Impedance Matching

After completing this section, students should be able to do the following.

- Explain why is the impedance matching needed
- How real power changes from the input to the output of a lossless transmission line
- Explain how maximum available power from the generator affects power on transmission line.
- Explain how minimum reflection from the generator affects power on a transmission line.
- Explain how minimum reflection from the load affects power on a transmission line.
- Design a simple impedance matching network for any load impedance and discuss pros and cons of various designs.
- Design a mixed impedance matching network for any load impedance and discuss pros and cons of various designs.
- Design a transmission-line impedance matching network for any load impedance and discuss pros and cons of various designs.
- Design a lumped element impedance matching network for any load impedance and discuss pros and cons of various designs.

Learning outcomes: