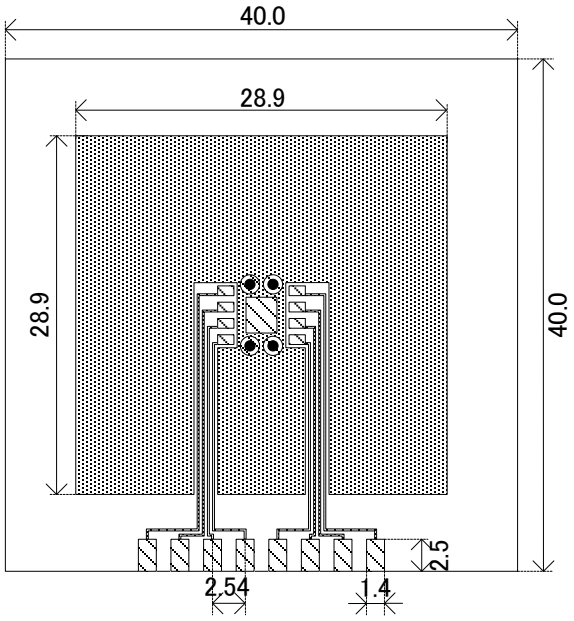
●SOP-8FD Power Dissipation

Power dissipation data for the SOP-8FD 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 mm^2 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

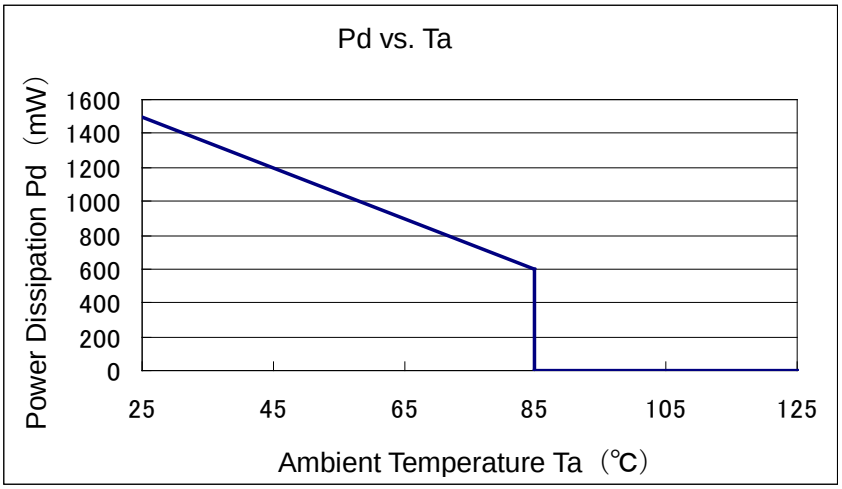


Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient temperature (85℃)

Board Mount (Tj max = 125℃)

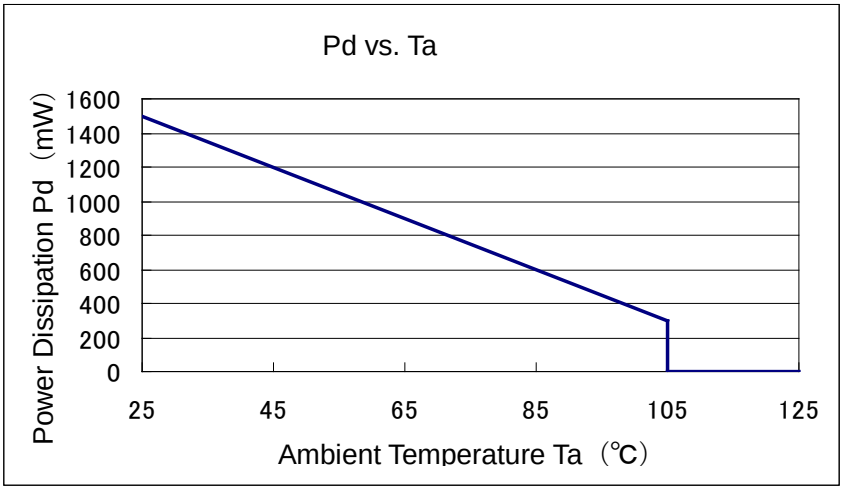
Ambient Temperature (℃)	Power Dissipation Pd (mW)	Thermal Resistance (℃/W)
25	1500	66.67
85	600	



3. Power Dissipation vs. Ambient temperature (105℃)

Board Mount (Tj max = 125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	Thermal Resistance (℃/W)
25	1500	66.67
105	300	

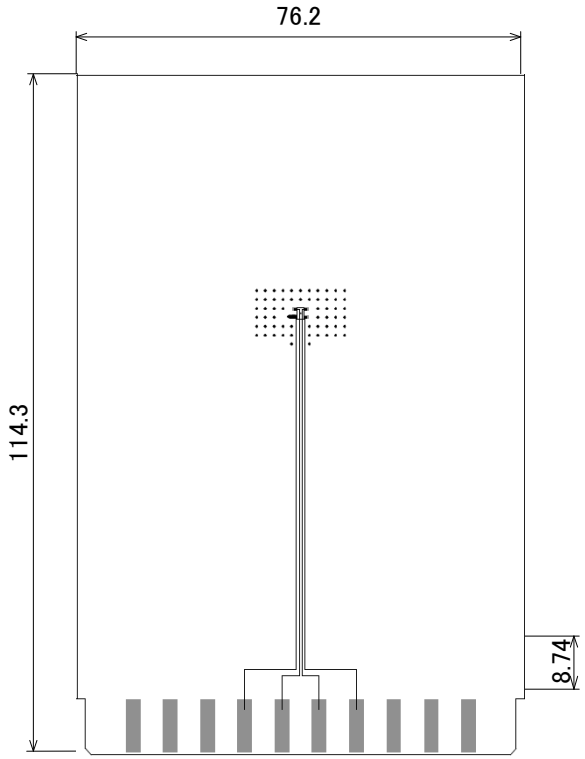


●SOP-8FD Power Dissipation (JESD51-7)

Power dissipation data for the SOP-8FD 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:	76.2mm × 114.3mm (8700mm2 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:	1.6 mm
Through-hole:	60 x 0.2 Diameter



Evaluation Board (Unit: mm)

2. Power Dissipation vs. Ambient Temperature (125℃)

Board Mount (Tj max = 125℃)

Ambient Temperature (℃)	Power Dissipation Pd (mW)	Thermal Resistance (℃/W)
25	2500	40.00
105	500