

PD032-01 mold type PIN-Photodiode

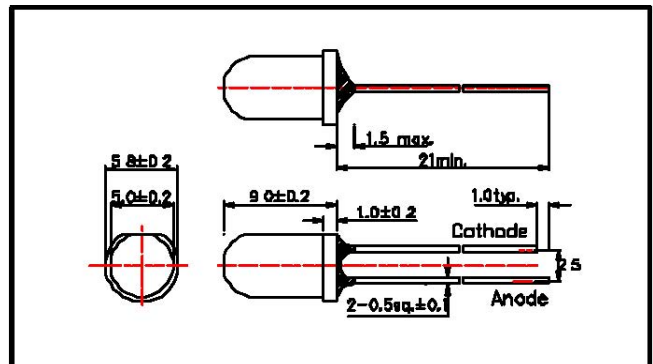
PD032-01 is a PIN-photodiode featuring excellent responsivity of 50 ns and high photocurrent. This PIN-photodiode consists of a large chip with 2.8 x 2.8 mm² active area mounted on a lead frame with a clear epoxy lens. These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of ±25 degrees.

Specifications

| | |
|--------------|---------------------------|
| Product name | Mold type PIN-Photodiode |
| Type No. | PD032-01 |
| Chip | Si |
| Chip size | 3.2 x 3.2 mm ² |
| Active area | 2.8 x 2.8 mm ² |
| Package | 5 mm clear epoxy |
| Type | Lead frame |

Resin material clear epoxy

outer dimension (unit: mm)



Absolute Maximum Ratings [Ta = 25°C]

| Item | Symbol | Maximum Rated Value | Unit |
|---------------------------|--------------------|---------------------|------|
| Reverse Breakdown Voltage | V _{(BR)R} | 170 | V |
| 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 |
|------------------------------|------------------|---|---------|---------|---------|------|
| Reverse Photo Current | I _L | V _R =10V, L=1000Lx | | 100 | | uA |
| Reverse Dark Current | I _D | V _R =10V | | 5 | 10 | nA |
| Open Circuit Voltage | V _{OC} | V _R =10V, L=1000Lx | | 350 | | mV |
| Spectral Responsivity (Peak) | I _P | | | 900 | | nm |
| Half Angle of Sensitivity | Q _{1/2} | | | ±25 | | deg. |
| Total Capacitance | C _T | V _R =10V, f=1MHz | | 25 | | pF |
| Rise/Fall Time(10%~90%) | t _r | R _L =1k, V _R =10V | | 50 | | ns |
| | t _f | | | 50 | | ns |