

## PD010-02 mold type PIN-Photodiode

PD010-02 is a PIN-photodiode featuring excellent responsibility of 10ns and high photocurrent.

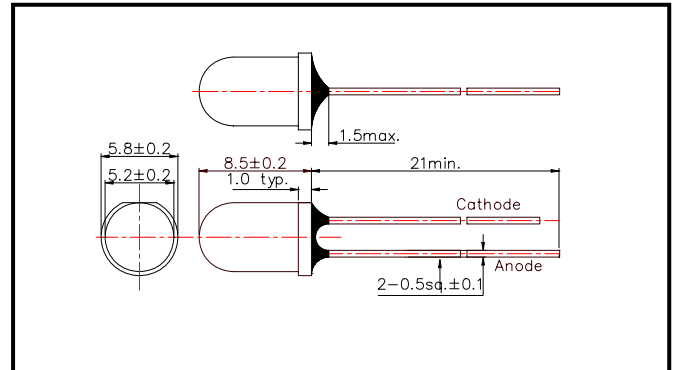
This PIN-photodiode consists of a large chip with 0.8x0.8mm active area mounted on a lead frame with a  $\Phi 5$  clear epoxy lens.

These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of  $\pm 14$  degrees.

### ◆ Specifications

- 1) Product name    Mold type PIN-Photodiode
- 2) Type No.        PD010-02
- 3) Chip
  - (1) Chip size        1.0mmx1.0mm
  - (2) Active area     0.8mmx0.8mm
- 4) Package
  - (1) Type             Lead frame
  - (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 ~ +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	$I_L$	$V_R=10V, L=1000Lx$		20		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)	$\lambda_P$			900		nm
Half Angle of Sensitivity	$\theta_{1/2}$			$\pm 14$		deg.
Total Capacitance	$C_T$	$V_R=10V, f=1MHz$		6		pF
Rise/Fall Time(10%~90%)	$t_r$	$R_L=1K\Omega, V_R=10V$		10		ns
	$t_f$			10		ns