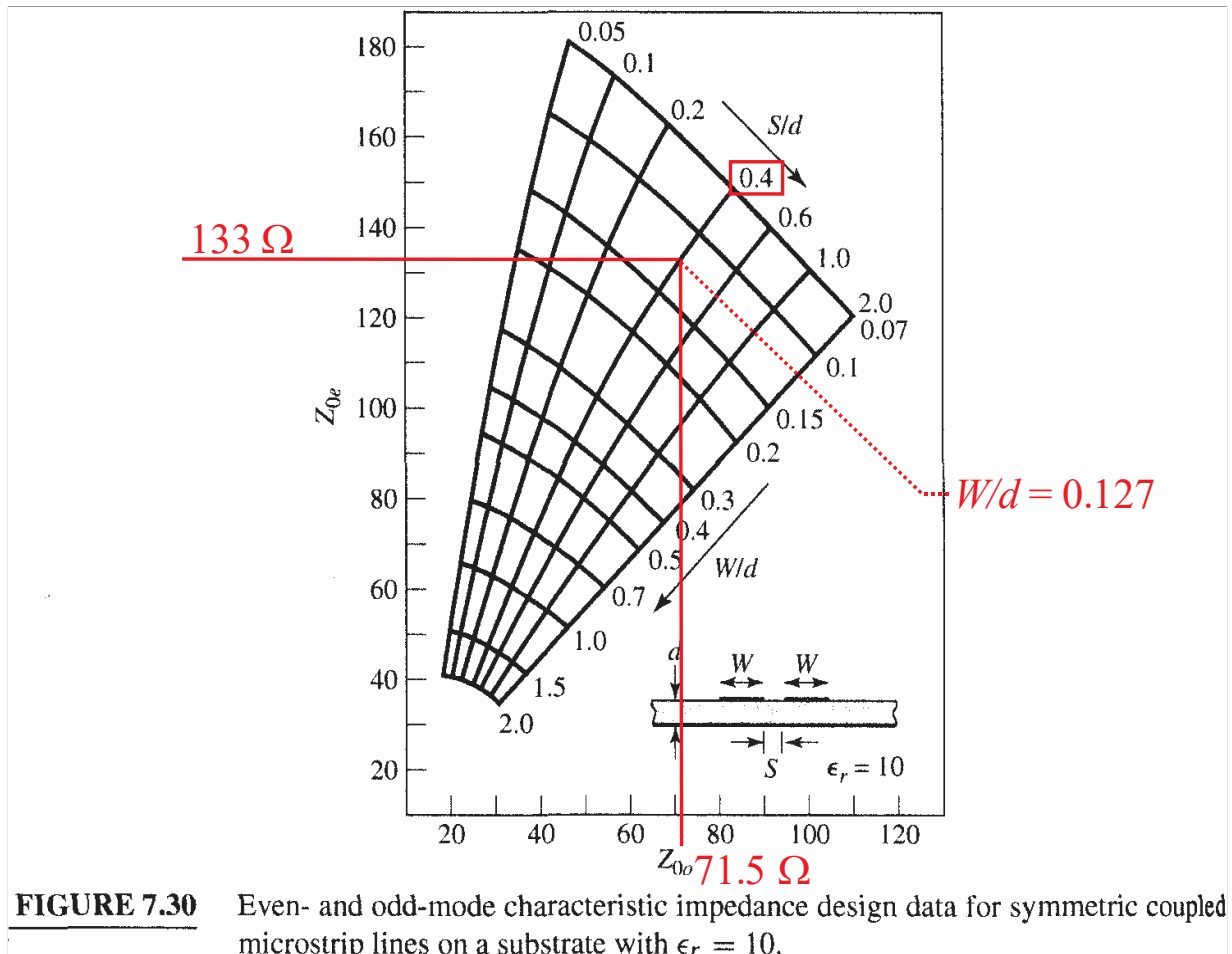


7.20 A coupled microstrip line is to be designed for a substrate having a thickness of 2.0 mm and dielectric constant of 10.0. The required even- and odd-mode characteristic impedances are $133\ \Omega$ and $71.5\ \Omega$, respectively. Use the graph of Figure 7.30 to find the required line widths and separation.



From Fig. 7.30 (above), we get $S/d = 0.4$ and $W/d = 0.127$. Using $d = 2.0\text{ mm}$,

$$S = 0.4(2) = \underline{\underline{0.8\text{ mm}}}$$

$$W = 0.127(2) = \underline{\underline{0.254\text{ mm}}}$$

