R_5\right) + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.734 X-INVALID-ORDER-734 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_6 R_1 R_3 R_4 R_6 s^2 + R_1 R_4 + s \left(C_3 R_1 R_3 R_4 + C_6 R_1 R_4 R_6\right)}{s^3 \left(C_1 C_3 C_6 R_1 R_3 R_4 R_5 + C_1 C_4 C_6 R_1 R_3 R_4 R_5\right) + s^2 \left(-C_1 C_6 R_1 R_3 R_4 + C_1 C_6 R_1 R_3 R_5 + C_1 C_6 R_1 R_4 R_5 + C_3 C_6 R_3 R_4 R_5 + C_4 C_6 R_3 R_4 R_5\right) + s \left(-C_6 R_3 R_4 + C_6 R_3 R_5 + C_6 R_4 R_5\right)}$$

10.735 X-INVALID-ORDER-735 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5,\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 R_1 R_3 R_4 R_6 s + R_1 R_4 R_6}{-R_3 R_4 + R_3 R_5 + R_4 R_5 + s^3 \left(C_1 C_3 C_6 R_1 R_3 R_4 R_5 R_6 + C_1 C_4 C_6 R_1 R_3 R_4 R_5 R_6\right) + s^2 \left(C_1 C_3 R_1 R_3 R_4 R_5 + C_1 C_4 R_1 R_3 R_4 R_5 - C_1 C_6 R_1 R_3 R_4 R_6 + C_1 C_6 R_1 R_3 R_5 R_6 + C_1 C_6 R_1 R_4 R_5 R_6 + C_3 C_6 R_3 R_4 R_5 R_6 + C_4 C_6 R_3 R_4 R_5 R_6\right) + s \left(-C_1 R_1 R_3 R_4 + C_1 R_1 R_3 R_5 + C_1 R_1 R$$

10.736 X-INVALID-ORDER-736 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_1 R_4 R_6 s}{R_3 + R_4 + s^3 \left(C_1 C_3 C_6 R_1 R_3 R_4 R_6 + C_1 C_4 C_6 R_1 R_3 R_4 R_6 - C_1 C_5 C_6 R_1 R_3 R_4 R_6\right) + s^2 \left(C_1 C_3 R_1 R_3 R_4 + C_1 C_4 R_1 R_3 R_4 - C_1 C_5 R_1 R_3 R_4 + C_1 C_6 R_1 R_3 R_6 + C_1 C_6 R_1 R_4 R_6 + C_3 C_6 R_3 R_4 R_6 + C_4 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6\right) + s \left(C_1 R_1 R_3 + C_1 R_1 R_4 + C_3 R_3 R_4 + C_4 R_3$$

10.737 X-INVALID-ORDER-737 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_6s^2 + C_5R_1R_4R_6s}{R_3 + R_4 + s^3\left(C_1C_3C_5R_1R_3R_4R_5 + C_1C_4C_5R_1R_3R_4R_5\right) + s^2\left(C_1C_3R_1R_3R_4 + C_1C_4R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_3C_5R_3R_4R_5 + C_4C_5R_3R_4R_5\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5\right)}$$

10.738 X-INVALID-ORDER-738 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4s + C_5R_1R_4}{C_6R_3 + C_6R_4 + s^3\left(C_1C_3C_5C_6R_1R_3R_4R_5 + C_1C_4C_5C_6R_1R_3R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_3C_5C_6R_3R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.739 X-INVALID-ORDER-739 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_6R_3 + C_6R_4 + s^3\left(C_1C_3C_5C_6R_1R_3R_4R_5 + C_1C_4C_5C_6R_1R_3R_4R_5\right) + s^2\left(C_1C_3C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4 + C_1C_5C_6R_1R_3R_5 + C_1C_5C_6R_1R_4R_5 + C_3C_5C_6R_3R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

10.740 X-INVALID-ORDER-740 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{}{R_3 + R_4 + s^4\left(C_1C_3C_5C_6R_1R_3R_4R_5R_6 + C_1C_4C_5C_6R_1R_3R_4R_5R_6\right) + s^3\left(C_1C_3C_5R_1R_3R_4R_5 + C_1C_3C_6R_1R_3R_4R_6 + C_1C_4C_5R_1R_3R_4R_5 + C_1C_4C_6R_1R_3R_4R_6 - C_1C_5C_6R_1R_3R_4R_6 + C_1C_5C_6R_1R_3R_5R_6 + C_1C_5C_6R_1R_4R_5R_6 + C_3C_5C_6R_3R_4R_5R_6 + C_4C_5C_6R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4 + C_1C_4R_1R_3R_4 - C_1C_5R_1R_3R_4 + C_1C_5R_1R_3R_5 + C_1C_5R_1R_4R_5 + C_3C_5R_3R_4R_5 + C_4C_5R_3R_4R_5\right) + s\left(C_1R_1R_3 + C_1R_1R_4 + C_3R_3R_4 + C_4R_3R_4 - C_5R_3R_4 + C_5R_3R_5 + C_5R_4R_5\right)}$$

10.741 X-INVALID-ORDER-741 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5s^2 + R_1R_4 + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5\right)}{s^3\left(C_1C_3C_6R_1R_3R_4R_5 + C_1C_4C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.742 X-INVALID-ORDER-742 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_5R_6s^3 + R_1R_4 + s^2\left(C_3C_5R_1R_3R_4R_5 + C_3C_6R_1R_3R_4R_6 + C_5C_6R_1R_4R_5R_6\right) + s\left(C_3R_1R_3R_4 + C_5R_1R_4R_5 + C_6R_1R_4R_6\right)}{s^3\left(C_1C_3C_6R_1R_3R_4R_5 + C_1C_4C_6R_1R_3R_4R_5 - C_1C_5C_6R_1R_3R_4R_5\right) + s^2\left(-C_1C_6R_1R_3R_4 + C_1C_6R_1R_3R_5 + C_1C_6R_1R_4R_5 + C_3C_6R_3R_4R_5 + C_4C_6R_3R_4R_5 - C_5C_6R_3R_4R_5\right) + s\left(-C_6R_3R_4 + C_6R_3R_5 + C_6R_4R_5\right)}$$

10.743 X-INVALID-ORDER-743 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^3\left(C_1C_3C_6R_1R_3R_4R_5R_6 + C_1C_4C_6R_1R_3R_4R_5R_6 - C_1C_5C_6R_1R_3R_4R_5R_6\right) + s^2\left(C_1C_3R_1R_3R_4R_5 + C_1C_4R_1R_3R_4R_5 - C_1C_5R_1R_3R_4R_5 - C_1C_6R_1R_3R_4R_6 + C_1C_6R_1R_3R_5R_6 + C_1C_6R_1R_4R_5R_6 + C_3C_6R_3R_4R_5R_6 + C_4C_6R_3R_4R_5R_6\right)}$$

11 X-INVALID-WZ

11.1 X-INVALID-WZ-1 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_4C_5C_6R_1R_4R_6s^2 + C_5R_1 + s\left(C_4C_5R_1R_4 + C_5C_6R_1R_6\right)}{-C_4C_5C_6R_3R_4s^2 + C_6 + s\left(C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_4R_3+C_4R_4-C_5R_3}$
wo: $\frac{i}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_4R_3+C_4R_4-C_5R_3}{C_4C_5R_3R_4}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_4C_5R_1R_4+C_5C_6R_1R_6}{C_4C_6R_3+C_4C_6R_4-C_5C_6R_3}$

Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.2 X-INVALID-WZ-2 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_4 C_5 C_6 R_1 R_4 R_6 s^2 + C_5 R_1 + s\left(C_4 C_5 R_1 R_4 + C_5 C_6 R_1 R_6\right)}{C_6 + s^2\left(-C_4 C_5 C_6 R_3 R_4 + C_4 C_5 C_6 R_3 R_5 + C_4 C_5 C_6 R_4 R_5\right) + s\left(C_4 C_6 R_3 + C_4 C_6 R_4 - C_5 C_6 R_3 + C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_4}\sqrt{C_5}R_3 R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_4}\sqrt{C_5}R_3 R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}} + \sqrt{C_4}\sqrt{C_5}R_4 R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_4R_3+C_4R_4-C_5R_3+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}(C_4R_3+C_4R_4-C_5R_3+C_5R_5)}{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_4C_5R_1R_4+C_5C_6R_1R_6}{C_4C_6R_3+C_4C_6R_4-C_5C_6R_3+C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.3 X-INVALID-WZ-3 $Z(s) = \left(R_1,\ \infty,\ R_3,\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_4 C_5 R_1 R_4 R_5 R_6 s^2 + R_1 R_6 + s\left(C_4 R_1 R_4 R_6 + C_5 R_1 R_5 R_6\right)}{-C_4 C_5 R_3 R_4 R_5 s^2 - R_3 + R_5 + s\left(-C_4 R_3 R_4 + C_4 R_3 R_5 + C_4 R_4 R_5 - C_5 R_3 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3-R_5}}{C_4R_3R_4-C_4R_3R_5-C_4R_4R_5+C_5R_3R_5}$
wo: $\frac{\sqrt{R_3-R_5}}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_4R_3R_4-C_4R_3R_5-C_4R_4R_5+C_5R_3R_5}{C_4C_5R_3R_4R_5}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{-C_4R_1R_4R_6-C_5R_1R_5R_6}{C_4R_3R_4-C_4R_3R_5-C_4R_4R_5+C_5R_3R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$

11.4 X-INVALID-WZ-4 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_4 C_6 R_1 R_4 R_6 s^2 + C_3 R_1 + s\left(C_3 C_4 R_1 R_4 + C_3 C_6 R_1 R_6\right)}{C_3 C_4 C_6 R_4 R_5 s^2 - C_6 + s\left(C_3 C_6 R_5 - C_4 C_6 R_4 + C_4 C_6 R_5\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}{C_3R_5-C_4R_4+C_4R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_5-C_4R_4+C_4R_5}{C_3C_4R_4R_5}$
K-LP: $-\frac{C_3R_1}{C_6}$
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3C_4R_1R_4+C_3C_6R_1R_6}{C_3C_6R_5-C_4C_6R_4+C_4C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.5 X-INVALID-WZ-5 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{C_3C_4C_5C_6R_4R_5s^2 + C_3C_6 + C_4C_6 - C_5C_6 + s\left(C_3C_4C_6R_4 + C_3C_5C_6R_5 - C_4C_5C_6R_4 + C_4C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4-C_5}}{C_3C_4R_4+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$
wo: $\frac{\sqrt{C_3+C_4-C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3C_4R_4+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}{C_3C_4C_5R_4R_5}$
K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3C_4C_5R_1R_4+C_3C_5C_6R_1R_6}{C_3C_4C_6R_4+C_3C_5C_6R_5-C_4C_5C_6R_4+C_4C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.6 X-INVALID-WZ-6 $Z(s) = \left(R_1,\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_4R_5s^2 + C_3R_1 + s\left(C_3C_4R_1R_4 + C_3C_5R_1R_5\right)}{-C_6 + s^2\left(C_3C_4C_6R_4R_5 - C_4C_5C_6R_4R_5\right) + s\left(C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5 - C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}}{C_3R_5-C_4R_4+C_4R_5-C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_4R_4R_5-C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_4R_5-C_4C_5R_4R_5}}(C_3R_5-C_4R_4+C_4R_5-C_5R_5)}{C_3\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}}$
K-LP: $-\frac{C_3R_1}{C_6}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$
K-BP: $\frac{C_3C_4R_1R_4+C_3C_5R_1R_5}{C_3C_6R_5-C_4C_6R_4+C_4C_6R_5-C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$

11.7 X-INVALID-WZ-7 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_5R_6s^2 + C_3R_1R_4 + s\left(C_3C_5R_1R_4R_5 + C_3C_6R_1R_4R_6\right)}{-C_3C_5C_6R_3R_4R_5s^2 - C_6R_4 + C_6R_5 + s\left(-C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_4-R_5}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_4-R_5}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5+C_5R_4R_5}{C_3C_5R_3R_4R_5}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{-C_3C_5R_1R_4R_5-C_3C_6R_1R_4R_6}{C_3C_6R_3R_4-C_3C_6R_3R_5-C_3C_6R_4R_5+C_5C_6R_4R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.8 X-INVALID-WZ-8 $Z(s) = \left(R_1,\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5R_5s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_5R_6s^2 + C_3R_1 + s\left(C_3C_5R_1R_5 + C_3C_6R_1R_6\right)}{-C_6 + s^2\left(C_3C_4C_6R_3R_5 - C_3C_5C_6R_3R_5\right) + s\left(-C_3C_6R_3 + C_3C_6R_5 + C_4C_6R_5 - C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}{C_3R_3-C_3R_5-C_4R_5+C_5R_5}$

wo: $\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_3R_5-C_3C_5R_3R_5}}(C_3R_3-C_3R_5-C_4R_5+C_5R_5)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4-C_5}}}$

K-LP: $-\frac{C_3R_1}{C_6}$

K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$

K-BP: $\frac{-C_3C_5R_1R_5-C_3C_6R_1R_6}{C_3C_6R_3-C_3C_6R_5-C_4C_6R_5+C_5C_6R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.9 X-INVALID-WZ-9 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ R_5,\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_6R_1R_4R_6s^2 + C_3R_1 + s\left(C_3C_4R_1R_4 + C_3C_6R_1R_6\right)}{-C_6 + s^2\left(-C_3C_4C_6R_3R_4 + C_3C_4C_6R_3R_5 + C_3C_4C_6R_4R_5\right) + s\left(-C_3C_6R_3 + C_3C_6R_5 - C_4C_6R_4 + C_4C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3-C_3R_5+C_4R_4-C_4R_5}$

wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}$

bandwidth: $\frac{(C_3R_3-C_3R_5+C_4R_4-C_4R_5)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_4R_3R_5-C_3C_4R_4R_5}}}{\sqrt{C_3}\sqrt{C_4}R_3R_4\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_3R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}-\sqrt{C_3}\sqrt{C_4}R_4R_5\sqrt{-\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $-\frac{C_3R_1}{C_6}$

K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-BP: $\frac{-C_3C_4R_1R_4-C_3C_6R_1R_6}{C_3C_6R_3-C_3C_6R_5+C_4C_6R_4-C_4C_6R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.10 X-INVALID-WZ-10 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{-C_3C_4C_5C_6R_3R_4s^2 + C_3C_6 + C_4C_6 - C_5C_6 + s\left(C_3C_4C_6R_3 + C_3C_4C_6R_4 - C_3C_5C_6R_3 - C_4C_5C_6R_4\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{-C_3-C_4+C_5}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$

wo: $\frac{\sqrt{-C_3-C_4+C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$

bandwidth: $-\frac{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}{C_3C_4C_5R_3R_4}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-HP: $-\frac{R_1R_6}{R_3}$

K-BP: $\frac{C_3C_4C_5R_1R_4+C_3C_5C_6R_1R_6}{C_3C_4C_6R_3+C_3C_4C_6R_4-C_3C_5C_6R_3-C_4C_5C_6R_4}$

Qz: None

Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.11 X-INVALID-WZ-11 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(-C_3C_4C_5C_6R_3R_4 + C_3C_4C_5C_6R_3R_5 + C_3C_4C_5C_6R_4R_5\right) + s\left(C_3C_4C_6R_3 + C_3C_4C_6R_4 - C_3C_5C_6R_3 + C_3C_5C_6R_5 - C_4C_5C_6R_4 + C_4C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$

wo: $\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}(C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5)}{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_3C_4C_5R_1R_4+C_3C_5C_6R_1R_6}{C_3C_4C_6R_3+C_3C_4C_6R_4-C_3C_5C_6R_3+C_3C_5C_6R_5-C_4C_5C_6R_4+C_4C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.12 X-INVALID-WZ-12 $Z(s) = \left(R_1,\ \infty,\ R_3+\frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_5R_6s^2 + C_3R_1R_4 + s\left(C_3C_5R_1R_4R_5 + C_3C_6R_1R_4R_6\right)}{-C_6R_4 + C_6R_5 + s^2\left(C_3C_4C_6R_3R_4R_5 - C_3C_5C_6R_3R_4R_5\right) + s\left(-C_3C_6R_3R_4 + C_3C_6R_3R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_4R_3R_4R_5-C_3C_5R_3R_4R_5}}\left(C_3R_3R_4-C_3R_3R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5\right)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$
K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$
K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$
K-BP: $\frac{-C_3C_5R_1R_4R_5-C_3C_6R_1R_4R_6}{C_3C_6R_3R_4-C_3C_6R_3R_5-C_3C_6R_4R_5-C_4C_6R_4R_5+C_5C_6R_4R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.13 X-INVALID-WZ-13 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_3C_5C_6R_3R_4R_5s^2 + C_6R_3 + C_6R_4 + s\left(C_3C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_3R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{C_3C_5R_3R_4R_5}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3C_5R_1R_3R_4+C_5C_6R_1R_4R_6}{C_3C_6R_3R_4-C_5C_6R_3R_4+C_5C_6R_3R_5+C_5C_6R_4R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.14 X-INVALID-WZ-14 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_3C_6R_3R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(C_3R_3R_4R_5 - C_5R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}}{C_3R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
wo: $\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_3C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_3C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}\left(C_3R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6\right)}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$
K-BP: $\frac{C_3R_1R_3R_4R_6+C_5R_1R_4R_5R_6}{C_3R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

11.15 X-INVALID-WZ-15 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_6s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_5C_6R_1R_6\right)}{C_6 + s^2\left(C_3C_5C_6R_3R_5 + C_4C_5C_6R_3R_5\right) + s\left(C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3 + C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_3+C_4R_3-C_5R_3+C_5R_5}$
wo: $\frac{1}{\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
bandwidth: $\frac{C_3R_3+C_4R_3-C_5R_3+C_5R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_3C_5R_1R_3+C_5C_6R_1R_6}{C_3C_6R_3+C_4C_6R_3-C_5C_6R_3+C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.16 X-INVALID-WZ-16 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s^2\left(C_3C_6R_3R_5R_6 + C_4C_6R_3R_5R_6 - C_5C_6R_3R_5R_6\right) + s\left(C_3R_3R_5 + C_4R_3R_5 - C_5R_3R_5 - C_6R_3R_6 + C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_3R_3R_5+C_4R_3R_5-C_5R_3R_5-C_6R_3R_6+C_6R_5R_6}$
wo: $\sqrt{\frac{-R_3+R_5}{C_3C_6R_3R_5R_6+C_4C_6R_3R_5R_6-C_5C_6R_3R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3+R_5}{C_3C_6R_3R_5R_6+C_4C_6R_3R_5R_6-C_5C_6R_3R_5R_6}}\left(C_3R_3R_5+C_4R_3R_5-C_5R_3R_5-C_6R_3R_6+C_6R_5R_6\right)}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_3R_1R_3R_6+C_5R_1R_5R_6}{C_3R_3R_5+C_4R_3R_5-C_5R_3R_5-C_6R_3R_6+C_6R_5R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

11.17 X-INVALID-WZ-17 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_3C_4R_1R_3R_4R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_4R_1R_4R_6\right)}{C_3C_4R_3R_4R_5s^2 - R_3 + R_5 + s\left(C_3R_3R_5 - C_4R_3R_4 + C_4R_3R_5 + C_4R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-R_3+R_5}}{C_3R_3R_5-C_4R_3R_4+C_4R_3R_5+C_4R_4R_5}$
wo: $\frac{\sqrt{-R_3+R_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3R_3R_5-C_4R_3R_4+C_4R_3R_5+C_4R_4R_5}{C_3C_4R_3R_4R_5}$
K-LP: $-\frac{R_1R_6}{R_3-R_5}$
K-HP: $\frac{R_1R_6}{R_5}$
K-BP: $\frac{C_3R_1R_3R_6+C_4R_1R_4R_6}{C_3R_3R_5-C_4R_3R_4+C_4R_3R_5+C_4R_4R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}}$

11.18 X-INVALID-WZ-18 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ \frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5R_1R_3R_4s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_4C_5R_1R_4\right)}{C_6 + s^2\left(C_3C_4C_6R_3R_4 - C_4C_5C_6R_3R_4\right) + s\left(C_3C_6R_3 + C_4C_6R_3 + C_4C_6R_4 - C_5C_6R_3\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_3R_3+C_4R_3+C_4R_4-C_5R_3}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_4C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_4R_3+C_4R_4-C_5R_3)\sqrt{\frac{1}{C_3C_4R_3R_4-C_4C_5R_3R_4}}}{C_3\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: $\frac{C_5R_1}{C_6}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6-C_5C_6}$
K-BP: $\frac{C_3C_5R_1R_3+C_4C_5R_1R_4}{C_3C_6R_3+C_4C_6R_3+C_4C_6R_4-C_5C_6R_3}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}}$

11.19 X-INVALID-WZ-19 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ R_5+\frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_6R_3 + C_6R_4 + s^2\left(C_3C_5C_6R_3R_4R_5 + C_4C_5C_6R_3R_4R_5\right) + s\left(C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4 + C_5C_6R_3R_5 + C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{R_3+R_4}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}$
wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
bandwidth: $\frac{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_5R_3R_5+C_5R_4R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_4R_5+C_4C_5R_3R_4R_5}}$
K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_3C_5R_1R_3R_4+C_5C_6R_1R_4R_6}{C_3C_6R_3R_4+C_4C_6R_3R_4-C_5C_6R_3R_4+C_5C_6R_3R_5+C_5C_6R_4R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.20 X-INVALID-WZ-20 $Z(s) = \left(R_1,\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_3C_6R_3R_4R_5R_6 + C_4C_6R_3R_4R_5R_6 - C_5C_6R_3R_4R_5R_6\right) + s\left(C_3R_3R_4R_5 + C_4R_3R_4R_5 - C_5R_3R_4R_5 - C_6R_3R_4R_6 + C_6R_3R_5R_6 + C_6R_4R_5R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}}{C_3R_3R_4R_5+C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
wo: $\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_3C_6R_3R_4R_5R_6+C_4C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_3C_6R_3R_4R_5R_6+C_4C_6R_3R_4R_5R_6-C_5C_6R_3R_4R_5R_6}}\left(C_3R_3R_4R_5+C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6\right)}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}}$
K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_3R_1R_3R_4R_6+C_5R_1R_4R_5R_6}{C_3R_3R_4R_5+C_4R_3R_4R_5-C_5R_3R_4R_5-C_6R_3R_4R_6+C_6R_3R_5R_6+C_6R_4R_5R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

11.21 X-INVALID-WZ-21 $Z(s) = \left(\frac{1}{C_1s},\ \infty,\ \frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_4R_5R_6s^2 + C_3R_6 + s\left(C_3C_4R_4R_6 + C_3C_5R_5R_6\right)}{-C_1 + s^2\left(C_1C_3C_4R_4R_5 - C_1C_4C_5R_4R_5\right) + s\left(C_1C_3R_5 - C_1C_4R_4 + C_1C_4R_5 - C_1C_5R_5\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}}{C_3R_5-C_4R_4+C_4R_5-C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_4R_4R_5-C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_4R_4R_5-C_4C_5R_4R_5}}\left(C_3R_5-C_4R_4+C_4R_5-C_5R_5\right)}{C_3\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{1}{C_3-C_5}}}$

K-LP: $-\frac{C_3R_6}{C_1}$
K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$
K-BP: $\frac{C_3C_4R_4R_6+C_3C_5R_5R_6}{C_1C_3R_5-C_1C_4R_4+C_1C_4R_5-C_1C_5R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$

11.22 X-INVALID-WZ-22 $Z(s) = \left(\frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_3C_4C_5R_3R_4R_6s^2 + C_5R_6 + s\left(C_3C_5R_3R_6 + C_4C_5R_4R_6\right)}{C_1 + s^2\left(C_1C_3C_4R_3R_4 - C_1C_4C_5R_3R_4\right) + s\left(C_1C_3R_3 + C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_3R_3+C_4R_3+C_4R_4-C_5R_3}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_4C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_4R_3+C_4R_4-C_5R_3)\sqrt{\frac{1}{C_3C_4R_3R_4-C_4C_5R_3R_4}}}{C_3\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_4}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_3-C_5}}}$
K-LP: $\frac{C_5R_6}{C_1}$
K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$
K-BP: $\frac{C_3C_5R_3R_6+C_4C_5R_4R_6}{C_1C_3R_3+C_1C_4R_3+C_1C_4R_4-C_1C_5R_3}$
Qz: None
Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_3}\sqrt{R_4}}$

11.23 X-INVALID-WZ-23 $Z(s) = \left(R_1+\frac{1}{C_1s},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_1C_4C_5R_1R_4R_6s^2 + C_5R_6 + s\left(C_1C_5R_1R_6 + C_4C_5R_4R_6\right)}{-C_1C_4C_5R_3R_4s^2 + C_1 + s\left(C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_4R_3+C_4R_4-C_5R_3}$
wo: $\frac{i}{\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_4R_3+C_4R_4-C_5R_3}{C_4C_5R_3R_4}$
K-LP: $\frac{C_5R_6}{C_1}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_1C_5R_1R_6+C_4C_5R_4R_6}{C_1C_4R_3+C_1C_4R_4-C_1C_5R_3}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.24 X-INVALID-WZ-24 $Z(s) = \left(R_1+\frac{1}{C_1s},\ \infty,\ R_3,\ R_4+\frac{1}{C_4s},\ R_5+\frac{1}{C_5s},\ R_6\right)$

$$H(s) = \frac{C_1C_4C_5R_1R_4R_6s^2 + C_5R_6 + s\left(C_1C_5R_1R_6 + C_4C_5R_4R_6\right)}{C_1 + s^2\left(-C_1C_4C_5R_3R_4 + C_1C_4C_5R_3R_5 + C_1C_4C_5R_4R_5\right) + s\left(C_1C_4R_3 + C_1C_4R_4 - C_1C_5R_3 + C_1C_5R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_4R_3+C_4R_4-C_5R_3+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_4C_5R_3R_4-C_4C_5R_3R_5-C_4C_5R_4R_5}}(C_4R_3+C_4R_4-C_5R_3+C_5R_5)}{-\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_5R_6}{C_1}$
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_1C_5R_1R_6+C_4C_5R_4R_6}{C_1C_4R_3+C_1C_4R_4-C_1C_5R_3+C_1C_5R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.25 X-INVALID-WZ-25 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s\left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_3 C_5 C_6 R_4 R_5 s^2 + C_1 C_6 + s\left(C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}{C_3 R_4 - C_5 R_4 + C_5 R_5}$
wo: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_4 - C_5 R_4 + C_5 R_5}{C_3 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_4}{C_1 C_6}$
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6}{C_1 C_3 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$

11.26 X-INVALID-WZ-26 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_6 R_4 R_5 R_6 - C_1 C_5 C_6 R_4 R_5 R_6\right) + s\left(C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}{C_3 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3 C_6 R_4 R_5 R_6 - C_5 C_6 R_4 R_5 R_6}}\left(C_3 R_4 R_5 - C_5 R_4 R_5 - C_6 R_4 R_6 + C_6 R_5 R_6\right)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}} - C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 - C_5 C_6}$
K-BP: $\frac{C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5 - C_1 C_6 R_4 R_6 + C_1 C_6 R_5 R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.27 X-INVALID-WZ-27 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s^2\left(C_1 C_3 C_6 R_5 R_6 + C_1 C_4 C_6 R_5 R_6 - C_1 C_5 C_6 R_5 R_6\right) + s\left(C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5 - C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_3 R_5 + C_4 R_5 - C_5 R_5 - C_6 R_6}$
wo: $\sqrt{-\frac{1}{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6 - C_5 C_6 R_5 R_6}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3 C_6 R_5 R_6 + C_4 C_6 R_5 R_6 - C_5 C_6 R_5 R_6}}\left(C_3 R_5 + C_4 R_5 - C_5 R_5 - C_6 R_6\right)}{C_3\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}} + C_4\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}} - C_5\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 + C_4 C_6 - C_5 C_6}$
K-BP: $\frac{C_1 C_3 R_1 R_6 + C_3 C_5 R_5 R_6}{C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5 - C_1 C_6 R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.28 X-INVALID-WZ-28 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6\right)}{C_1 C_3 C_4 R_4 R_5 s^2 - C_1 + s\left(C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5\right)}$$

Parameters:

Q: $\frac{i\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}{C_3 R_5 - C_4 R_4 + C_4 R_5}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_4}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_5 - C_4 R_4 + C_4 R_5}{C_3 C_4 R_4 R_5}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6}{C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.29 X-INVALID-WZ-29 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s + 1}\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(C_1 C_3 C_4 C_6 R_4 R_6 - C_1 C_4 C_5 C_6 R_4 R_6\right) + s\left(C_1 C_3 C_4 R_4 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5} + \frac{C_4}{C_3-C_5} - \frac{C_5}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5} + \frac{C_4}{C_3-C_5} - \frac{C_5}{C_3-C_5}}}{C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6}$
wo: $\sqrt{\frac{C_3 + C_4 - C_5}{C_3 C_4 C_6 R_4 R_6 - C_4 C_5 C_6 R_4 R_6}}$
bandwidth: $\frac{\sqrt{\frac{C_3 + C_4 - C_5}{C_3 C_4 C_6 R_4 R_6 - C_4 C_5 C_6 R_4 R_6}}\left(C_3 C_4 R_4 + C_3 C_6 R_6 - C_4 C_5 R_4 + C_4 C_6 R_6 - C_5 C_6 R_6\right)}{C_3\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5} + \frac{C_4}{C_3-C_5} - \frac{C_5}{C_3-C_5}} - \sqrt{C_4}C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}\sqrt{\frac{C_3}{C_3-C_5} + \frac{C_4}{C_3-C_5} - \frac{C_5}{C_3-C_5}}}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 - C_5 C_6}$
K-BP: $\frac{C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6}{C_1 C_3 C_4 R_4 + C_1 C_3 C_6 R_6 - C_1 C_4 C_5 R_4 + C_1 C_4 C_6 R_6 - C_1 C_5 C_6 R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.30 X-INVALID-WZ-30 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 C_4 C_5 R_4 R_5 s^2 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_4 + C_1 C_3 C_5 R_5 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3 + C_4 - C_5}}{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}$
wo: $\frac{\sqrt{C_3 + C_4 - C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 C_4 R_4 + C_3 C_5 R_5 - C_4 C_5 R_4 + C_4 C_5 R_5}{C_3 C_4 C_5 R_4 R_5}$
K-LP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$
K-HP: $\frac{R_1 R_6}{R_5}$
K-BP: $\frac{C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6}{C_1 C_3 C_4 R_4 + C_1 C_3 C_5 R_5 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.31 X-INVALID-WZ-31 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s + 1},\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s\left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_6 + s^2\left(C_1 C_3 C_5 C_6 R_4 R_5 + C_1 C_4 C_5 C_6 R_4 R_5\right) + s\left(C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4 + C_1 C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3 + C_4}}{C_3 R_4 + C_4 R_4 - C_5 R_4 + C_5 R_5}$

wo: $\frac{1}{\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
bandwidth: $\frac{C_3R_4+C_4R_4-C_5R_4+C_5R_5}{\sqrt{C_5}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_4R_5+C_4C_5R_4R_5}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$
K-BP: $\frac{C_1C_3C_5R_1R_4+C_3C_5C_6R_4R_6}{C_1C_3C_6R_4+C_1C_4C_6R_4-C_1C_5C_6R_4+C_1C_5C_6R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$

11.32 X-INVALID-WZ-32 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{1}{C_3 s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ \frac{R_6}{C_6R_6s+1}\right)$

$$H(s) = \frac{C_1C_3C_5R_1R_4R_5R_6s^2 + C_3R_4R_6 + s\left(C_1C_3R_1R_4R_6 + C_3C_5R_4R_5R_6\right)}{-C_1R_4 + C_1R_5 + s^2\left(C_1C_3C_6R_4R_5R_6 + C_1C_4C_6R_4R_5R_6 - C_1C_5C_6R_4R_5R_6\right) + s\left(C_1C_3R_4R_5 + C_1C_4R_4R_5 - C_1C_5R_4R_5 - C_1C_6R_4R_6 + C_1C_6R_5R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_3R_4R_5+C_4R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6}$
wo: $\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}$
bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3C_6R_4R_5R_6+C_4C_6R_4R_5R_6-C_5C_6R_4R_5R_6}}(C_3R_4R_5+C_4R_4R_5-C_5R_4R_5-C_6R_4R_6+C_6R_5R_6)}{C_3\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_4}\sqrt{R_5}\sqrt{R_6}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$
K-LP: $-\frac{C_3R_4R_6}{C_1R_4-C_1R_5}$
K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$
K-BP: $\frac{C_1C_3R_1R_4R_6+C_3C_5R_4R_5R_6}{C_1C_3R_4R_5+C_1C_4R_4R_5-C_1C_5R_4R_5-C_1C_6R_4R_6+C_1C_6R_5R_6}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.33 X-INVALID-WZ-33 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_4 + s\left(C_1C_3C_5R_1R_4 + C_3C_5C_6R_4R_6\right)}{-C_1C_3C_5C_6R_3R_4s^2 + C_1C_6 + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 - C_1C_5C_6R_4\right)}$$

Parameters:

Q: $-\frac{i\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}{C_3R_3+C_3R_4-C_5R_4}$
wo: $\frac{i}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3R_3+C_3R_4-C_5R_4}{C_3C_5R_3R_4}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_1C_3C_5R_1R_4+C_3C_5C_6R_4R_6}{C_1C_3C_6R_3+C_1C_3C_6R_4-C_1C_5C_6R_4}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$

11.34 X-INVALID-WZ-34 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1C_3C_5C_6R_1R_4R_6s^2 + C_3C_5R_4 + s\left(C_1C_3C_5R_1R_4 + C_3C_5C_6R_4R_6\right)}{C_1C_6 + s^2\left(-C_1C_3C_5C_6R_3R_4 + C_1C_3C_5C_6R_3R_5 + C_1C_3C_5C_6R_4R_5\right) + s\left(C_1C_3C_6R_3 + C_1C_3C_6R_4 - C_1C_5C_6R_4 + C_1C_5C_6R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3R_3+C_3R_4-C_5R_4+C_5R_5}$
wo: $\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3C_5R_3R_4-C_3C_5R_3R_5-C_3C_5R_4R_5}}(C_3R_3+C_3R_4-C_5R_4+C_5R_5)}{-\sqrt{C_3}\sqrt{C_5}R_3R_4\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_3R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_5}R_4R_5\sqrt{\frac{1}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_1C_3C_5R_1R_4+C_3C_5C_6R_4R_6}{C_1C_3C_6R_3+C_1C_3C_6R_4-C_1C_5C_6R_4+C_1C_5C_6R_5}$

Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$

11.35 X-INVALID-WZ-35 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 C_3 C_5 R_3 R_4 R_5 s^2 - C_1 R_4 + C_1 R_5 + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_4 - R_5}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$
wo: $\frac{\sqrt{R_4 - R_5}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$
bandwidth: $\frac{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$
K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$
K-HP: $-\frac{R_1 R_6}{R_3}$
K-BP: $\frac{-C_1 C_3 R_1 R_4 R_6 - C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_3 R_4 - C_1 C_3 R_3 R_5 - C_1 C_3 R_4 R_5 + C_1 C_5 R_4 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.36 X-INVALID-WZ-36 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_5 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_5 R_5 R_6\right)}{-C_1 + s^2\left(C_1 C_3 C_4 R_3 R_5 - C_1 C_3 C_5 R_3 R_5\right) + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 + C_1 C_4 R_5 - C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}} + \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}}}{C_3 R_3 - C_3 R_5 - C_4 R_5 + C_5 R_5}$
wo: $\sqrt{-\frac{1}{C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5}}$
bandwidth: $\frac{\sqrt{-\frac{1}{C_3 C_4 R_3 R_5 - C_3 C_5 R_3 R_5}}\left(C_3 R_3 - C_3 R_5 - C_4 R_5 + C_5 R_5\right)}{-\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}} + \sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{1}{C_4 - C_5}}}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3}$
K-BP: $\frac{-C_1 C_3 R_1 R_6 - C_3 C_5 R_5 R_6}{C_1 C_3 R_3 - C_1 C_3 R_5 - C_1 C_4 R_5 + C_1 C_5 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.37 X-INVALID-WZ-37 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5,\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 R_1 R_4 R_6 s^2 + C_3 R_6 + s\left(C_1 C_3 R_1 R_6 + C_3 C_4 R_4 R_6\right)}{-C_1 + s^2\left(-C_1 C_3 C_4 R_3 R_4 + C_1 C_3 C_4 R_3 R_5 + C_1 C_3 C_4 R_4 R_5\right) + s\left(-C_1 C_3 R_3 + C_1 C_3 R_5 - C_1 C_4 R_4 + C_1 C_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_4}R_3 R_4\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} - \sqrt{C_3}\sqrt{C_4}R_3 R_5\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} - \sqrt{C_3}\sqrt{C_4}R_4 R_5\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}{C_3 R_3 - C_3 R_5 + C_4 R_4 - C_4 R_5}$
wo: $\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_4 R_3 R_5 - C_3 C_4 R_4 R_5}}$
bandwidth: $\frac{\left(C_3 R_3 - C_3 R_5 + C_4 R_4 - C_4 R_5\right)\sqrt{\frac{1}{C_3 C_4 R_3 R_4 - C_3 C_4 R_3 R_5 - C_3 C_4 R_4 R_5}}}{\sqrt{C_3}\sqrt{C_4}R_3 R_4\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} - \sqrt{C_3}\sqrt{C_4}R_3 R_5\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}} - \sqrt{C_3}\sqrt{C_4}R_4 R_5\sqrt{-\frac{1}{-R_3 R_4 + R_3 R_5 + R_4 R_5}}}$
K-LP: $-\frac{C_3 R_6}{C_1}$
K-HP: $-\frac{R_1 R_4 R_6}{R_3 R_4 - R_3 R_5 - R_4 R_5}$
K-BP: $\frac{-C_1 C_3 R_1 R_6 - C_3 C_4 R_4 R_6}{C_1 C_3 R_3 - C_1 C_3 R_5 + C_1 C_4 R_4 - C_1 C_4 R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.38 X-INVALID-WZ-38 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{-C_1 C_3 C_4 C_5 R_3 R_4 s^2 + C_1 C_3 + C_1 C_4 - C_1 C_5 + s\left(C_1 C_3 C_4 R_3 + C_1 C_3 C_4 R_4 - C_1 C_3 C_5 R_3 - C_1 C_4 C_5 R_4\right)}$$

Parameters:

Q: $-\frac{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{-C_3-C_4+C_5}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}$
wo: $\frac{\sqrt{-C_3-C_4+C_5}}{\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}}$
bandwidth: $-\frac{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3-C_4C_5R_4}{C_3C_4C_5R_3R_4}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: $-\frac{R_1R_6}{R_3}$
K-BP: $\frac{C_1C_3C_5R_1R_6+C_3C_4C_5R_4R_6}{C_1C_3C_4R_3+C_1C_3C_4R_4-C_1C_3C_5R_3-C_1C_4C_5R_4}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.39 X-INVALID-WZ-39 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ R_4 + \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_4 C_5 R_1 R_4 R_6 s^2 + C_3 C_5 R_6 + s\left(C_1 C_3 C_5 R_1 R_6 + C_3 C_4 C_5 R_4 R_6\right)}{C_1 C_3 + C_1 C_4 - C_1 C_5 + s^2\left(-C_1 C_3 C_4 C_5 R_3 R_4 + C_1 C_3 C_4 C_5 R_3 R_5 + C_1 C_3 C_4 C_5 R_4 R_5\right) + s\left(C_1 C_3 C_4 R_3 + C_1 C_3 C_4 R_4 - C_1 C_3 C_5 R_3 + C_1 C_3 C_5 R_5 - C_1 C_4 C_5 R_4 + C_1 C_4 C_5 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}{C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5}$
wo: $\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}$
bandwidth: $\frac{\sqrt{\frac{-C_3-C_4+C_5}{C_3C_4C_5R_3R_4-C_3C_4C_5R_3R_5-C_3C_4C_5R_4R_5}}(C_3C_4R_3+C_3C_4R_4-C_3C_5R_3+C_3C_5R_5-C_4C_5R_4+C_4C_5R_5)}{-\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_4\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_3R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}+\sqrt{C_3}\sqrt{C_4}\sqrt{C_5}R_4R_5\sqrt{\frac{C_3}{-R_3R_4+R_3R_5+R_4R_5}+\frac{C_4}{-R_3R_4+R_3R_5+R_4R_5}-\frac{C_5}{-R_3R_4+R_3R_5+R_4R_5}}}$
K-LP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$
K-HP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$
K-BP: $\frac{C_1C_3C_5R_1R_6+C_3C_4C_5R_4R_6}{C_1C_3C_4R_3+C_1C_3C_4R_4-C_1C_3C_5R_3+C_1C_3C_5R_5-C_1C_4C_5R_4+C_1C_4C_5R_5}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}}$

11.40 X-INVALID-WZ-40 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_1 C_3 C_5 C_6 R_1 R_4 R_6 s^2 + C_3 C_5 R_4 + s\left(C_1 C_3 C_5 R_1 R_4 + C_3 C_5 C_6 R_4 R_6\right)}{C_1 C_6 + s^2\left(C_1 C_3 C_4 C_6 R_3 R_4 - C_1 C_3 C_5 C_6 R_3 R_4\right) + s\left(C_1 C_3 C_6 R_3 + C_1 C_3 C_6 R_4 + C_1 C_4 C_6 R_4 - C_1 C_5 C_6 R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}{C_3R_3+C_3R_4+C_4R_4-C_5R_4}$
wo: $\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}$
bandwidth: $\frac{(C_3R_3+C_3R_4+C_4R_4-C_5R_4)\sqrt{\frac{1}{C_3C_4R_3R_4-C_3C_5R_3R_4}}}{\sqrt{C_3}C_4\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}-\sqrt{C_3}C_5\sqrt{R_3}\sqrt{R_4}\sqrt{\frac{1}{C_4-C_5}}}$
K-LP: $\frac{C_3C_5R_4}{C_1C_6}$
K-HP: $\frac{C_5R_1R_6}{C_4R_3-C_5R_3}$
K-BP: $\frac{C_1C_3C_5R_1R_4+C_3C_5C_6R_4R_6}{C_1C_3C_6R_3+C_1C_3C_6R_4+C_1C_4C_6R_4-C_1C_5C_6R_4}$
Qz: None
Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_6}\sqrt{R_1}\sqrt{R_6}}$

11.41 X-INVALID-WZ-41 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ R_3 + \frac{1}{C_3 s},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{R_5}{C_5 R_5 s+1},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_4 R_5 R_6 s^2 + C_3 R_4 R_6 + s\left(C_1 C_3 R_1 R_4 R_6 + C_3 C_5 R_4 R_5 R_6\right)}{-C_1 R_4 + C_1 R_5 + s^2\left(C_1 C_3 C_4 R_3 R_4 R_5 - C_1 C_3 C_5 R_3 R_4 R_5\right) + s\left(-C_1 C_3 R_3 R_4 + C_1 C_3 R_3 R_5 + C_1 C_3 R_4 R_5 + C_1 C_4 R_4 R_5 - C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_3} C_4 \sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3} C_5 \sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}{C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5}$

wo: $\sqrt{\frac{-R_4+R_5}{C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_3 C_4 R_3 R_4 R_5 - C_3 C_5 R_3 R_4 R_5}}\left(C_3 R_3 R_4 - C_3 R_3 R_5 - C_3 R_4 R_5 - C_4 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_3} C_4 \sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}+\sqrt{C_3} C_5 \sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_4-C_5}+\frac{R_5}{C_4-C_5}}}$

K-LP: $-\frac{C_3 R_4 R_6}{C_1 R_4 - C_1 R_5}$

K-HP: $\frac{C_5 R_1 R_6}{C_4 R_3 - C_5 R_3}$

K-BP: $\frac{-C_1 C_3 R_1 R_4 R_6 - C_3 C_5 R_4 R_5 R_6}{C_1 C_3 R_3 R_4 - C_1 C_3 R_3 R_5 - C_1 C_3 R_4 R_5 - C_1 C_4 R_4 R_5 + C_1 C_5 R_4 R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_5}\sqrt{R_1}\sqrt{R_5}}$

11.42 X-INVALID-WZ-42 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s\left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s^2\left(C_1 C_3 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s\left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6}$

wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}$

bandwidth: $\frac{\sqrt{R_3+R_4}\left(C_3 R_3 R_4 - C_5 R_3 R_4 + C_6 R_3 R_6 + C_6 R_4 R_6\right)\sqrt{\frac{1}{C_3 C_6 R_3 R_4 R_6 - C_5 C_6 R_3 R_4 R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}$

K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$

K-HP: $\frac{C_3 C_5 R_1}{C_3 C_6 - C_5 C_6}$

K-BP: $\frac{C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6}{C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.43 X-INVALID-WZ-43 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ R_4,\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s\left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 C_3 C_5 R_3 R_4 R_5 s^2 + C_1 R_3 + C_1 R_4 + s\left(C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{R_3+R_4}}{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$

wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}}$

bandwidth: $\frac{C_3 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{C_3 C_5 R_3 R_4 R_5}$

K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$

K-HP: $\frac{R_1 R_6}{R_5}$

K-BP: $\frac{C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6}{C_1 C_3 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.44 X-INVALID-WZ-44 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_6 s^2 + C_5 R_6 + s\left(C_1 C_5 R_1 R_6 + C_3 C_5 R_3 R_6\right)}{C_1 + s^2\left(C_1 C_3 C_6 R_3 R_6 + C_1 C_4 C_6 R_3 R_6 - C_1 C_5 C_6 R_3 R_6\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_6 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3R_3+C_4R_3-C_5R_3+C_6R_6}$

wo: $\sqrt{\frac{1}{C_3C_6R_3R_6+C_4C_6R_3R_6-C_5C_6R_3R_6}}$

bandwidth: $\frac{(C_3R_3+C_4R_3-C_5R_3+C_6R_6)\sqrt{\frac{1}{C_3C_6R_3R_6+C_4C_6R_3R_6-C_5C_6R_3R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}\sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: $\frac{C_5R_6}{C_1}$

K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-BP: $\frac{C_1C_5R_1R_6+C_3C_5R_3R_6}{C_1C_3R_3+C_1C_4R_3-C_1C_5R_3+C_1C_6R_6}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.45 X-INVALID-WZ-45 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{1}{C_4 s},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_6 s^2 + C_5 R_6 + s\left(C_1 C_5 R_1 R_6 + C_3 C_5 R_3 R_6\right)}{C_1 + s^2\left(C_1 C_3 C_5 R_3 R_5 + C_1 C_4 C_5 R_3 R_5\right) + s\left(C_1 C_3 R_3 + C_1 C_4 R_3 - C_1 C_5 R_3 + C_1 C_5 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}}{C_3R_3+C_4R_3-C_5R_3+C_5R_5}$

wo: $\frac{1}{\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$

bandwidth: $\frac{C_3R_3+C_4R_3-C_5R_3+C_5R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3C_5R_3R_5+C_4C_5R_3R_5}}$

K-LP: $\frac{C_5R_6}{C_1}$

K-HP: $\frac{C_3R_1R_6}{C_3R_5+C_4R_5}$

K-BP: $\frac{C_1C_5R_1R_6+C_3C_5R_3R_6}{C_1C_3R_3+C_1C_4R_3-C_1C_5R_3+C_1C_5R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.46 X-INVALID-WZ-46 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ \frac{1}{C_5 s},\ \frac{R_6}{C_6 R_6 s+1}\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s\left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s^2\left(C_1 C_3 C_6 R_3 R_4 R_6 + C_1 C_4 C_6 R_3 R_4 R_6 - C_1 C_5 C_6 R_3 R_4 R_6\right) + s\left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_6 R_3 R_6 + C_1 C_6 R_4 R_6\right)}$$

Parameters:

Q: $\frac{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6}$

wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}$

bandwidth: $\frac{\sqrt{R_3+R_4}(C_3R_3R_4+C_4R_3R_4-C_5R_3R_4+C_6R_3R_6+C_6R_4R_6)\sqrt{\frac{1}{C_3C_6R_3R_4R_6+C_4C_6R_3R_4R_6-C_5C_6R_3R_4R_6}}}{C_3\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+C_4\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-C_5\sqrt{C_6}\sqrt{R_3}\sqrt{R_4}\sqrt{R_6}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: $\frac{C_5R_4R_6}{C_1R_3+C_1R_4}$

K-HP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-BP: $\frac{C_1C_5R_1R_4R_6+C_3C_5R_3R_4R_6}{C_1C_3R_3R_4+C_1C_4R_3R_4-C_1C_5R_3R_4+C_1C_6R_3R_6+C_1C_6R_4R_6}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.47 X-INVALID-WZ-47 $Z(s) = \left(R_1 + \frac{1}{C_1 s},\ \infty,\ \frac{R_3}{C_3 R_3 s+1},\ \frac{R_4}{C_4 R_4 s+1},\ R_5 + \frac{1}{C_5 s},\ R_6\right)$

$$H(s) = \frac{C_1 C_3 C_5 R_1 R_3 R_4 R_6 s^2 + C_5 R_4 R_6 + s\left(C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6\right)}{C_1 R_3 + C_1 R_4 + s^2\left(C_1 C_3 C_5 R_3 R_4 R_5 + C_1 C_4 C_5 R_3 R_4 R_5\right) + s\left(C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5\right)}$$

Parameters:

Q: $\frac{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{R_3+R_4}}{C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}$

wo: $\frac{\sqrt{R_3+R_4}}{\sqrt{C_3 C_5 R_3 R_4 R_5 + C_4 C_5 R_3 R_4 R_5}}$

bandwidth: $\frac{C_3 R_3 R_4 + C_4 R_3 R_4 - C_5 R_3 R_4 + C_5 R_3 R_5 + C_5 R_4 R_5}{\sqrt{C_5}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{C_3+C_4}\sqrt{C_3 C_5 R_3 R_4 R_5 + C_4 C_5 R_3 R_4 R_5}}$

K-LP: $\frac{C_5 R_4 R_6}{C_1 R_3 + C_1 R_4}$

K-HP: $\frac{C_3 R_1 R_6}{C_3 R_5 + C_4 R_5}$

K-BP: $\frac{C_1 C_5 R_1 R_4 R_6 + C_3 C_5 R_3 R_4 R_6}{C_1 C_3 R_3 R_4 + C_1 C_4 R_3 R_4 - C_1 C_5 R_3 R_4 + C_1 C_5 R_3 R_5 + C_1 C_5 R_4 R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_1}\sqrt{C_3}\sqrt{R_1}\sqrt{R_3}}$

11.48 X-INVALID-WZ-48 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ R_4,\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_4 R_5 R_6 s^2 + C_3 R_1 R_4 + s\left(C_3 C_5 R_1 R_4 R_5 + C_3 C_6 R_1 R_4 R_6\right)}{-C_6 R_4 + C_6 R_5 + s^2\left(C_1 C_3 C_6 R_1 R_4 R_5 - C_1 C_5 C_6 R_1 R_4 R_5\right) + s\left(-C_1 C_6 R_1 R_4 + C_1 C_6 R_1 R_5 + C_3 C_6 R_4 R_5 - C_5 C_6 R_4 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}{C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5}$

wo: $\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_1 C_3 R_1 R_4 R_5 - C_1 C_5 R_1 R_4 R_5}}\left(C_1 R_1 R_4 - C_1 R_1 R_5 - C_3 R_4 R_5 + C_5 R_4 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3-C_5}+\frac{R_5}{C_3-C_5}}}$

K-LP: $-\frac{C_3 R_1 R_4}{C_6 R_4 - C_6 R_5}$

K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 - C_1 C_5}$

K-BP: $\frac{-C_3 C_5 R_1 R_4 R_5 - C_3 C_6 R_1 R_4 R_6}{C_1 C_6 R_1 R_4 - C_1 C_6 R_1 R_5 - C_3 C_6 R_4 R_5 + C_5 C_6 R_4 R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.49 X-INVALID-WZ-49 $Z(s) = \left(\frac{R_1}{C_1 R_1 s+1},\ \infty,\ \frac{1}{C_3 s},\ \frac{1}{C_4 s},\ \frac{R_5}{C_5 R_5 s+1},\ R_6 + \frac{1}{C_6 s}\right)$

$$H(s) = \frac{C_3 C_5 C_6 R_1 R_5 R_6 s^2 + C_3 R_1 + s\left(C_3 C_5 R_1 R_5 + C_3 C_6 R_1 R_6\right)}{-C_6 + s^2\left(C_1 C_3 C_6 R_1 R_5 + C_1 C_4 C_6 R_1 R_5 - C_1 C_5 C_6 R_1 R_5\right) + s\left(-C_1 C_6 R_1 + C_3 C_6 R_5 + C_4 C_6 R_5 - C_5 C_6 R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1} C_3 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}{C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5}$

wo: $\sqrt{-\frac{1}{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5}}$

bandwidth: $\frac{\sqrt{-\frac{1}{C_1 C_3 R_1 R_5 + C_1 C_4 R_1 R_5 - C_1 C_5 R_1 R_5}}\left(C_1 R_1 - C_3 R_5 - C_4 R_5 + C_5 R_5\right)}{-\sqrt{C_1} C_3 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} - \sqrt{C_1} C_4 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}} + \sqrt{C_1} C_5 \sqrt{R_1}\sqrt{R_5}\sqrt{-\frac{1}{C_3+C_4-C_5}}}$

K-LP: $-\frac{C_3 R_1}{C_6}$

K-HP: $\frac{C_3 C_5 R_6}{C_1 C_3 + C_1 C_4 - C_1 C_5}$

K-BP: $\frac{-C_3 C_5 R_1 R_5 - C_3 C_6 R_1 R_6}{C_1 C_6 R_1 - C_3 C_6 R_5 - C_4 C_6 R_5 + C_5 C_6 R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.50 X-INVALID-WZ-50 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ R_4+\frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_4C_5C_6R_1R_4R_6s^2 + C_3C_5R_1 + s\left(C_3C_4C_5R_1R_4 + C_3C_5C_6R_1R_6\right)}{C_3C_6 + C_4C_6 - C_5C_6 + s^2\left(C_1C_3C_4C_6R_1R_4 - C_1C_4C_5C_6R_1R_4\right) + s\left(C_1C_3C_6R_1 + C_1C_4C_6R_1 - C_1C_5C_6R_1 + C_3C_4C_6R_4 - C_4C_5C_6R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}{C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4}$

wo: $\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}$

bandwidth: $\frac{\sqrt{\frac{C_3+C_4-C_5}{C_1C_3C_4R_1R_4-C_1C_4C_5R_1R_4}}\left(C_1C_3R_1+C_1C_4R_1-C_1C_5R_1+C_3C_4R_4-C_4C_5R_4\right)}{\sqrt{C_1}C_3\sqrt{C_4}\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}-\sqrt{C_1}\sqrt{C_4}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{\frac{C_3}{C_3-C_5}+\frac{C_4}{C_3-C_5}-\frac{C_5}{C_3-C_5}}}$

K-LP: $\frac{C_3C_5R_1}{C_3C_6+C_4C_6-C_5C_6}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$

K-BP: $\frac{C_3C_4C_5R_1R_4+C_3C_5C_6R_1R_6}{C_1C_3C_6R_1+C_1C_4C_6R_1-C_1C_5C_6R_1+C_3C_4C_6R_4-C_4C_5C_6R_4}$

Qz: None

Wz: $\frac{1}{\sqrt{C_4}\sqrt{C_6}\sqrt{R_4}\sqrt{R_6}}$

11.51 X-INVALID-WZ-51 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{1}{C_3s},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_4R_5R_6s^2 + C_3R_1R_4 + s\left(C_3C_5R_1R_4R_5 + C_3C_6R_1R_4R_6\right)}{-C_6R_4 + C_6R_5 + s^2\left(C_1C_3C_6R_1R_4R_5 + C_1C_4C_6R_1R_4R_5 - C_1C_5C_6R_1R_4R_5\right) + s\left(-C_1C_6R_1R_4 + C_1C_6R_1R_5 + C_3C_6R_4R_5 + C_4C_6R_4R_5 - C_5C_6R_4R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5}$

wo: $\sqrt{\frac{-R_4+R_5}{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5-C_1C_5R_1R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_4+R_5}{C_1C_3R_1R_4R_5+C_1C_4R_1R_4R_5-C_1C_5R_1R_4R_5}}\left(C_1R_1R_4-C_1R_1R_5-C_3R_4R_5-C_4R_4R_5+C_5R_4R_5\right)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_4}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$

K-LP: $-\frac{C_3R_1R_4}{C_6R_4-C_6R_5}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{-C_3C_5R_1R_4R_5-C_3C_6R_1R_4R_6}{C_1C_6R_1R_4-C_1C_6R_1R_5-C_3C_6R_4R_5-C_4C_6R_4R_5+C_5C_6R_4R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_5}\sqrt{C_6}\sqrt{R_5}\sqrt{R_6}}$

11.52 X-INVALID-WZ-52 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_6R_3 + C_6R_4 + s^2\left(C_1C_3C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4}$

wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}$

bandwidth: $\frac{\sqrt{R_3+R_4}\left(C_1R_1R_3+C_1R_1R_4+C_3R_3R_4-C_5R_3R_4\right)\sqrt{\frac{1}{C_1C_3R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3-C_5}}}$

K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$

K-BP: $\frac{C_3C_5R_1R_3R_4+C_5C_6R_1R_4R_6}{C_1C_6R_1R_3+C_1C_6R_1R_4+C_3C_6R_3R_4-C_5C_6R_3R_4}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.53 X-INVALID-WZ-53 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ R_4,\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_1C_3R_1R_3R_4R_5 - C_1C_5R_1R_3R_4R_5\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 + C_3R_3R_4R_5 - C_5R_3R_4R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5+C_5R_3R_4R_5}$

wo: $\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_1C_3R_1R_3R_4R_5-C_1C_5R_1R_3R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_1C_3R_1R_3R_4R_5-C_1C_5R_1R_3R_4R_5}}\left(C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5+C_5R_3R_4R_5\right)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3-C_5}+\frac{R_3R_5}{C_3-C_5}+\frac{R_4R_5}{C_3-C_5}}}$

K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3-C_1C_5}$

K-BP: $\frac{-C_3R_1R_3R_4R_6-C_5R_1R_4R_5R_6}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5+C_5R_3R_4R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

11.54 X-INVALID-WZ-54 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_6s^2 + C_5R_1 + s\left(C_3C_5R_1R_3 + C_5C_6R_1R_6\right)}{C_6 + s^2\left(C_1C_3C_6R_1R_3 + C_1C_4C_6R_1R_3 - C_1C_5C_6R_1R_3\right) + s\left(C_1C_6R_1 + C_3C_6R_3 + C_4C_6R_3 - C_5C_6R_3\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1R_1+C_3R_3+C_4R_3-C_5R_3}$

wo: $\sqrt{\frac{1}{C_1C_3R_1R_3+C_1C_4R_1R_3-C_1C_5R_1R_3}}$

bandwidth: $\frac{\left(C_1R_1+C_3R_3+C_4R_3-C_5R_3\right)\sqrt{\frac{1}{C_1C_3R_1R_3+C_1C_4R_1R_3-C_1C_5R_1R_3}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: $\frac{C_5R_1}{C_6}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{C_3C_5R_1R_3+C_5C_6R_1R_6}{C_1C_6R_1+C_3C_6R_3+C_4C_6R_3-C_5C_6R_3}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.55 X-INVALID-WZ-55 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{1}{C_4s},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_5R_6s^2 + R_1R_6 + s\left(C_3R_1R_3R_6 + C_5R_1R_5R_6\right)}{-R_3 + R_5 + s^2\left(C_1C_3R_1R_3R_5 + C_1C_4R_1R_3R_5 - C_1C_5R_1R_3R_5\right) + s\left(-C_1R_1R_3 + C_1R_1R_5 + C_3R_3R_5 + C_4R_3R_5 - C_5R_3R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}{C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5+C_5R_3R_5}$

wo: $\sqrt{\frac{-R_3+R_5}{C_1C_3R_1R_3R_5+C_1C_4R_1R_3R_5-C_1C_5R_1R_3R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_3+R_5}{C_1C_3R_1R_3R_5+C_1C_4R_1R_3R_5-C_1C_5R_1R_3R_5}}\left(C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5+C_5R_3R_5\right)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_5}\sqrt{-\frac{R_3}{C_3+C_4-C_5}+\frac{R_5}{C_3+C_4-C_5}}}$

K-LP: $-\frac{R_1R_6}{R_3-R_5}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{-C_3R_1R_3R_6-C_5R_1R_5R_6}{C_1R_1R_3-C_1R_1R_5-C_3R_3R_5-C_4R_3R_5+C_5R_3R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

11.56 X-INVALID-WZ-56 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{1}{C_5s},\ R_6+\frac{1}{C_6s}\right)$

$$H(s) = \frac{C_3C_5C_6R_1R_3R_4R_6s^2 + C_5R_1R_4 + s\left(C_3C_5R_1R_3R_4 + C_5C_6R_1R_4R_6\right)}{C_6R_3 + C_6R_4 + s^2\left(C_1C_3C_6R_1R_3R_4 + C_1C_4C_6R_1R_3R_4 - C_1C_5C_6R_1R_3R_4\right) + s\left(C_1C_6R_1R_3 + C_1C_6R_1R_4 + C_3C_6R_3R_4 + C_4C_6R_3R_4 - C_5C_6R_3R_4\right)}$$

Parameters:

Q: $\frac{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}{C_1R_1R_3+C_1R_1R_4+C_3R_3R_4+C_4R_3R_4-C_5R_3R_4}$

wo: $\sqrt{R_3+R_4}\sqrt{\frac{1}{C_1C_3R_1R_3R_4+C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}$

bandwidth: $\frac{\sqrt{R_3+R_4}(C_1R_1R_3+C_1R_1R_4+C_3R_3R_4+C_4R_3R_4-C_5R_3R_4)\sqrt{\frac{1}{C_1C_3R_1R_3R_4+C_1C_4R_1R_3R_4-C_1C_5R_1R_3R_4}}}{\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}+\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}-\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_3+R_4}\sqrt{\frac{1}{C_3+C_4-C_5}}}$

K-LP: $\frac{C_5R_1R_4}{C_6R_3+C_6R_4}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{C_3C_5R_1R_3R_4+C_5C_6R_1R_4R_6}{C_1C_6R_1R_3+C_1C_6R_1R_4+C_3C_6R_3R_4+C_4C_6R_3R_4-C_5C_6R_3R_4}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_6}\sqrt{R_3}\sqrt{R_6}}$

11.57 X-INVALID-WZ-57 $Z(s) = \left(\frac{R_1}{C_1R_1s+1},\ \infty,\ \frac{R_3}{C_3R_3s+1},\ \frac{R_4}{C_4R_4s+1},\ \frac{R_5}{C_5R_5s+1},\ R_6\right)$

$$H(s) = \frac{C_3C_5R_1R_3R_4R_5R_6s^2 + R_1R_4R_6 + s\left(C_3R_1R_3R_4R_6 + C_5R_1R_4R_5R_6\right)}{-R_3R_4 + R_3R_5 + R_4R_5 + s^2\left(C_1C_3R_1R_3R_4R_5 + C_1C_4R_1R_3R_4R_5 - C_1C_5R_1R_3R_4R_5\right) + s\left(-C_1R_1R_3R_4 + C_1R_1R_3R_5 + C_1R_1R_4R_5 + C_3R_3R_4R_5 + C_4R_3R_4R_5 - C_5R_3R_4R_5\right)}$$

Parameters:

Q: $\frac{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5-C_4R_3R_4R_5+C_5R_3R_4R_5}$

wo: $\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_1C_3R_1R_3R_4R_5+C_1C_4R_1R_3R_4R_5-C_1C_5R_1R_3R_4R_5}}$

bandwidth: $\frac{\sqrt{\frac{-R_3R_4+R_3R_5+R_4R_5}{C_1C_3R_1R_3R_4R_5+C_1C_4R_1R_3R_4R_5-C_1C_5R_1R_3R_4R_5}}(C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5-C_4R_3R_4R_5+C_5R_3R_4R_5)}{-\sqrt{C_1}C_3\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}-\sqrt{C_1}C_4\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}+\sqrt{C_1}C_5\sqrt{R_1}\sqrt{R_3}\sqrt{R_4}\sqrt{R_5}\sqrt{-\frac{R_3R_4}{C_3+C_4-C_5}+\frac{R_3R_5}{C_3+C_4-C_5}+\frac{R_4R_5}{C_3+C_4-C_5}}}$

K-LP: $-\frac{R_1R_4R_6}{R_3R_4-R_3R_5-R_4R_5}$

K-HP: $\frac{C_3C_5R_6}{C_1C_3+C_1C_4-C_1C_5}$

K-BP: $\frac{-C_3R_1R_3R_4R_6-C_5R_1R_4R_5R_6}{C_1R_1R_3R_4-C_1R_1R_3R_5-C_1R_1R_4R_5-C_3R_3R_4R_5-C_4R_3R_4R_5+C_5R_3R_4R_5}$

Qz: None

Wz: $\frac{1}{\sqrt{C_3}\sqrt{C_5}\sqrt{R_3}\sqrt{R_5}}$

12 X-PolynomialError