

## **•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 (1600mm<sup>2</sup> in one side)

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

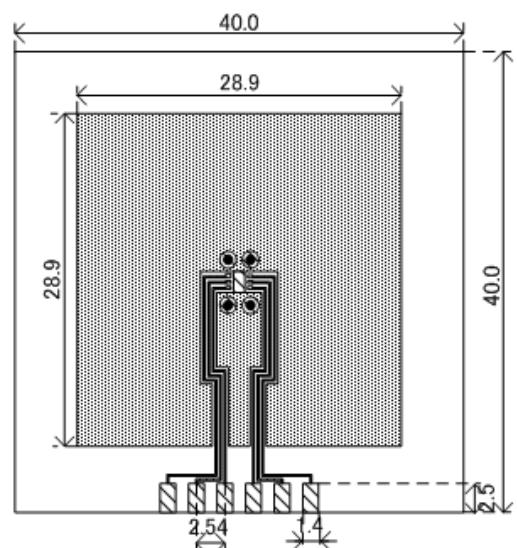
In top and back faces

Package heat-sink is tied to the copper traces

Material : Glass Epoxy (FR-4)

Thickness : 1.6mm

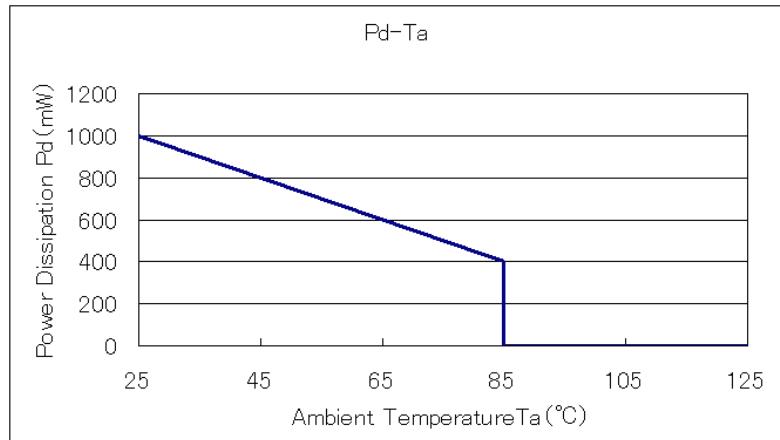
Through-hole : 4 x 0.8 Diameter



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

Board Mount ( Tjmax=125°C )

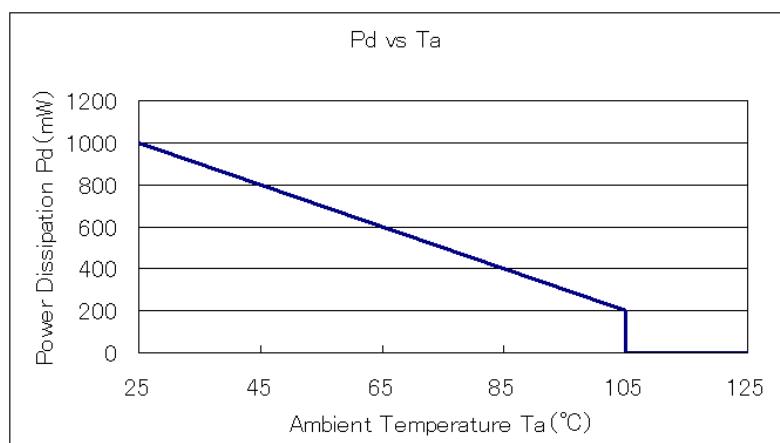
Ambient Temperature (°C)	Power Dissipation Pd (mW)	Thermal Resistance (°C/W)
25	1000	100.00
85	400	



### **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 8700mm<sup>2</sup>)

1st layer : No copper foil (Signal layer)

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

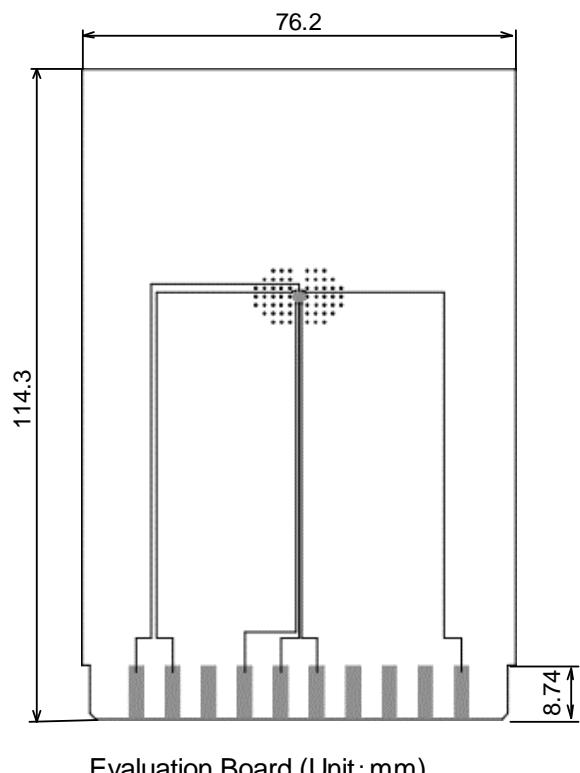
3rd layer : 70mm×70mm\_Connected to heat-sink.

4th layer : No copper foil (Signal layer)

Material : Glass Epoxy (FR-4)

Thickness : 1.6mm

Through-hole : φ0.2mm x 60pcs



Evaluation Board (Unit: mm)

### **2.Power Dissipation vs. Ambient temperature**

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

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

