

Lead (Pb) Free Product – RoHS Compliant

PD018T00 Metal Stem Type PIN Photo-Diode

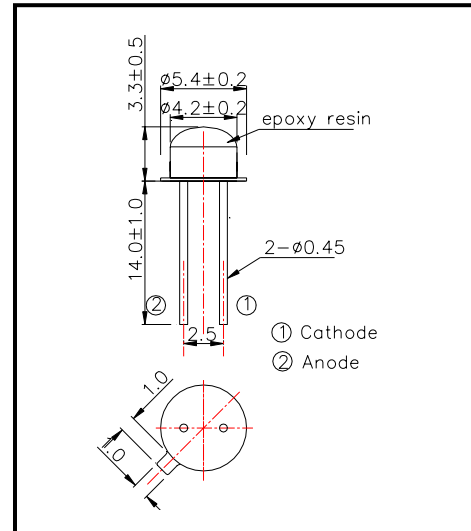
PD018T00 is a PIN-photodiode featuring excellent responsivity and high photocurrent. This PIN-photodiode consists of a large chip with 1.6x1.6mm active area mounted on the TO-18 stem and is sealed with epoxy resin

These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of $\pm 60^\circ$

◆ Specifications

- 1) Product Name Metal Stem Type Photo-Diode
- 2) Type No. PD018T00
- 3) Chip
 - (1) Chip Size 1.8mmx1.8mm
 - (2) Active Area 1.6mmx1.6mm
- 4) Package
 - (1) Type TO-18
 - (2) Lens Epoxy Resin Lens

◆ 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		30		uA
Reverse Dark Current	I _D	V _R =10V			10	nA
Open Circuit Voltage	V _{OC}	V _R =10V, L=1000Lx		410		mV
Spectral Responsivity (Peak)	λ_P			900		nm
Half Angle of Sensitivity	$\theta_{1/2}$			± 60		deg.
Total Capacitance	C _T	V _R =10V, f=1MHz		18		pF
Rise/Fall Time(10% ~ 90%)	t _r	R _L =1K Ω , V _R =10V		30		ns
	t _f			30		ns