

Lead ( Pb ) Free Product – RoHS Compliant

# PD006-SMC SMD Type PIN-Photodiode

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

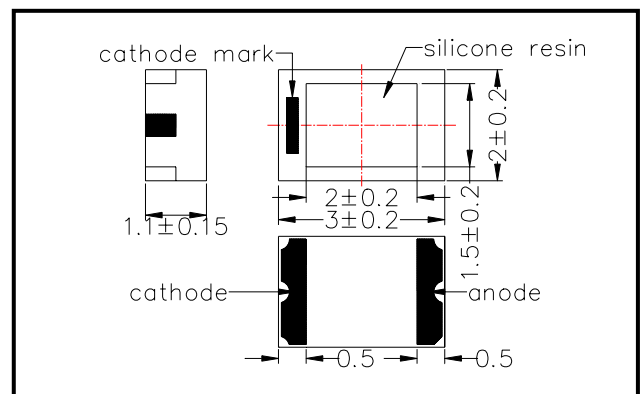
This PIN-photodiode consists of a large chip with 0.44x0.44mm active area mounted in a ceramic package and covered with silicone.

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

### ◆ Specifications

- |                    |                         |
|--------------------|-------------------------|
| 1) Product Name    | SMD Type Pin-Photodiode |
| 2) Type No.        | PD006-SMC               |
| 3) Chip            |                         |
| (1) Chip Size      | 0.6mmx0.6mm             |
| (2) Active Area    | 0.44mmx0.44mm           |
| 4) Package         |                         |
| (1) Type           | Ceramics                |
| (2) Resin Material | Silicone                |

### ◆ 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	$I_L$	$V_R=10V, L=1000Lx$		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 (Peak)	$\lambda_P$			900		nm
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