

PD010-02B mold type PIN-Photodiode with cut filter

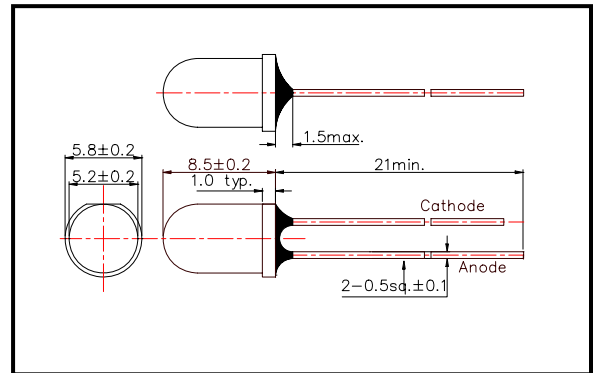
PD010-02B is a PIN-photodiode featuring excellent responsibility of 10ns and high photocurrent.

This PIN-photodiode consists of a large chip with 0.8x0.8mm active area mounted on a lead frame with a $\phi 5$ epoxy lens with visible cut off filter.

◆ Specifications

- 1) Product name Mold type PIN-Photodiode
- 2) Type No. PD010-02B
- 3) Chip
 - (1) Chip size 1.0mmx1.0mm
 - (2) Active area 0.8mmx0.8mm
- 4) Package
 - (1) Type Lead frame
 - (2) Resin material Epoxy with visible light cut filter

◆ 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	$V_R=10V, L=1000Lx$		18		μA
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		750	900	1100	nm
Half Angle of Sensitivity	$\theta_{1/2}$			± 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