

PD010T00 Metal Stem Type PIN Photo-Diode

PD010T00 is a PIN-photodiode featuring excellent responsibility of 10ns and high photocurrent.

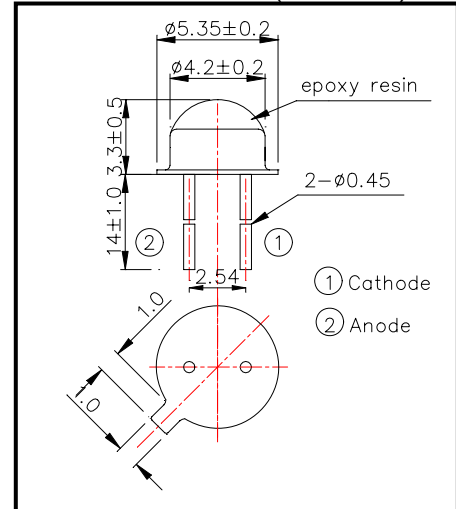
This PIN-photodiode consists of a large chip with 0.8mm*0.8mm active area mounted on the TO-18 stem and is sealed with epoxy resin

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. PD010T00
- 3) Chip
 - (1) Chip Size 1.0mm*1.0mm
 - (2) Active Area 0.8mm*0.8mm
- 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	$V_R=10V, L=1000Lx$		10		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	$V_R=10V, f=1MHz$		6		pF
Rise/Fall Time(10% ~ 90%)	t_r	$R_L=1K\Omega, V_R=10V$		10		ns
	t_f			10		ns