

•USP-6C Power Dissipation

Power dissipation data for the USP-6C 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 40mm×40mm (1600mm² in one side)

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

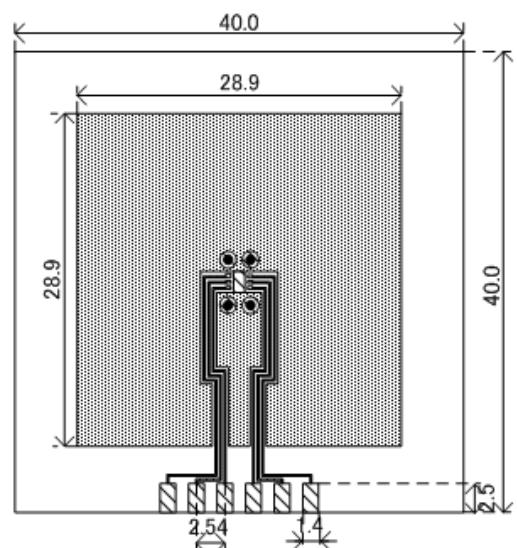
In top and back faces

Package heat-sink is tied to the copper traces

Material : Glass Epoxy (FR-4)

Thickness : 1.6mm

Through-hole : 4 x 0.8 Diameter

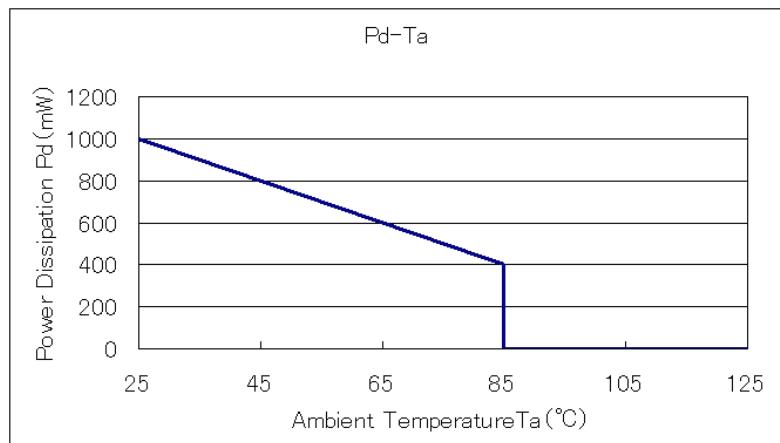


Evaluation Board (Unit: mm)

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

Board Mount (Tjmax=125°C)

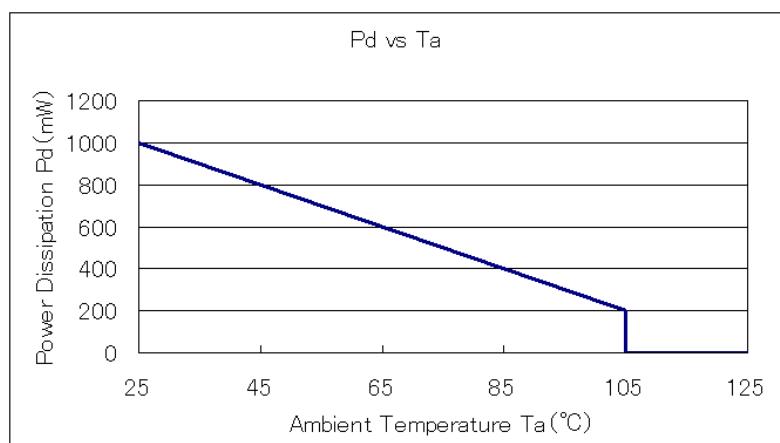
Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance (°C/W)
25	1000	100.00
85	400	



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	1000	100.00
105	200	



●USP-6C Power Dissipation (JEDEC board)

Power dissipation data for the USP-6C 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 : The board using 4 copper layer.

(76.2mm×114.3mm···Area: about 8700mm²)

1st layer : No copper foil (Signal layer)

2nd layer : 70mm×70mm_Connected to heat-sink.

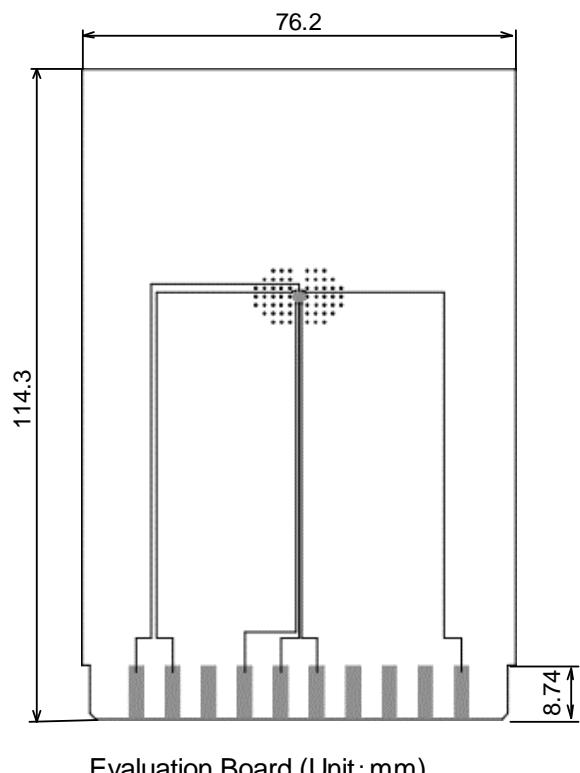
3rd layer : 70mm×70mm_Connected to heat-sink.

4th layer : No copper foil (Signal layer)

Material : Glass Epoxy (FR-4)

Thickness : 1.6mm

Through-hole : φ0.2mm x 60pcs



2.Power Dissipation vs. Ambient temperature

Board Mount($T_{jmax} = 125^{\circ}\text{C}$)

Ambient Temperature (°C)	Power Dissipation Pd (mW)	θ_{ja} (°C/W)
25	1250	80.00
105	250	

