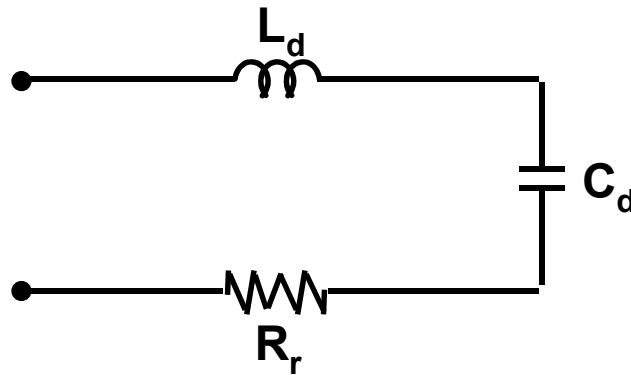


EQUIVALENT CIRCUIT OF A SHORT DIPOLE

Half length = l

radius = a



$$R_r = 20 (\beta l)^2$$

$$C_d = \frac{l}{0.036 \left[\ln \frac{l}{a} \right]} \text{ pF} \quad L_d = \frac{1.6 l}{\pi^2} \left[\ln \frac{l}{a} \right] \mu\text{H}$$

$$\beta = 2\pi / \lambda$$