USHIO Applying Light to Life



Data Sheet

2020.10

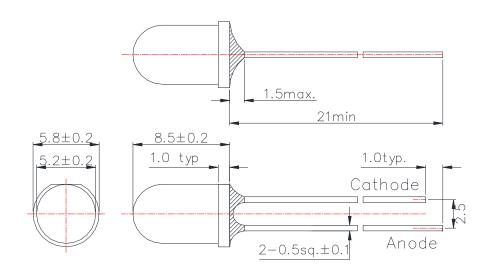
PRELIMINARY

epitex

PD010-02

Mold type PIN-Photodiode

Outline and Internal Circuit



(Unit: mm)

Features

• Chip Material : Si

Chip Dimension : 1000um * 1000um

• Active Area: 800um * 800um

• Number of Chips : 1pce

Package Type : φ5mm clear molding
Lead Frame : Soldered (Lead Free)

• Lens : Epoxy Resin

Application

Absolute Maximum Ratings (Tc=25°C)

Item	Symbol	Ratings	Unit
Reverse Breakdown Voltage	VR	170	V
Operating Temperature	Topr	-25 ~ +100	°C
Storage Temperature	Tstg	-30 ~ +100	°C
Soldering Temperature	TSOL	265	°C

[‡]Soldering condition : Soldering condition must be completed with 3 seconds at 265°C.

Optical and Electrical Characteristics (Tc=25°C)

(*: 100% testing, **: reference value)

Parameter	Symbol	Min	Тур	Max	Unit	Test Condition
Photo Current	IL		20		uA	VR=10V**
Dark Current	ID			1	uA	VR=10V*
Open Circuit Voltage	Voc		410		mV	VR=0V**
Spectral Responsivity (Peak)	λρ		900		nm	VR=10V**
Viewing Half Angle	θ1/2		±14		deg.	VR=0V**
Total Capacitance	Ст		21		pF	VR=5V f=1MHz**
Rise Time	tr		10		ns	VR=0V RL=1MΩ**
Fall Time	tf		10		ns	VR=0V RL=1MΩ**

[‡] Measured by USHIO's calibrated tool.



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