

Lead (Pb) Free Product RoHS compliant

PT010-33 mold type Phototransistor

PT010-33 is an epoxy mold type phototransistor featuring high photo current.

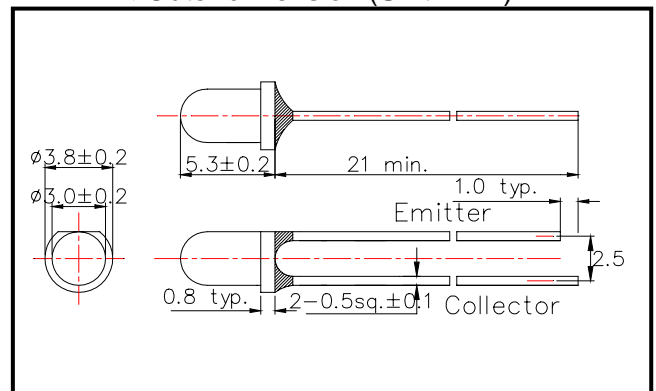
This phototransistor consists of a chip with 0.8*0.8mm active area mounted on a lead frame with a $\Phi 3$ clear epoxy lens.

This device exhibits a half angle of sensitivity $\pm 25^\circ$ and response time of 8us.

◆ Specifications

- | | |
|--------------------|----------------------------|
| 1) Product Name | Mold type Photo Transistor |
| 2) Type No. | PT010-33 |
| 3) Chip | |
| (1) Chip Size | 1mm*1mm |
| (2) Active Area | 0.8mm*0.8mm |
| 4) Package | |
| (1) Type | $\Phi 3$ Epoxy Mold |
| (2) Resin Material | Clear Epoxy Resin |
| (3) Lead Frame | Soldered (Pb-free) |

◆ Outer dimension (Unit : mm)



◆ Absolute Maximum Ratings [Ta=25°C]

| Item | Symbol | Maximum Rated Value | Unit |
|-------------------------------------|------------------|---------------------|------|
| Collector-Emitter Breakdown Voltage | V _{CEO} | 10 | V |
| Emitter-Collector Breakdown Voltage | V _{ECO} | 5 | V |
| Collector Current | I _C | 10 | mA |
| Collector Dissipation | P _C | 50 | mW |
| Operating Temperature | T _{OPR} | -25 ~ +100 | °C |
| Storage Temperature | T _{STG} | -30 ~ +125 | °C |
| Soldering Temperature | T _{SOL} | 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 _L | V _{CE} =5V, L=1000Lx | 5 | 10 | | mA |
| Collector Dark Current | I _D | V _{CE} =5V | | | 100 | nA |
| Collector Emitter Satu. Voltage | V _{CE(S)} | I _C =2mA, L=1000Lx | | | 0.3 | V |
| Spectral Responsivity (Peak) | P | | | 900 | | nm |
| Half Angle of Sensitivity | | | | ±25 | | deg. |
| Rise/Fall Time(10%~90%) | t _r | R _L =1K Ω , V _{CE} =5V | | 8 | | us |
| | t _f | I _C =1mA | | 8 | | us |