

•SOT-25 Power Dissipation

Power dissipation data for the SOT-25 is shown in this page.

The value of power dissipation varies with the mount board conditions.

Please use this data as one of reference data taken in the described condition.

1. Measurement Condition (Reference data)

Condition : Mount on a board

Ambient : Natural convection

Soldering : Lead (Pb) free

Board : Dimensions 40×40mm (1600mm² in one side)

Copper (Cu) traces occupy 50% of the board area

In top and back faces

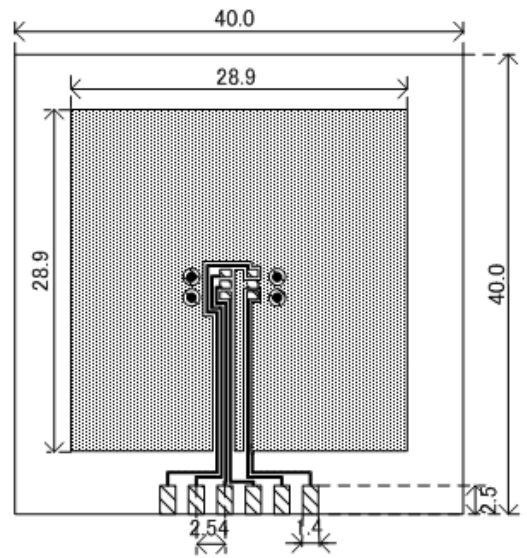
Package heat-sink is tied to the copper traces

(Board of SOT-26 is used)

Material : Glass Epoxy (FR-4)

Thickness : 1.6mm

Through-hole : 4 x 0.8 Diameter

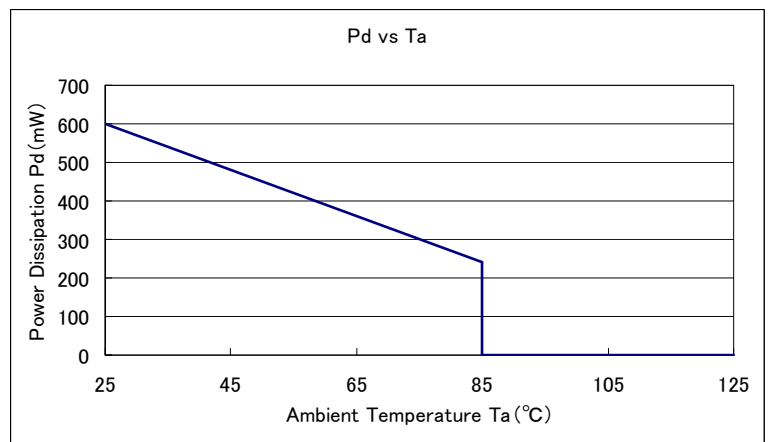


Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient temperature (85°C)

Board Mount (Tjmax=125°C)

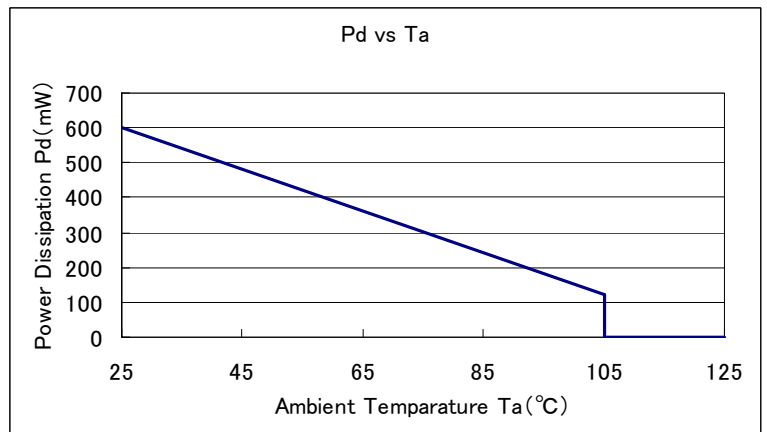
Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance (°C/W)
25	600	166.67
85	240	



3. Power Dissipation vs. Ambient temperature (105°C)

Board Mount (Tjmax=125°C)

Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance (°C/W)
25	600	166.67
105	120	



4. Power Dissipation vs. Ambient temperature ($T_j=150^{\circ}\text{C}$)

TVS DATA

Board Mount ($T_{jmax}=150^{\circ}\text{C}$)

Ambient Temperature ($^{\circ}\text{C}$)	Power Dissipation Pd (mW)	Thermal Resistance ($^{\circ}\text{C}/\text{W}$)
25	750	166.67
105	270	

