

PD010-03 mold type PIN – Photodiode

PD010-03 is a PIN-photodiode featuring excellent responsibility of 10ns and high photocurrent.

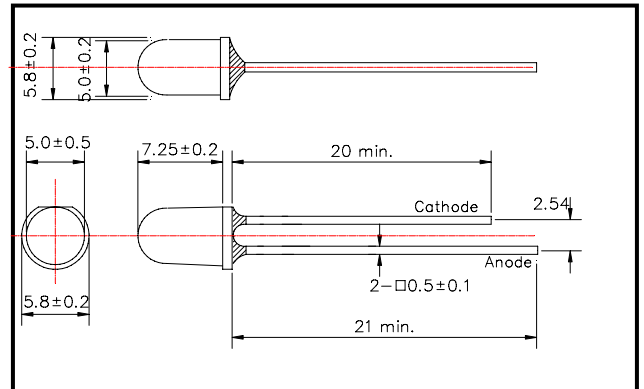
This PIN-photodiode consists of a large chip with 0.8×0.8mm active area mounted on a lead frame with a φ5 clear epoxy lens.

These devices are designed to be easy of setting up optically with a wide angle of half sensitivity of ±20 degrees.

◆ Specifications

- 1) product name epoxy mold type PIN-Photodiode
- 2) type No. PD010-03
- 3) chip
 - (1) chip size 1.0mm×1.0mm
 - (2) active area 0.8mm×0.8mm
- 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		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			900		nm
Half Angle of Sensitivity	Δθ			±20		deg.
Total Capacitance	C _T	V _R =10V, f=1MHz		6		pF
Rise/Fall Time (10% ~ 90%)	t _r t _f	R _L =1KΩ, V _R =10V		10		ns
				10		ns