



$V = I \times R$   
 $P = V \times V / R$   
 $P = I \times I \times R$

$V_{batt} = 300v$   
 $Presistor = 0.25W (250mW)$

$R = V \times V / P$   
 $R = 300v \times 300v / 0.25w$   
 $R = 300 \times 300 / 0.25$   
 $R = 360000$   
 $R = 360k (220k \text{ preferred})$

$P = I \times V$   
 $I = P / V$   
 $I = 0.25w / 300v$   
 $I = 0.25 / 300$   
 $I = 0.0008333333$   
 $I = 0.833 \text{ mA}$

$P = V \times V / R$   
 $P = 300v \times 300v / 220k$   
 $P = 300 \times 300 / 220 \text{ 000}$   
 $P = 0.409090909091$   
 $P = 409mW$

$P = I \times I \times R$   
 $I = \text{SQR} (0.25w / 220k)$   
 $I = \text{SQR} (0.25 / 220 \text{ 000})$   
 $I = 0.001066$   
 $I = 1.066mA$

$F = 32768Hz$   
 $T_{transition} = 1\mu S$

$T = 1 / F$   
 $T = 1 / 32768$   
 $T = 0.000030518$   
 $T = 30.518\mu S$

$Proportion = T_{transition} / T$   
 $Proportion = 1 / 30.518$   
 $Proportion = 0.032768 (3.3\%)$

R7:

$P = 0.25 / 0.032768$   
 $P = 7.629394531$

$R = V \times V / P$   
 $R = 300 \times 300 / 7.629394531$   
 $R = 11796 (10k \text{ preferred})$

$I = P / V$   
 $I = 7.629 / 300$   
 $I = 0.02543$   
 $I = 25.43mA$