

POWER DISSIPATION (SC-88A)

This specification is at mounted on board. Power Dissipation (P_D) depends on conditions of mounting on board. This specification is based on the measurement at the condition below:

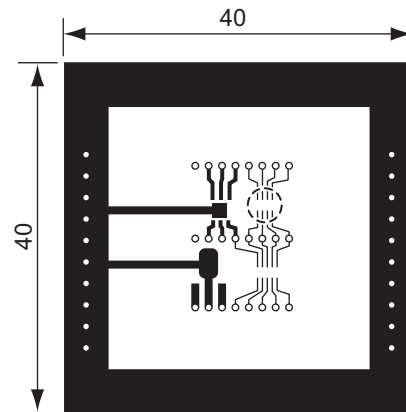
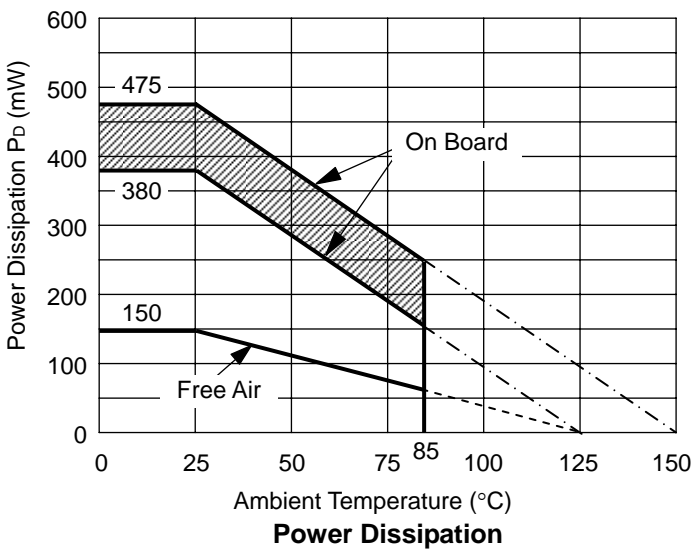
Measurement Conditions

	Standard Land Pattern
Environment	Mounting on Board (Wind velocity=0m/s)
Board Material	Glass cloth epoxy plastic (Double sided)
Board Dimensions	40mm × 40mm × 1.6mm
Copper Ratio	Top side : Approx. 50%, Back side : Approx. 50%
Through-holes	φ0.5mm × 44pcs

Measurement Results

($T_{opt}=25^{\circ}C$, $T_{jmax}=125^{\circ}C$)

	Standard Land Pattern	Free Air
Power Dissipation	380mW	150mW
Thermal Resistance	$\theta_{ja}=(125-25^{\circ}C)/0.38W=263^{\circ}C/W$	$\theta_{ja}=(125-25^{\circ}C)/0.15W=667^{\circ}C/W$
Thermal Resistance	$\theta_{jc}=75^{\circ}C/W$	-



Measurement Board Pattern
 ○ IC Mount Area (Unit: mm)

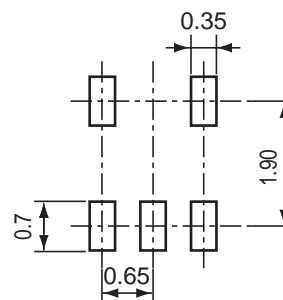
The above graph shows the Power Dissipation of the package based on $T_{jmax}=125^{\circ}C$ and $T_{jmax}=150^{\circ}C$.

Operating the IC in the shaded area in the graph might have an influence it's lifetime.

Operating time must be within the time limit described in the table below, in case of operating in the shaded area.

Product Name	Operating time	Estimated years*
RP105Q RP109Q RP114Q RP170Q	13,000hrs	9years
RP171Q RP200Q RP201Q		

RECOMMENDED LAND PATTERN



(Unit: mm)

*The volume is calculated on the supposition that operating four hours/day.