

29-6. $P_{\text{MOSFET,max}} = \frac{150 \text{ mC} \cdot 50 \text{ mC}}{1 \text{ mC/W}} = 100 \text{ W} ; 100 \text{ W} = 50 + 10^{-3} f_s$

Solving for f_s yields $f_s = 50 \text{ kHz}$