

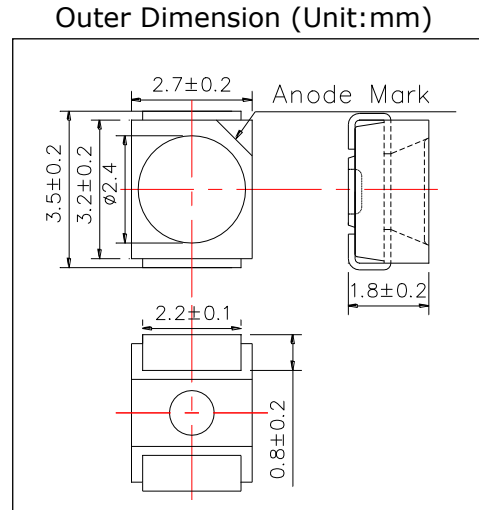
PD006-SMT(B)
SMT Type Pin-Photodiode

PD006-SMT(B) is a surface mount type PIN-Photodiode featuring excellent responsivity of 6 ns and high photocurrent.

This PIN-Photodiode consists of a large chip with 0.44x0.44mm active area mounted in a PPA black color resin package and covered with epoxy resin. This device exhibits a half angle of sensitivity $\pm 30^\circ$.

<Specifications>

1. Product Name: SMT Type Pin-Photodiode
2. Type Number: PD006-SMT(B)
3. Chip:
 - Chip Size: 0.6mm x 0.6mm
 - Active Area: 0.44mm x 0.44mm
4. Package
 - lead Frame Die: Silver Plated
 - Resin: PPA Black Color Resin
 - Lens: Epoxy Resin



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Reverse Breakdown Voltage	VR	170	V
Operating Temperature	TOPR	-25 ~ +100	°C
Storage Temperature	TSTG	-30 ~ +125	°C
Soldering Temperature*	TSOL	255	°C

* Soldering condition must be completed within 10 seconds at 255°C

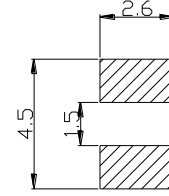
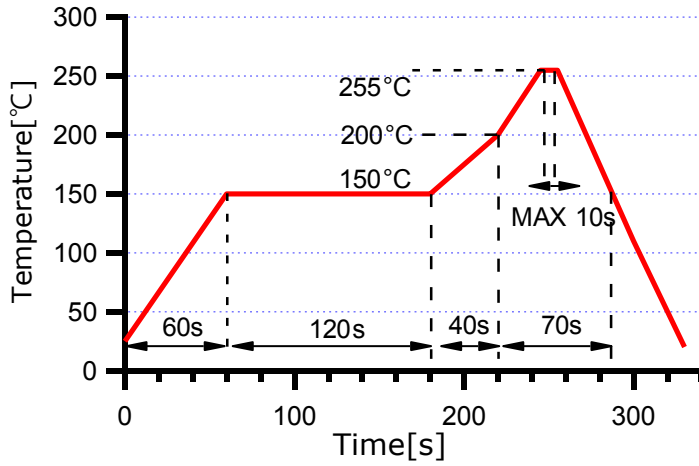
Electro-Optical Characteristics [Ta=25°C typ.]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Reverse Photo Current	IL	VR=10V, L=1000Lx		4		uA
Reverse Dark Current	ID	VR=10V			10	nA
Open Circuit Voltage	VOC	VR=10V, L=1000Lx		390		mV
Spectral Responsibility(Peak)	A/W	$\lambda P=900nm$		0.6		
		$\lambda P=635nm$		0.4		
Half Angle of Sensitivity	$\theta_{1/2}$			± 30		deg
Total Capacitance	CT	VR=10V, f=1MHz		6		pF
Rise Time	tr	RL=1k Ω , VR=10V		6		ns
Fall Time	tr			6		



SMD Application

IR-Reflow Soldering Profile for lead free soldering

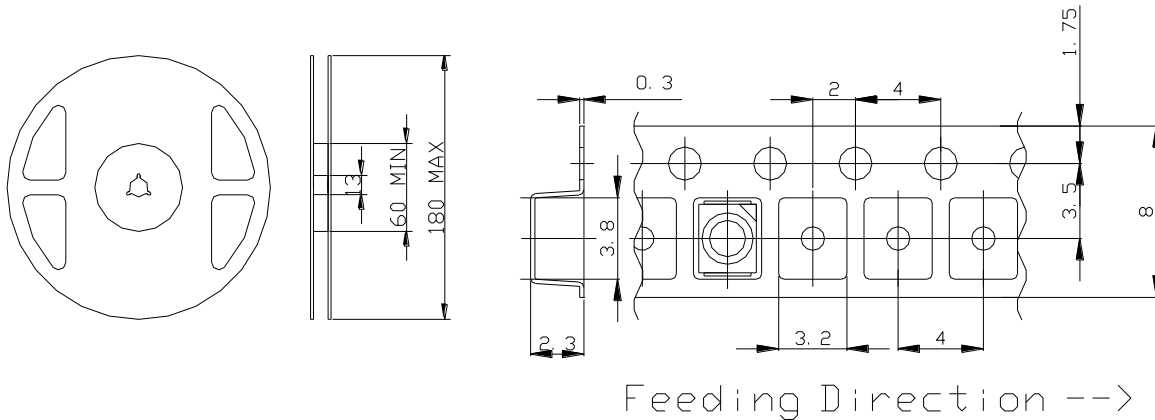
Recommended Land Layout (Unit:mm)



Don't put stress on SMD and a circuit board after soldering.

SMD Packing

Tape and Reel Dimensions (Unit:mm)



Wrapping

Moisture barrier bag aluminum laminated film with a desiccant to keep out the moisture absorption during the transportation and storage.