

Lead ( Pb ) Free Product – RoHS Compliant

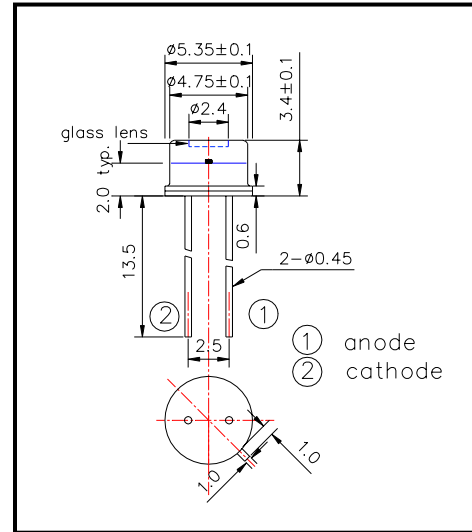
# PD015T52 Metal Stem Type PIN Photo-Diode

PD015T52 is a PIN-photodiode featuring excellent responsibility and high photocurrent. This PIN-photodiode consists of a large chip with 1.3x1.3mm active area mounted on the TO-18 stem and is hermetical sealed by metal can with flat lens of  $\Phi 2.4$ . These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of  $\pm 45^\circ$

### ◆ Specifications

- 1) Product Name Metal Stem Type Photo-Diode
- 2) Type No. PD015T52
- 3) Chip
  - (1) Chip Size 1.5mmx1.5mm
  - (2) Active Area 1.3mmx1.3mm
- 4) Package
  - (1) Type TO-18
  - (2) Lens Glass Flat Lens  $\Phi 2.4$
  - (3) Cap Gold Plated

### ◆ 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 <sub>OPR</sub>	-25 ~ +100	°C
Storage Temperature	T <sub>STG</sub>	-30 ~ +125	°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
Reverse Photo Current	I <sub>L</sub>	V <sub>R</sub> =10V, L=1000Lx		15		uA
Reverse Dark Current	I <sub>D</sub>	V <sub>R</sub> =10V			10	nA
Open Circuit Voltage	V <sub>OC</sub>	V <sub>R</sub> =10V, L=1000Lx		410		mV
Spectral Responsivity (Peak)	$\lambda_P$			900		nm
Half Angle of Sensitivity	$\theta_{1/2}$			$\pm 45$		deg.
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> =10V, f=1MHz		6		pF
Rise/Fall Time(10% ~ 90%)	t <sub>r</sub>	R <sub>L</sub> =1K $\Omega$ , V <sub>R</sub> =10V		10		ns
	t <sub>f</sub>			10		ns