

PD010-SMP GULL WING Type PIN-Photodiode

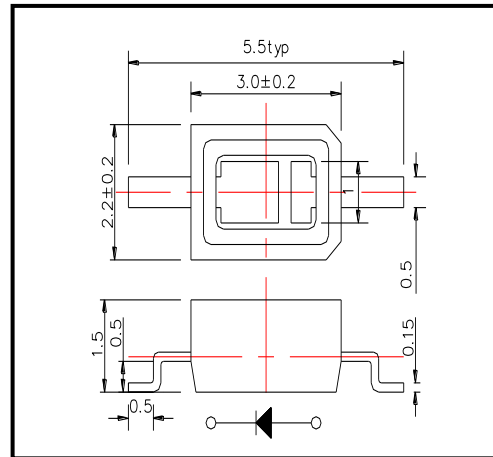
PD010-SMP is a PIN-photodiode featuring excellent responsivity and high photocurrent. This PIN-photodiode consists of a large chip with 0.8x0.8mm active area mounted on the lead frame with reflector and is sealed with epoxy resin.

These devices are designed to be easy of setting up optically with a wide half angle of sensitivity $\pm 60^\circ$.

◆ Specifications

- 1) Product Name GULL WING type PIN PD
- 2) Type No. PD010-SMP
- 3) Chip
 - (1) Chip Size 1.0mmx1.0mm
 - (2) Active Area 0.8mmx0.8mm
- 4) Package
 - (1) Type Lead frame with Reflector
 - (2) Resin Material Epoxy Resin

◆ 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 ~ +90	°C
Storage Temperature	T _{STG}	-30 ~ +100	°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		14		uA
Reverse Dark Current	I _D	V _R =10V			10	nA
Open Circuit Voltage	V _{OC}	V _R =10V, L=1000Lx		410		mV
Spectral Responsivity (Peak)	λ _P			900		nm
Half Angle of Sensitivity	θ 1/2			±60		deg.
Total Capacitance	C _T	V _R =10V, f=1MHz		6		pF
Rise/Fall Time(10% ~ 90%)	t _r	R _L =1KΩ, V _R =10V		10		ns
	t _f			10		ns