

5-5 (1) $U_{om} \approx U_{im} \approx 14.14 V$

$$P_o = U_{om}^2 / 2R_L \approx 25 W$$

$$\eta = \pi U_{om} / 4V_{CC} = 74\%$$

$$P_{V1} = \frac{1}{R_L} \left(\frac{V_{CC} U_{om}}{\pi} - \frac{U_{om}^2}{4} \right) \approx 4.93 W$$

(2) $U_{(BE)CE0} > 2V_{CC} = 30 V$

$$I_{cm} > V_{CC} / R_L = 15 / 4 = 3.75 A$$

$$P_{cm} > 0.5 \frac{V_{CC}^2}{R_L} = 5.625 W$$

功率管安全。