

18373038 钱思远

3-6 次作业

3-30

解: $Z_0 = \frac{60}{\sqrt{\epsilon_r}} \ln \frac{D}{a} = 50.15 \Omega.$

$$v = \frac{c}{\sqrt{\epsilon_r}} = 2.07 \times 10^8 \text{ m/s}.$$

3-31

解: $P_{\max} = \frac{\sqrt{\epsilon_r} d^2}{480} E_{br}^2 \ln \frac{D}{a} = 7.60 \times 10^5 \text{ W}.$

3-7 次作业.

1. 在矩形波导中传输 TE_{10} (H_{10}) 模式时, 小环可从矩形波导的窄边接入.

