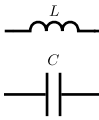
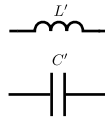
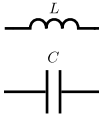
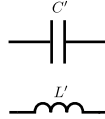
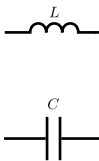
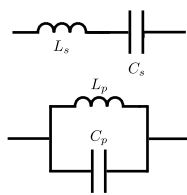
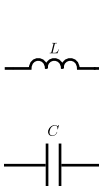
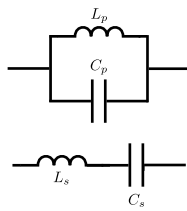


Transformation	HP element	After Transformation	
Lowpass $\Omega = \frac{\Omega_c \omega}{\omega_c}$			$L' = \frac{\Omega_c}{\omega_c} L$ $C' = \frac{\Omega_c}{\omega_c} C$
Highpass $\Omega = -\frac{\omega_c \Omega_c}{\omega}$			$C' = \frac{1}{\omega_c \Omega_c} \frac{1}{L}$ $L' = \frac{1}{\omega_c \Omega_c} \frac{1}{C}$
Bandpass $\Omega = \frac{\Omega_c}{\text{FBW}} \left(\frac{\omega}{\omega_0} - \frac{\omega_0}{\omega} \right)$			$L_s = \frac{\Omega_c}{\text{FBW} \omega_0} L$ $C_s = \frac{1}{\omega_0^2 L_s}$ $C_p = \frac{\Omega_c}{\text{FBW} \omega_0} C$ $L_p = \frac{1}{\omega_0^2 C_p}$
Bandstop $\Omega = \frac{\Omega_c \text{FBW}}{\left(\frac{\omega}{\omega_0} - \frac{\omega_0}{\omega} \right)}$			$L_p = \frac{\text{FBW} \Omega_c}{\omega_0} L$ $C_p = \frac{1}{\omega_0^2 L_p}$ $C_s = \frac{\text{FBW} \Omega_c}{\omega_0} C$ $L_s = \frac{1}{\omega_0^2 C_s}$

Ω, ω represent normalized and unnormalized frequency domains, respectively.

$$\omega_0 = \sqrt{\omega_1 \omega_2}$$

$$\text{FBW} = \frac{\omega_2 - \omega_1}{\omega_0}$$