

PD006-SMC SMD Type PIN-Photodiode

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

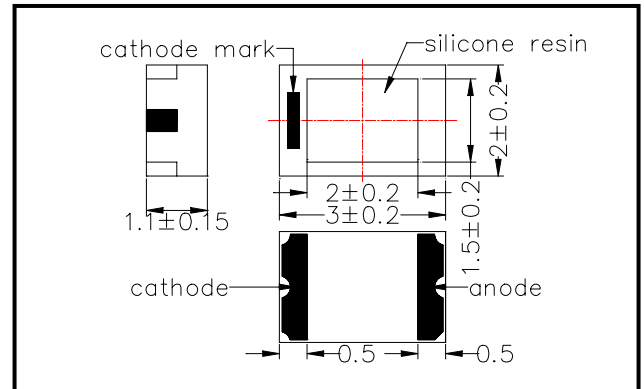
This PIN-photodiode consists of a large chip with 0.44x0.44mm active area mounted in a ceramic package and covered with silicone.

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)	λ_P			900		nm
Half Angle of Sensitivity	$\theta_{1/2}$			± 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