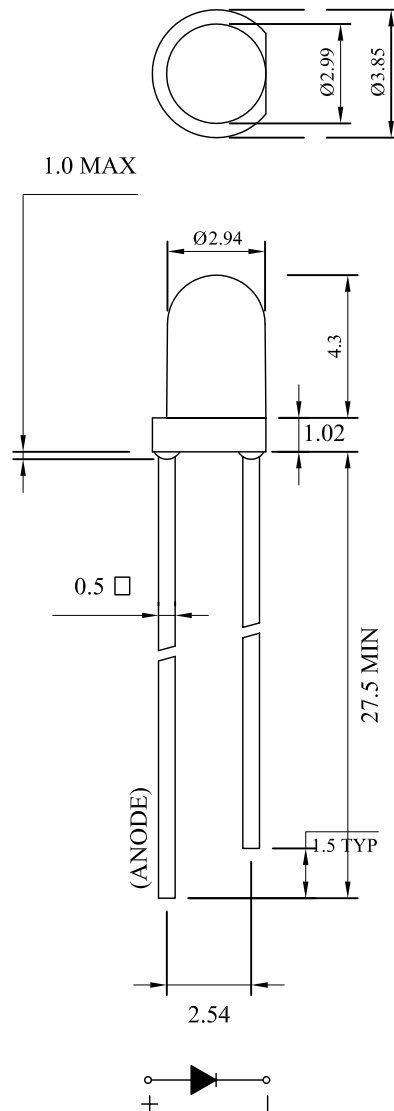


Description: 3mm Siclicon PIN Pnotodiode

Package Dimensions:



Part No	Material	Lens Color
PD	Silicon	Black

NOTES

- 1.All dimensions are in millimeters .
- 2.Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
- 3.Protruded resin under flange is 1.0mm max.
- 4.Lead spacing is measured where the leads emerge from the package.
- 5.Specifications are subject to change without notice.



Absolute Maximum Ratings at TA=25℃

Parameter	Symbol	Maximum Rating	Unit
Reverse Voltage	VR	32	V
Power Dissipation	PD	150	mW
Operation Temp.	Tamb	—25℃ to+85℃	
Storage Temp.	Tstg	—25℃ to+85℃	
Soldering Temp.(5s)	Tsd	260℃ for 5 seconds	

Opto-electrical Characteristics at TA=25℃

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Rang of Spectral Bandwidth	$\lambda_{0.5}$	840		1200	nm	Vs=5V Ev=0
Perk wavelength	λ_p		940		nm	
Open-Circuit Voltage	Voc		0.42		V	Ee=1mw/cm ² λ_p =940nm
Short-Circuit Current	Isc		10		uA	
Reverse Light Current	IL		12		uA	Ee=1mw/cm ² λ_p =940nm VR=5V
Dark Current	Id				nA	
Reverse Breakdown Voltage	BVR	32	150		V	Ee=0mw/cm ² IR=100uA
Rise/Fall Time	tr/tf		6/6	ns		Ee=0mw/cm ² IR=100uA
Controlled angle	$\Delta\theta$		30		deg	

1.Features:

- Fast response time
- High photo sensitivity
- Small junction capacitance



Typical Electrical / Optical Characteristics Curves
(25° C Ambient Temperature Unless Otherwise Noted)

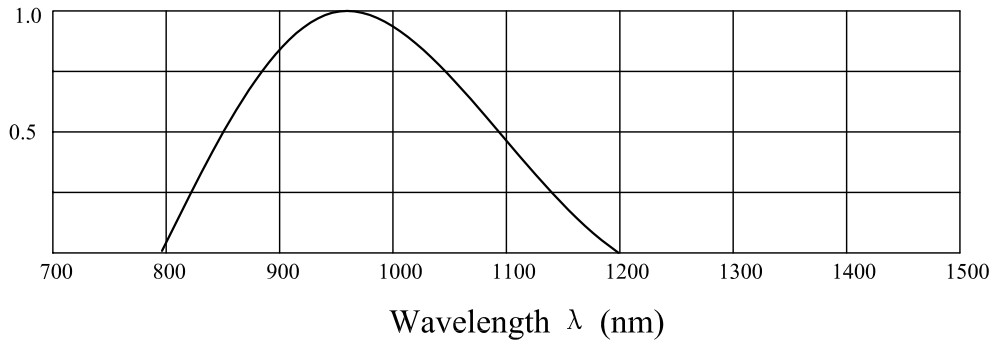
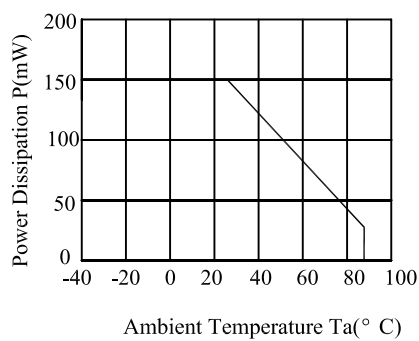
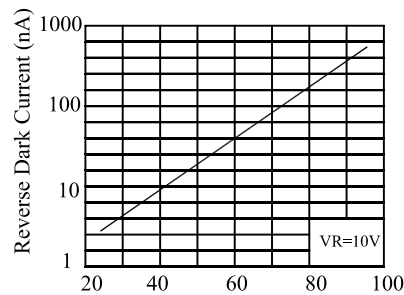


Fig. 1 Relative Intensity vs . Wavelength



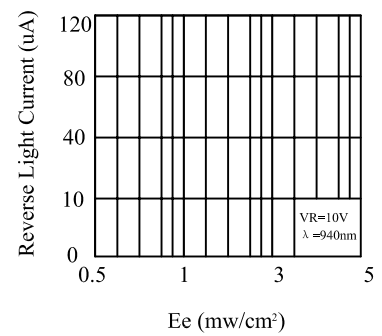
Ambient Temperature Ta(° C)

Fig.2 Power Dissipation vs Ambient Temperature



Ambient Temperature

Fig.3 Dark Current vs Ambient Temperature



Ee (mw/cm²)

Fig 4 Responce Time vs Load Resistance

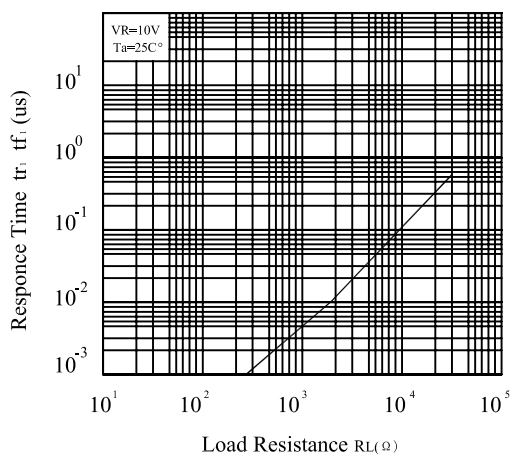
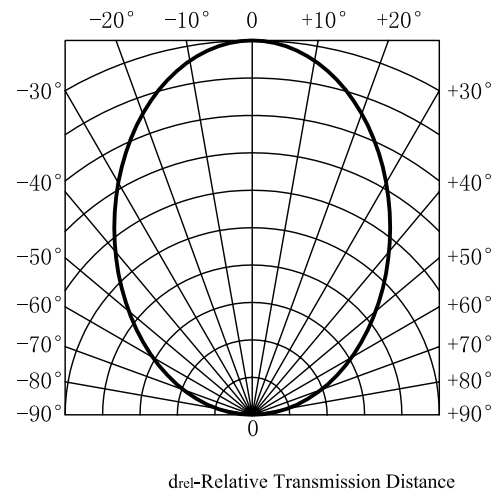


Fig.5 Responce Time vs Load Resistance



drel-Relative Transmission Distance

Fig.6 Spatial Distribution



CAUTIONS

1.Application

High speed photo detector

Camera

Optoelectronic switch

VCRs Video camera

Floppy

2. Cleaning

Use alcohol-based cleaing solvent such as isopropyl alcohol to clean the LEDs if necessary.

3.Lead Forming & Assembly

During lead froming, the leads shold be bent at point at least 3mm from the base of LED lens.

Do not use the base of the lead frame as a fulcrum during forming.

Lead forming must be done before soldering,at normal temperature.

During assembly on PCB, use minimum clinch force possible to avoid excessive mechanical stress.

4.Soldering

Recommended soldering conditions:

Soldering iron		Wave soldering	
Temperature	300 Max	Pre-heat	100 Max
Soldering time	3 sec.Max (one time only)	Pre-heat time	60sec.Max
		Solder wave	260 Max
		Soldering time	10sec.Max

Note:Excessive soldering temperature and/or time might result in deformation of the LED lens or catastrophic failure of the LED.

5.Protece Of ESD

Since the device is static sensitive,it is requested that anti-static measures should be taken on human body,all devices (including soldering iron) and equipment,machinery,desk and ground.