

$$\text{Eqn } Z_{\text{res}} = \text{abs}(\text{real}(Z1)) / 3 - j * \text{imag}(Z1)$$

$$\text{Eqn } C_{\text{res}} = 1 / (2 * \text{PI} * \text{freq} * \text{abs}(Z1))$$

Z_res	C_res
0.032 - j2.855	3.715E-11

$$\text{Eqn } ZL = 5$$

$$\text{Eqn } G1 = (S11 - GL * \text{delta}) / (1 - S22 * GL)$$

$$\text{Eqn } GL = (ZL - 50) / (ZL + 50) \quad \text{Eqn } Z1 = 50 * (1 + G1) / (1 - G1)$$

G1	Z1	ZL	GL
0.0004472425	0.032 - j2.855	5	0.040