

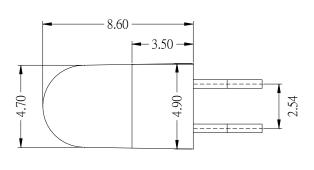


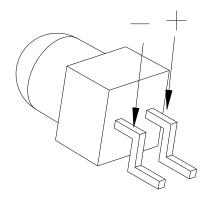


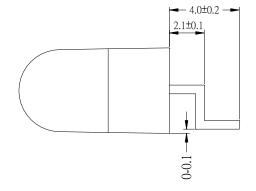
#### **Features**

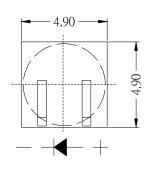
- ◆ Pb free product RoHS compliant
- ♦ High Photo Sensitivity
- ♦ Reliable and rugged
- ♦ Long life solid state reliability
- ♦ Sensitivity angle: 55 °

## Package Dimension









Part NO.	Chip Material	Lens Color
LG-05PD2D94Q-557K-B-T	Silicon	Black

#### **Notes:**

- 1. All dimensions are in millimeters.
- 2. Tolerance is ±0.20mm 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.

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#### Absolute Maximum Ratings at Ta=25℃

Parameter	MAX.	Unit	
Power Dissipation	150	mW	
Reverse Voltage	30	V	
Electrostatic Discharge (HBM)*3	8000	V	
Operating Temperature	-40 to +85		
Storage Temperature	-40°C to + 100°C		
IR Reflow Temperature	245 for 30 seconds		

#### 1. Storage

The storage ambient for the LEDs should not exceed 30 °C temperature or 70% relative humidity. It is recommended that LEDs out of their original packaging are used within three months.

For extended storage out of their original packaging, it is recommended that the LEDs be stored in a sealed container with appropriate desiccant or in desiccators with nitrogen ambient.

#### 2. Precautions in handling:

- When soldering, leave 2mm of minimum clearance from the resin to the soldering point.
- Dipping the resin to solder must be avoided.
- Correcting the soldered position after soldering must be avoided.
- In soldering, do not apply any stress to the lead frame particularly when heated.
- When forming a lead, make sure not to apply any stress inside the resin.
- Lead forming must be done before soldering.
- It is necessary to cut the lead frame at normal temperature.

#### 3. Caution in ESD:

Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

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### Electrical Optical Characteristics at Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNITS	TEST CONDITIONS
Range Of Spectral Bandwidth	0.5	840		1100	nm	
Reverse Light Current	$I_L$	65	84		μΑ	$V_{R}=5V$ $Ee=1mW/cm^{2}$ $=940nm$
Reverse Dark Current	$I_{\mathrm{D}}$			30	nA	V <sub>R</sub> =10V Ee=0mW/cm <sup>2</sup>

Reverse Voltage  $V_{(R)}$  30

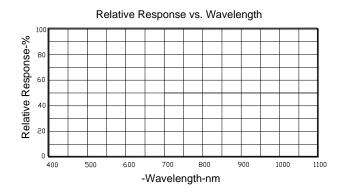
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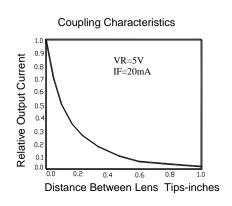


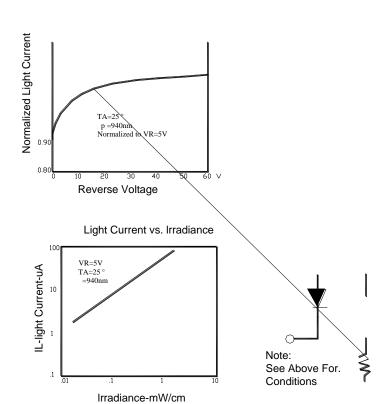


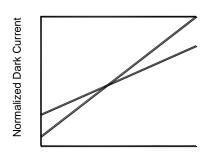


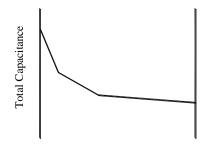
# Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)











nm

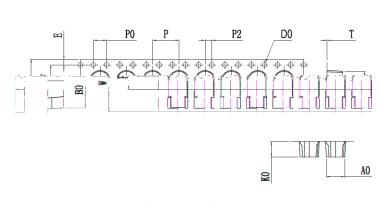
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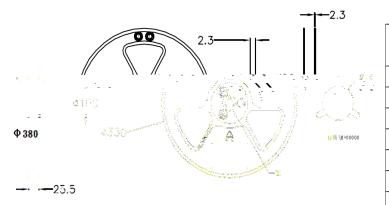
## Package

## **Package Dimensions**









Item	Specification				
Rem	Minmum	Maximum			
W	15.97	16.3			
Р	7.9	8.1			
E	1.65	1.85			
F	7.4	7.6			
D	1.5	1.6			
PO	3.9	4.1			
P0x10	39.8	40.2			
P2	1.9	2.1			
<b>A</b> 0	5.2	5.4			
ВО	10.6	10.8			
К0	4.8	5.0			

## **Notes:**

- 1.All dimensions in millimeters.
- 2.All dimensions meet EIA-481-C requirements.
- 3. Cover tape by a heat sealing manner.

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