

$$|H| = \frac{1}{\sqrt{1+x^2}}, \text{ and } \phi = -\tan^{-1}(x)$$

$$|H| = \frac{x}{\sqrt{1+x^2}}, \text{ and } \phi = \frac{\pi}{2} - \tan^{-1}(x)$$

$$|H(j\omega)| = \frac{1}{\sqrt{(1-x^2)^2 + 4x^2d^2}} \text{ and } \phi = -\tan^{-1}\left(\frac{2xd}{1-x^2}\right)$$

$$Q = \frac{1}{R} \sqrt{\frac{L}{C}} = \frac{1}{2d}$$

$$|H(j\omega)| = \frac{x^2}{\sqrt{(1-x^2)^2 + 4x^2d^2}} \text{ and } \phi = \pi - \tan^{-1}\left(\frac{2xd}{1-x^2}\right)$$

$$|H(j\omega)| = \frac{2xd}{\sqrt{(1-x^2)^2 + 4x^2d^2}} \text{ and } \phi = \frac{\pi}{2} - \tan^{-1}\left(\frac{2xd}{1-x^2}\right)$$