

Design and sketch (e.g., Figure 7.14) an equal-split, 5-way, Wilkinson power divider for a $50\ \Omega$ system.

From Fig. 7.14 and notes for a $N=5$ -way equal split Wilkinson power divider we need $\lambda/4$ arms with characteristic impedance

$$Z_0 \sqrt{N} = 50\sqrt{5} = \underline{\underline{111.8034\ \Omega}}$$

interconnected w/ $Z_0 = \underline{\underline{50\ \Omega}} = R$ resistors.

