

## PD006-SMT SMT Type PIN-Photodiode

PD006-SMT is a surface mount type PIN-photodiode featuring excellent responsibility of 6ns and high photocurrent.

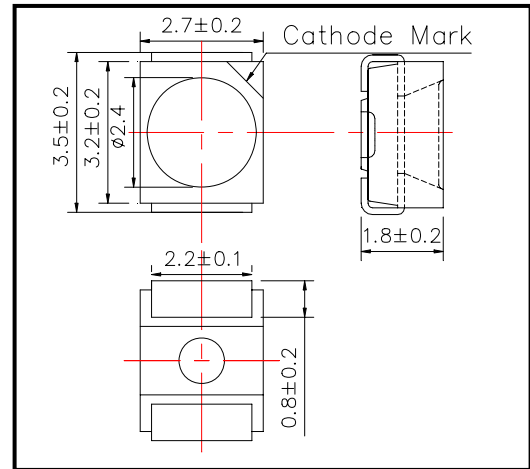
This PIN-photodiode consists of a large chip with 0.44x0.44mm active area mounted in a PPA Resin package and covered with epoxy resin.

This device exhibits a half angle of sensitivity  $\pm 40^\circ$ .

◆ Outer dimension (Unit: mm)

◆ Specifications

- 1) Product Name SMT Type Pin-Photodiode
- 2) Type No. PD006-SMT
- 3) Chip
  - (1) Chip Size 0.6mmx0.6mm
  - (2) Active Area 0.44mmx0.44mm
- 4) Package
  - (1) Lead Frame Die Silver Plated
  - (2) Package Resin PPA Resin
  - (3) Lens Epoxy Resin



◆ 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	$I_L$	$V_R=10V, L=1000Lx$		6		uA
Reverse Dark Current	$I_D$	$V_R=10V$			10	nA
Open Circuit Voltage	$V_{OC}$	$V_R=10V, L=1000Lx$		390		mV
Spectral Responsivity	$A/W$	$\lambda_P=900nm$		0.6		-
		$\lambda_P=635nm$		0.4		-
Half Angle of Sensitivity	$\theta_{1/2}$			$\pm 40$		deg.
Total Capacitance	$C_T$	$V_R=10V, f=1MHz$		6		pF
Rise/Fall Time (10% ~ 90%)	$t_r$	$R_L=1K\Omega, V_R=10V$		6		ns
	$t_f$			6		ns