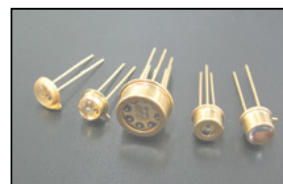




IPD14-12-5T

TECHNICAL DATA

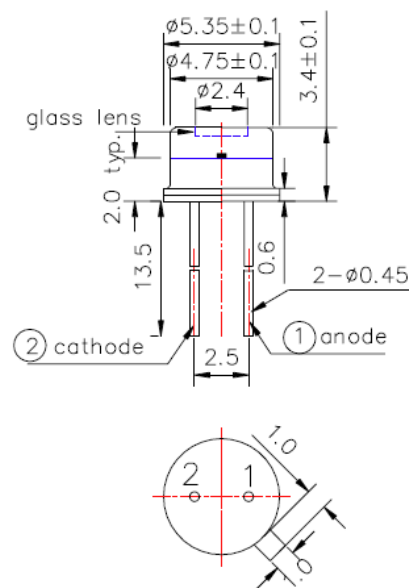


Silicone PD, TO package

IPD14-12-5T is an InGaAs PIN-photodiode containing a large chip with 0.35mm² active area, mounted on a TO-18 stem and hermetical sealed by metal can with flat glass window.

Specifications

- Spectral Responsivity: 1000-1600 nm
- Active Area: 0,35 x 0,35 mm
- Package: TO-18
- Lens: Flat window glass



(Unit: mm)

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)

| Item | Symbol | Value | Unit |
|--------------------------------------|-------------|--------------|------|
| Reverse Breakdown Voltage | $V_{(BR)R}$ | 10 | V |
| Operating Temperature | T_{opr} | -25 ... +90 | °C |
| Storage Temperature | T_{stg} | -30 ... +100 | °C |
| Soldering Temperature * ¹ | T_{sol} | 260 | °C |

*¹ must be completed within 3 seconds.

Electro-Optical Characteristics

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|------------------------------|----------------|----------------------------|------|----------|------|---------------|
| Photo Responsivity | R_E | $V_R=0V, \lambda_P=1450nm$ | - | 0,9 | - | A/W |
| Photo Current | I_L | $V_R=0V, \lambda_P=1450nm$ | 10 | 14 | - | μA |
| Dark Current | I_D | $V_R=1V$ | - | - | 100 | nA |
| Open Circuit Voltage | V_{OC} | $V_R=10V, L=1000Lx$ | - | 410 | - | mV |
| Spectral Responsivity (Peak) | λ_P | | 1000 | | 1600 | nm |
| Half Angle of Sensitivity | $\Theta_{1/2}$ | $V_R=0V$ | | ± 40 | | deg |
| Total Capacitance | C_T | $V_R=1V, f=1MHz$ | | 20 | | pF |
| Rise Time (10-90%) | t_r | $R_L=1K\Omega, V_R=1V$ | | 10 | | ns |
| Fall Time (10-90%) | t_f | | | 5 | | ns |

Note: The above specifications are for reference purpose only and subjected to change without prior notice.