Special Problem 5.4-1

A matching network has been constructed to match a complex load to a transmission line with characteristic impedance $Z_0 = 50~\Omega$.

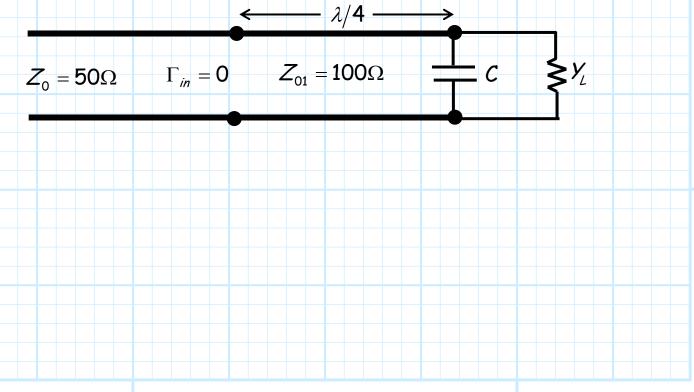
The design frequency of this matching network is $f_0 = 10 \ MHz$.

Note that this matching network is **not** specifically one of the standard designs that we studied.

The capacitor has a capacitance of value:

$$C = \frac{10^{-9}}{2\pi} \text{ farads}$$

Determine the complex admittance Y_{L} of the load.



Jim Stiles The Univ. of Kansas Dept. of EECS