

Lead (Pb) Free Product – RoHS Compliant

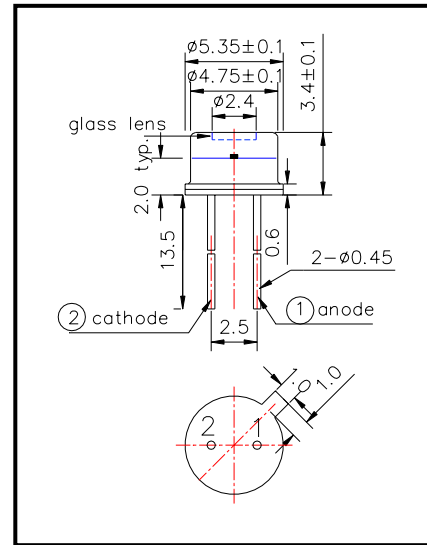
PD018T52 Stem type photo-diode

PD018T52 is a PIN-photodiode featuring excellent responsibility and high photocurrent. This PIN-photodiode consists of a large chip with 1.6x1.6mm active area mounted on the TO-18 stem and is hermetical sealed by metal can with flat lens. 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 Stem Type Photo-Diode
- 2) Type No. PD018T52
- 3) Chip
- (1) Chip Size 1.8mmx1.8mm
- (2) Active Area 1.6mmx1.6mm
- 4) Package
- (1) Type TO-18
- (2) Lens Glass Flat Lens
- (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	TOPR	-25 ~ +100	°C
Storage Temperature	TSTG	-30 ~ +125	°C
Soldering Temperature	TSOL	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	IL	VR=10V, L=1000Lx		15		uA
Reverse Dark Current	ID	VR=10V			10	nA
Open Circuit Voltage	VOC	VR=10V, L=1000Lx		410		mV
Spectral Responsivity (Peak)	λ_P			900		nm
Half Angle of Sensitivity	$\theta_{1/2}$			± 45		deg.
Total Capacitance	CT	VR=10V, f=1MHz		18		pF
Rise/Fall Time(10%~90%)	tr tf	RL=1K, VR=10V		30 30		ns ns