

## 1.6mm Side Looking Infrared Emitting Diode IR968-8C

### Features

- Low forward voltage
- Peak wavelength  $\lambda_p=940\text{nm}$
- High reliability
- This product itself will remain within RoHS compliant version.

### Description

- The IR968-8C is a GaAlAs infrared emitting diode. The miniature side-facing device is a chip that emits radiation from the side of the clear package.

### Applications

- VCR
- Floppy disk drive
- Automatic stroboscope
- Cassette type recorder
- Optoelectronic switch
- Photo interrupter

## Device Selection Guide

Chip Materials	Lens Color
GaAlAs	Water Clear

## Absolute Maximum Ratings (Ta=25 °C)

Parameter	Symbol	Rating	Unit
Continuous Forward Current	$I_F$	50	mA
Peak Forward Current(*1)	$I_{FP}$	500	mA
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	-40 ~ +85	
Storage Temperature	$T_{stg}$	-40 ~ +100	
Soldering Temperature	$T_{sol}$	260	
Power Dissipation at (or below) 25 °C Free Air Temperature	$P_d$	75	mW

Notes: \*1: $I_{FP}$  Conditions--Pulse Width 100 $\mu$ s and Duty 1%.

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**Electro-Optical Characteristics (Ta=25 )**

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Collector Current	I <sub>c(on)</sub>	465	-	1274	μA	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
Peak Wavelength	λ <sub>p</sub>	-	940	-	nm	I <sub>F</sub> =20mA
Spectral Bandwidth	λ	-	45	-	nm	I <sub>F</sub> =20mA
View Angle	2θ1/2	-	25	-	Deg	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>	-	1.2	1.5	V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>	-	-	10	μA	V <sub>R</sub> =5V

**Rank**

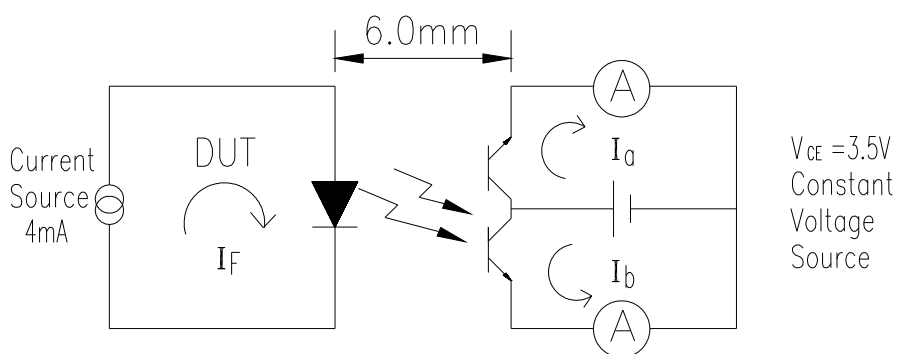
Unit : μA

Parameter	Symbol	Min	Max	Unit	Test Condition
6-1	I <sub>c(ON)</sub>	650	1274	μA	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
6-2	I <sub>c(ON)</sub>	465	750	μA	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V

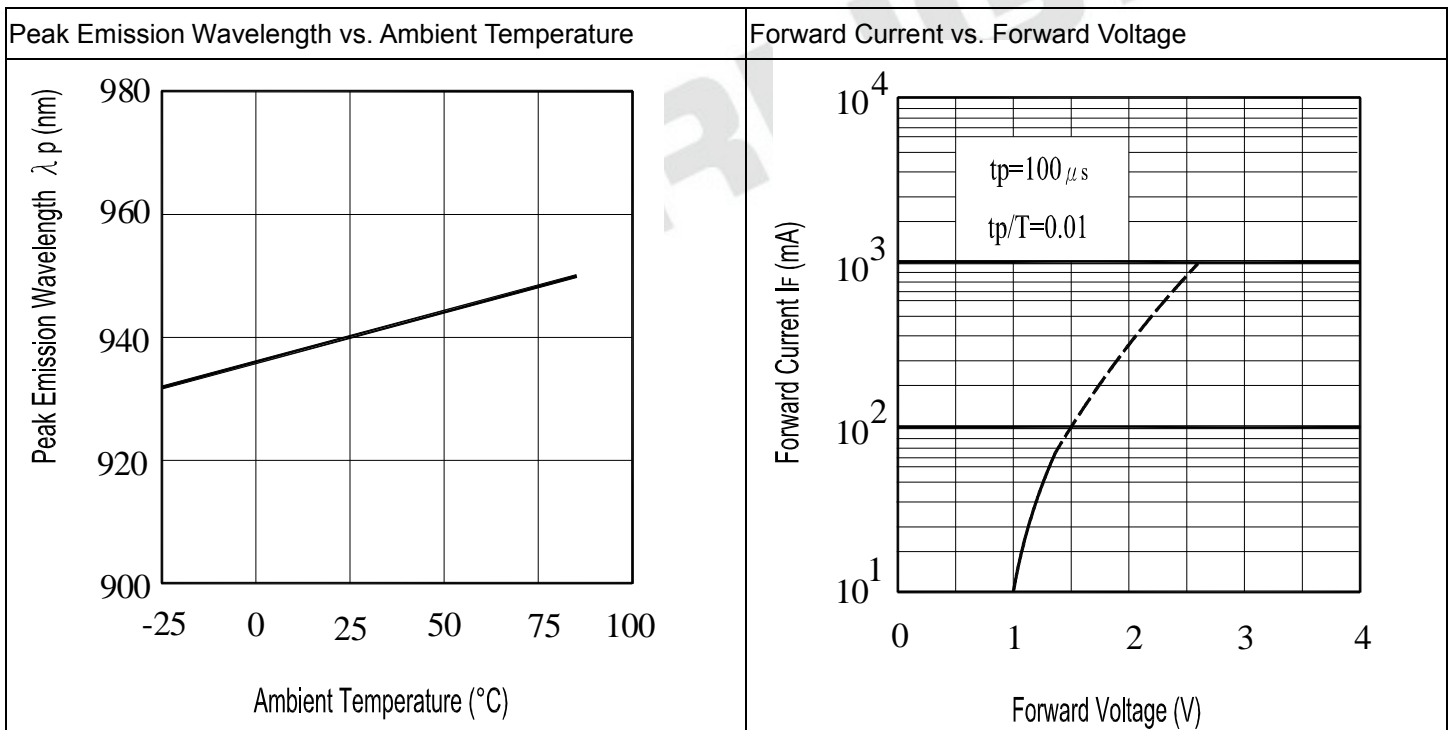
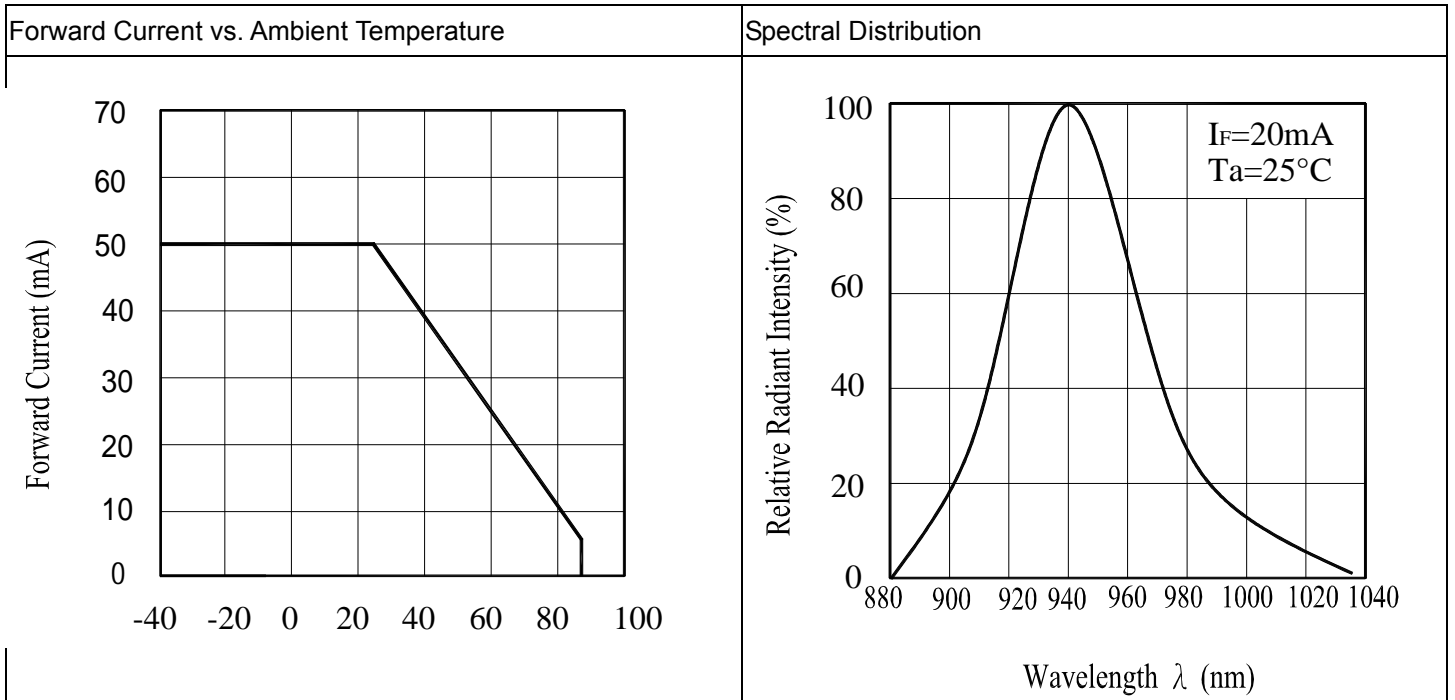
**Test Method For I<sub>c(ON)</sub>:**

Condition: I<sub>F</sub>=4mA, V<sub>CE</sub>=3.5V

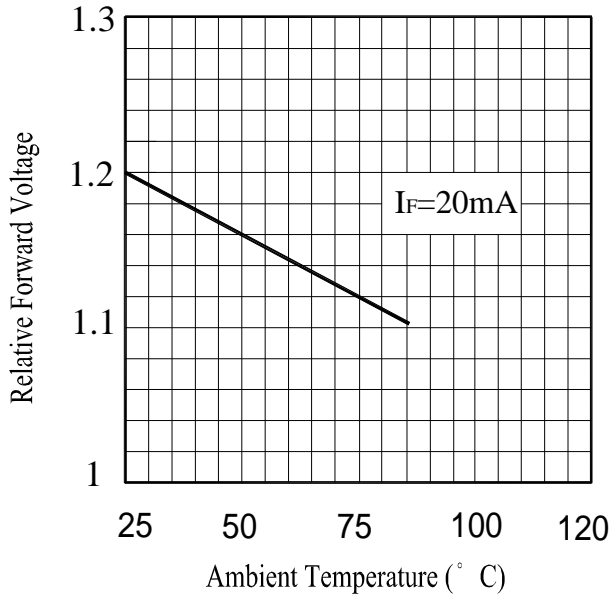
The intensity testing method of Infrared emitting diode:



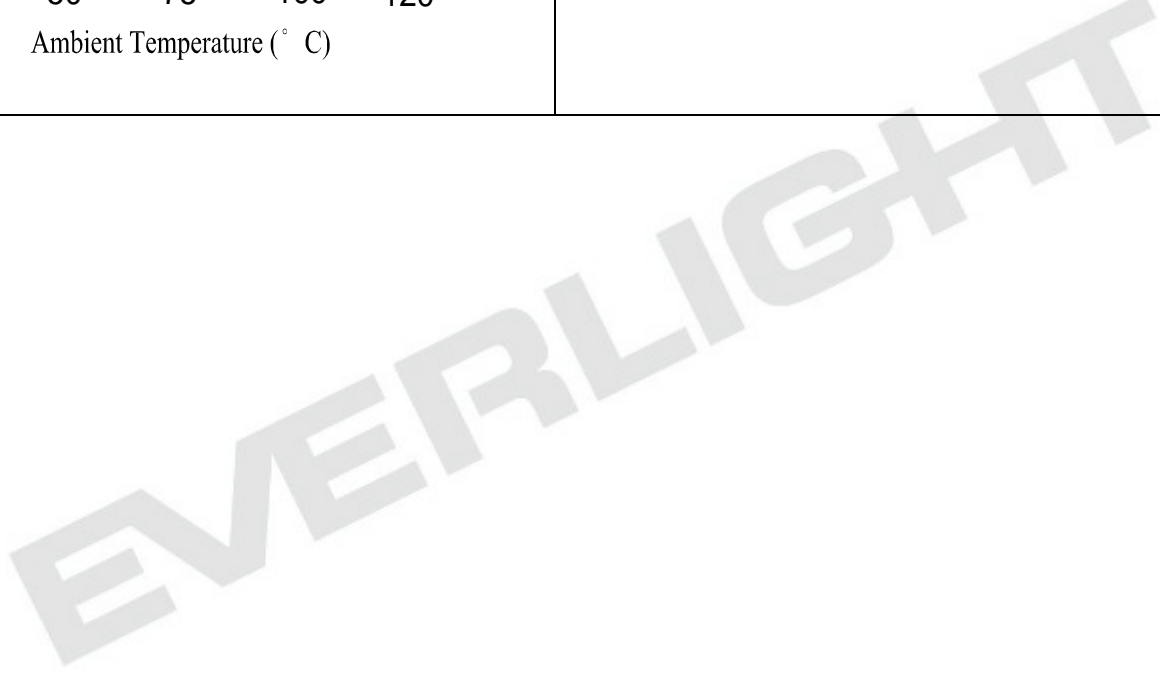
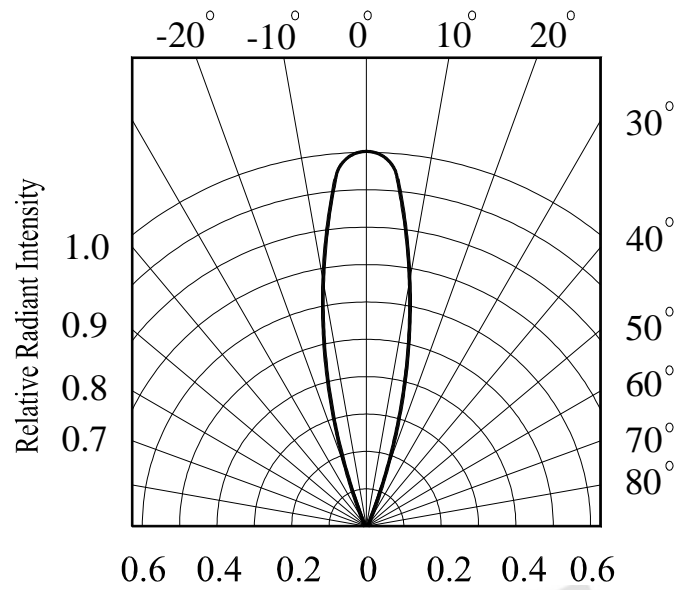
Typical Electro-Optical Characteristics Curves



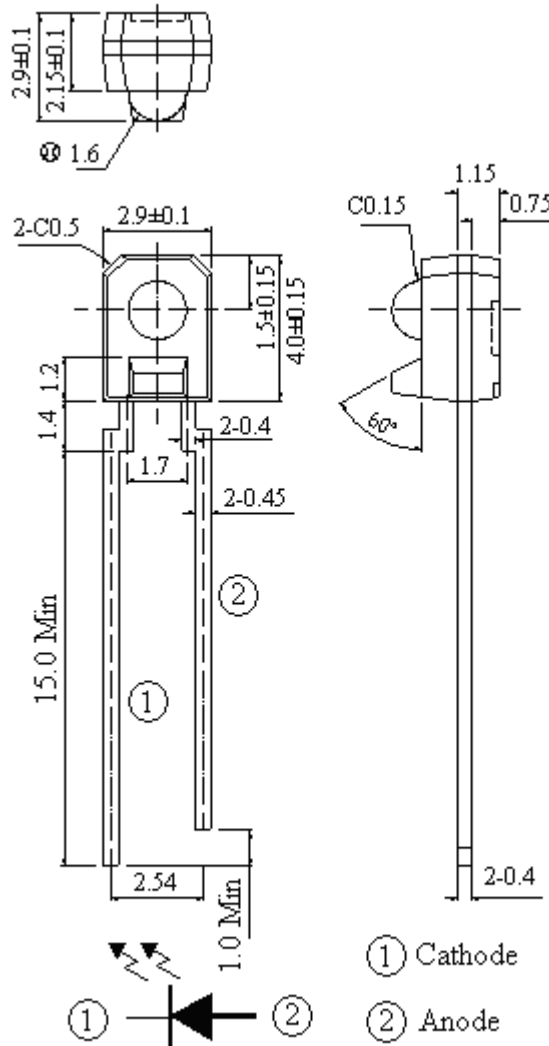
Forward Current vs. Ambient Temperature



Relative Radiant Intensity vs. Angular Displacement



Package Dimension



Note: Tolerances unless dimensions  $\pm 0.25$ mm

**Packing Quantity Specification**

1. 1000PCS/1Bag,8Bag/1Box
2. 10Boxes/1Carton

**Label Form Specification**

- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number
- X: Month
- Reference: Identify Label Number

**Notes**

1. Above specification may be changed without notice. EVERLIGHT will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instruction for using outlined in these specification sheets. EVERLIGHT assumes no responsibility for any damage resulting from use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.
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