Special Problem II.A-13

The voltage along a transmission line connected to **port 1** of a **passive** microwave device is:

$$V(z) = 0.8 \, e^{-j\beta z} + 0.2 \, e^{j\beta z}$$

Assuming all other ports of the device are **terminated** in matched loads, **determine S_{11}** for this device.