

Lead ( Pb ) Free Product – RoHS Compliant

# PT008-SMC SMD TYPE PHOTO-TRANSISTOR

PT008-SMC is a surface mount type photo-transistor featuring high photocurrent.

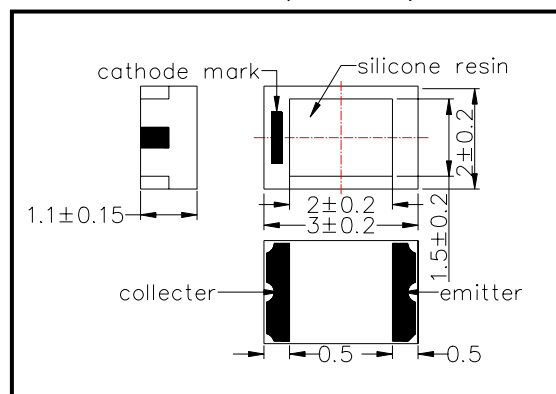
This phototransistor consists of a chip with 0.6x0.6mm active area mounted in a ceramic package and covered with silicone.

This device exhibits a half angle of sensitivity  $\pm 40^\circ$  and response time of 20us.

### ◆ Specifications

- 1) Product Name SMD Type Photo Transistor
- 2) Type No. PT008-SMC
- 3) Chip
  - (1) Chip Size 0.8mmx0.8mm
  - (2) Active Area 0.6mmx0.6mm
- 4) Package
  - (1) Type Ceramics
  - (2) Resin Material Silicone

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Collector-Emitter Breakdown Voltage	V <sub>CEO</sub>	30	V
Emitter-Collector Breakdown Voltage	V <sub>ECO</sub>	5	V
Collector Current	I <sub>C</sub>	10	mA
Collector Dissipation	P <sub>C</sub>	50	mW
Operating Temperature	T <sub>OPR</sub>	-25 ~ +125	°C
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C
Soldering Temperature	T <sub>SOL</sub>	240	°C

‡Soldering condition: Soldering condition must be completed within 2 seconds at 240°C

### ◆ Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	unit
Photo Current	I <sub>L</sub>	V <sub>CE</sub> =5V, L=1000Lx	1	3		mA
Collector Dark Current	I <sub>D</sub>	V <sub>CE</sub> =5V			200	nA
Collector Emitter Satu. Voltage	V <sub>CE(S)</sub>	I <sub>C</sub> =2mA, L=1000Lx			0.3	V
Spectral Responsivity (Peak)	P			900		nm
Half Angle of Sensitivity				±40		deg.
Rise/Fall Time(10%~90%)	t <sub>r</sub>	R <sub>L</sub> =1KΩ, V <sub>CE</sub> =5V		20		us
	t <sub>f</sub>	I <sub>C</sub> =1mA		20		us