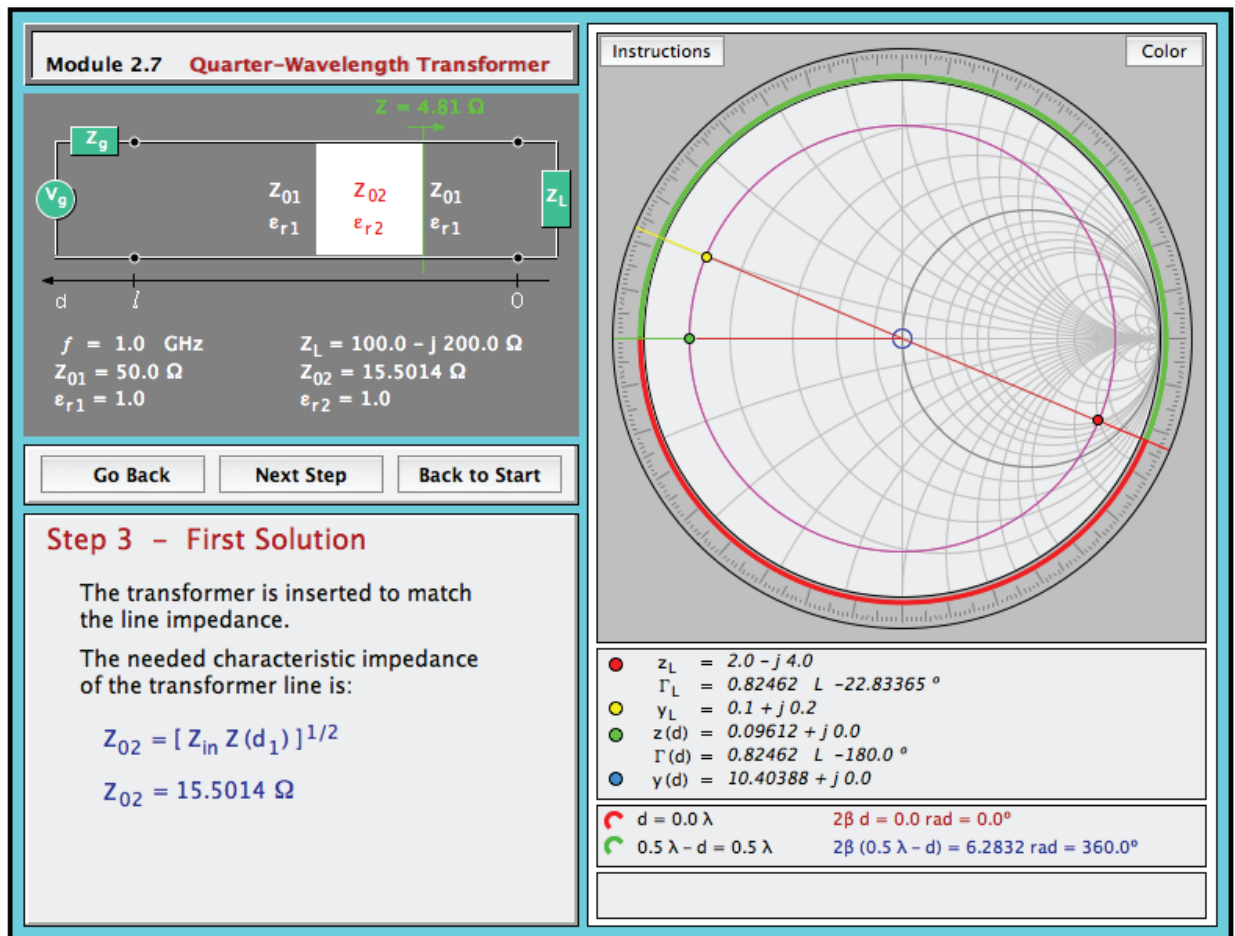


**2.64** Use Module 2.7 to design a quarter-wavelength transformer to match a load with  $Z_L = (100 - j200) \Omega$  to a 50- $\Omega$  line.

**Solution:** Figure P2.64(a) displays the first solution of Module 2.7 where a  $\lambda/4$  section of  $Z_{02} = 15.5015 \Omega$  is inserted at distance  $d_1 = 0.21829\lambda$  from the load.

Figure P2.64(b) displays a summary of the two possible solutions for matching the load to the feedline with a  $\lambda/4$  transformer.



**Figure P2.64(a)**

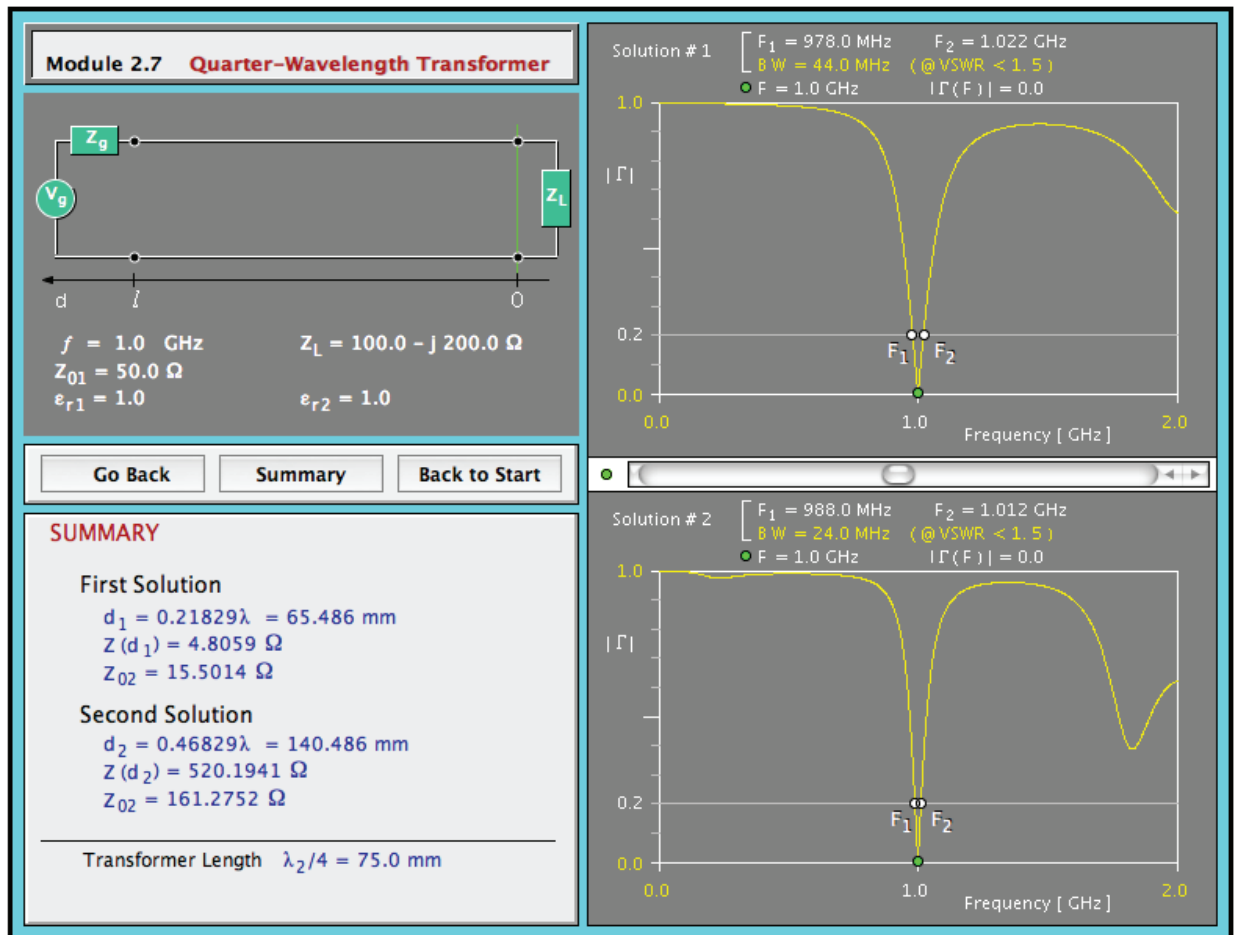


Figure P2.64(b)