

PD018D00

stem type Photodiode

PD018D 00 is a PIN-photodiode featuring excellent responsivity and high photocurrent.

This PIN-photodiode consists of a large chip with 1.6mm*1.6mm active area mounted on the TO-18 (3pin) 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 ± 60 degree.

†Specifications

1)Product No.	stem type PIN-Photodiode	Outer Dimension
2)type No.	PD018D00	
3)Chip		
(1)Chip size	1.8mm*1.8mm	
(2)Active area	1.6mm*1.6mm	
4)Package		
(1)type	TO-18 (3pin)	
(2)Lens	Epoxy resin	

Technical drawing of the PD018D00 photodiode showing side and top views with dimensions.

Side View Dimensions:

- Top width: 1.4 ± 0.2
- Top thickness: 1.2 ± 0.5
- Stem diameter: 0.8 ± 0.2
- Stem length: 1.35
- Base diameter: 0.9
- Base thickness: 0.45 ± 0.05
- Pin diameter: 0.25
- Pin length: 0.1

Top View Dimensions:

- Overall diameter: 1.8
- Active area diameter: 1.6
- Pin diameter: 0.25
- Pin length: 0.1

Legend:

- $\Phi 0.25$ Pin
- $\Phi 0.9$ Base
- $\Phi 1.8$ Overall diameter

†Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Reverse Broken down Voltage	V(BR)R	170	V	Ta=25 °C
Operating Temperature e	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		20		uA
Reverse Dark Current	Id	VR=10V			10	nA
Open Circuit Voltage	Voc	VR=10V L=1000LX		410		mV
Spectral Responsibility (peak)				900		nm
Half Angle Sensitivity				±60		deg.
Total capacitance	Ct	VR=10V f=1MHz		18		pF
Rise / Fall time (10%-90%)	Tr	RL=1k VR=10V		10		ns
	Tf			10		ns

EPITEX INC.: 4, Nishiaketa-cho, Higashi-Kuijo, Minami-Ku, Kyoto, Japan

Tel:++81-75-682-2338 Fax:++81-75-682-2267

e-mail: sales-dep@epitex.com <http://www.epitex.com>