

$Z_{\text{in}}$     desired input impedance in  $\Omega$

$Z_{\text{out}}$     desired output impedance in  $\Omega$

$a$     attenuation in dB

$L = 10^{\frac{a}{10}}$  (the loss)

$A = (L + 1)/(L - 1)$

**Tee attenuator**

$$R2 = 2 \cdot \frac{\sqrt{L \cdot Z_{\text{in}} \cdot Z_{\text{out}}}}{L - 1}$$

$$R1 = Z_{\text{in}} \cdot A - R2$$

$$R3 = Z_{\text{out}} \cdot A - R2$$