●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: Dimensions 40 x 40 mm (1600 mm2 in one side)

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

In top and back faces

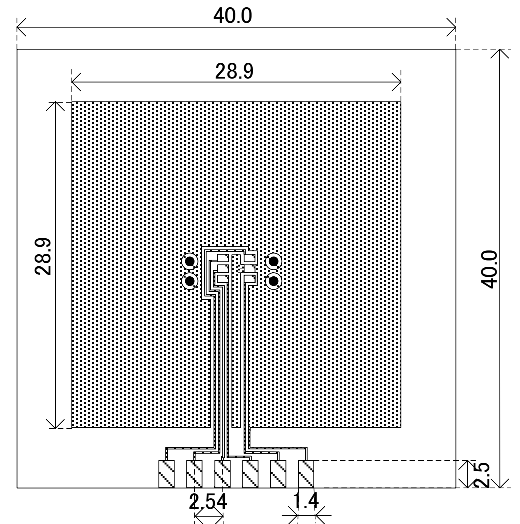
Package heat-sink is tied to the copper traces

(Board of SOT-26 is used)

Material : Glass Epoxy（FR-4）

Thickness : 1.6mm

Through-hole : 4 x 0.8 Diameter

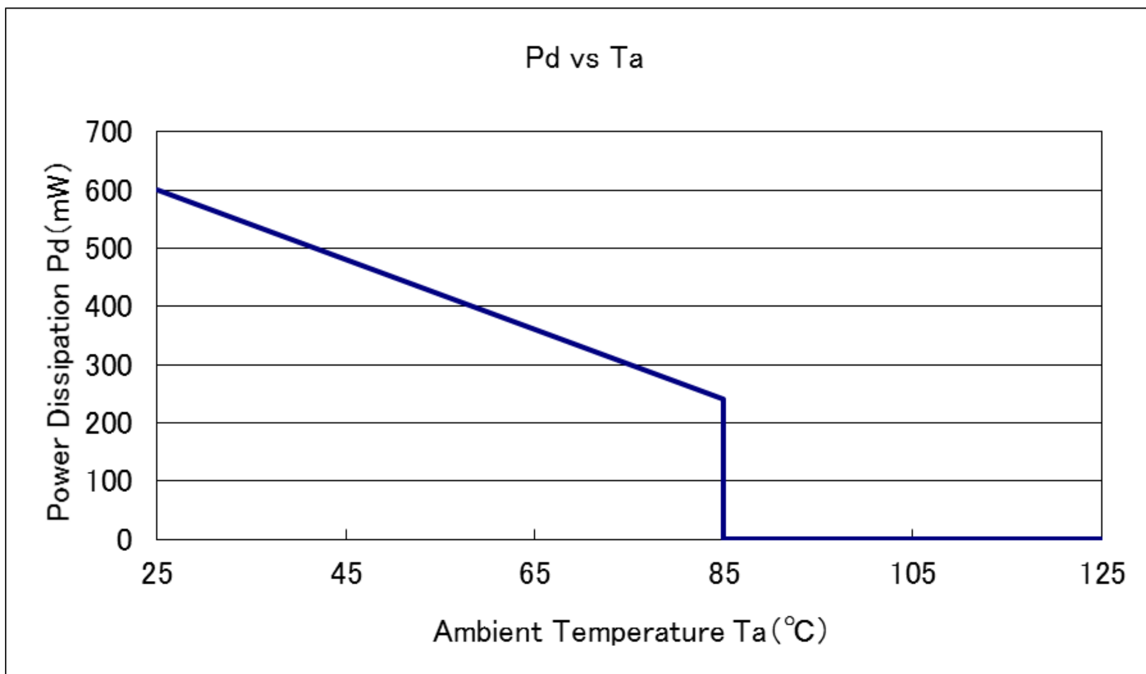


Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient temperature

Board Mount (Tjmax=125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	θja(℃/W)
25	600	166.67
85	240	



●SOT-25 Power Dissipation(JESD51-7)

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: 76.2mm×114.3mm（8700mm^2 in one side）

1st inner layer：No copper foil

Package heat-sink is tied to the copper traces

2nd inner layer：70mm×70mm_with heat sink

3rd inner layer：70mm×70mm_ with heat sink

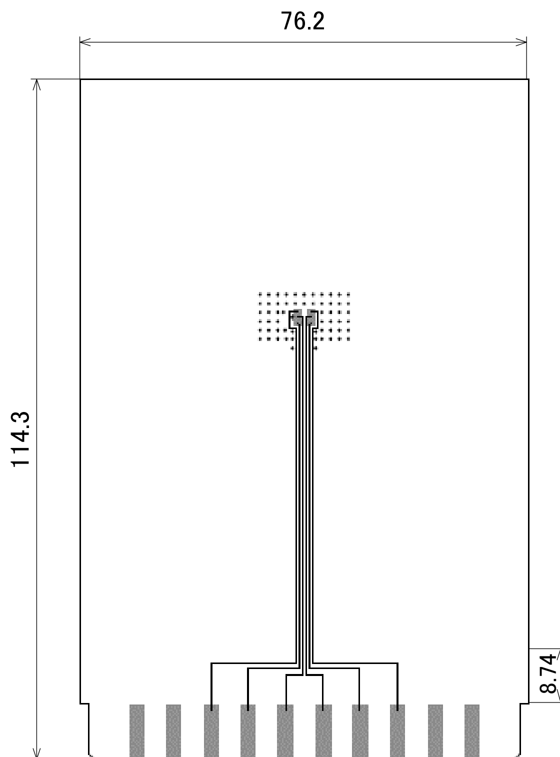
4th inner layer：No copper foil

Each heat sink back metal is connected to the Inner layers respectively.

Material : Glass Epoxy（FR-4）

Thickness : 1.6mm

Through-hole： ϕ0.2mm 60 個

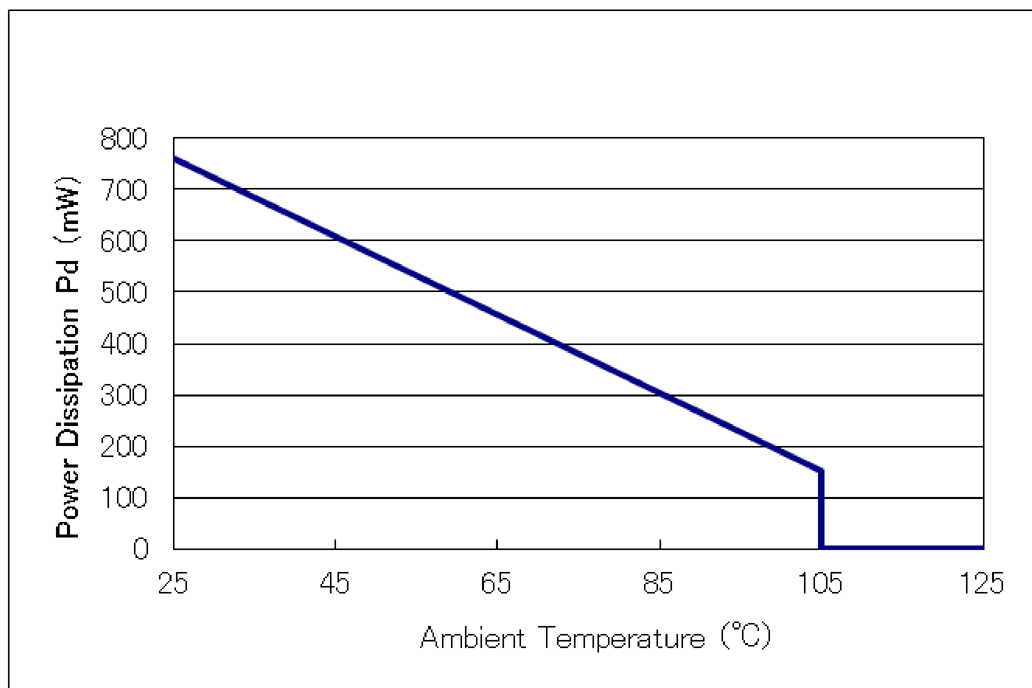


評価基板レイアウト(単位:mm)

2. Power Dissipation vs. Ambient temperature

Board Mount (Tjmax=125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	θja(℃/W)
25	760	131.58
105	152	

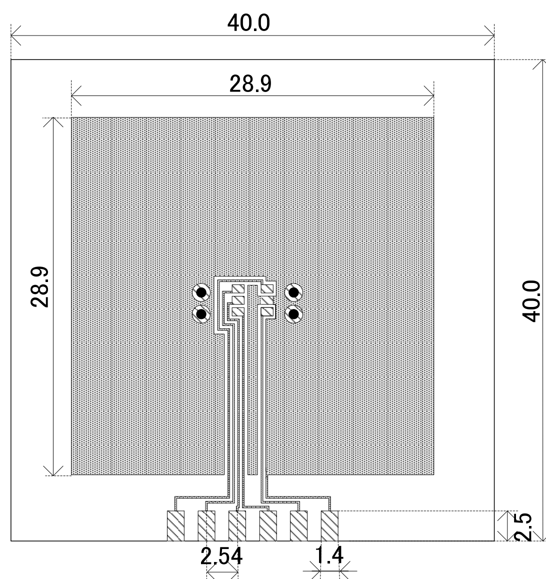


●SOT-25 Power Dissipation ※Tjmax=150℃

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:
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
(Board of SOT-26 is used)
Material : Glass Epoxy (FR-4)
Thickness : 1.6mm
Through-hole : 4 x 0.8 Diameter



Evaluation Board Layout (Unit:mm)

2.Power Dissipation vs. Ambient temperature

Board Mount (Tjmax = 150℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)		θja(℃/W)
	Ta max=125℃	Ta max=150℃	
25	750	750	166.67
125	150	150	
150	0	0