

● **SOT-223 Power Dissipation**

Power dissipation data for the SOT-223 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 x 40 mm (1600 mm² in one side)

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

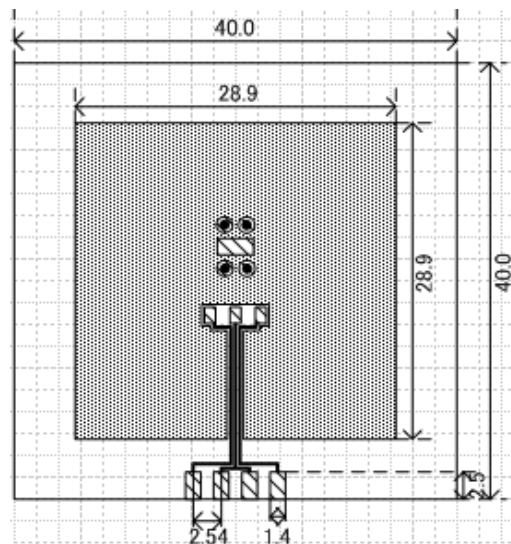
In top and back faces

Package heat-sink is tied to the copper traces

Material: Glass Epoxy (FR-4)

Thickness: 1.6 mm

Through-hole: 4 x 0.8 Diameter



Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient temperature

Board Mount ($T_j \text{ max} = 125^\circ\text{C}$)

| Ambient Temperature ($^\circ\text{C}$) | Power Dissipation P_d (mW) | Thermal Resistance ($^\circ\text{C}/\text{W}$) |
|--|------------------------------|--|
| 25 | 1500 | 66.67 |
| 85 | 600 | |

