

Side Face Infrared LED IR908-7C

Features

- High reliability
- High radiant intensity
- Peak wavelength $\lambda_p=940\text{nm}$
- 2.54mm Lead spacing
- Low forward voltage
- Pb free
- This product itself will remain within RoHS compliant version.

Description

- EVERLIGHT's Infrared Emitting Diode (IR908-7C) is a high intensity diode , molded in a water clear plastic package.
- The miniature side- facing device has a chip , that emits radiation from the side of the clear package.

Applications

- Mouse
- Optoelectronic switch
- Infrared applied system

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}	1.0	A
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 μ s and Duty 1%.

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Electro-Optical Characteristics (Ta=25)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Light Current	Ic(on)	I _F =4mA, V _{CE} =3.5V	143	--	1274	μA
Peak Wavelength	λp	I _F =20mA	--	940	--	nm
Spectral Bandwidth	Δλ	I _F =20mA	--	45	--	nm
Forward Voltage	V _F	I _F =20mA	--	1.2	1.5	V
Reverse Current	I _R	V _R =5V	--	--	10	μA
View Angle	2θ1/2	I _F =20mA	--	60	--	De g

Rank

Ranks	Symbol	Min	Typ	Max	Unit	Test Condition
E1	Ic(on)	143	---	255	μA	I _F =4mA, V _{CE} =3.5V
E2	Ic(on)	214	---	343	μA	I _F =4mA, V _{CE} =3.5V
E3	Ic(on)	286	---	431	μA	I _F =4mA, V _{CE} =3.5V
E4	Ic(on)	357	---	519	μA	I _F =4mA, V _{CE} =3.5V
E5	Ic(on)	428	---	608	μA	I _F =4mA, V _{CE} =3.5V
E6	Ic(on)	500	---	696	μA	I _F =4mA, V _{CE} =3.5V
E7	Ic(on)	571	---	784	μA	I _F =4mA, V _{CE} =3.5V

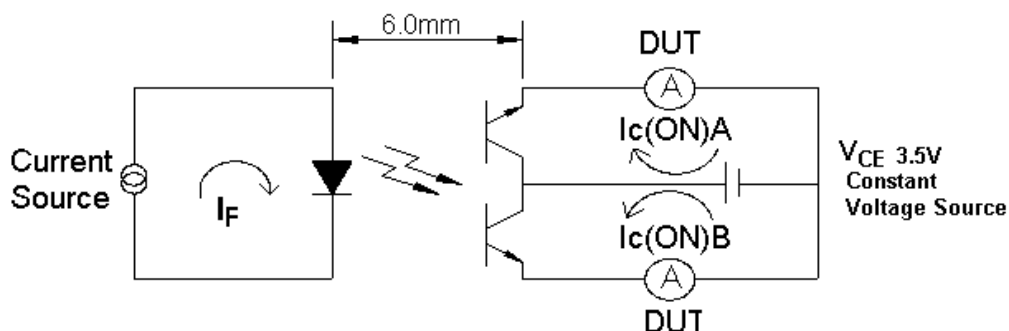
Rough ranks

Parameter	Min	Max	Unit	Test Condition
7-2	306	441	μA	I _F =4mA, V _{CE} =3.5V
7-1	347	550	μA	I _F =4mA, V _{CE} =3.5V
6-2	465	750	μA	I _F =4mA, V _{CE} =3.5V
6-1	650	1274	μA	I _F =4mA, V _{CE} =3.5V

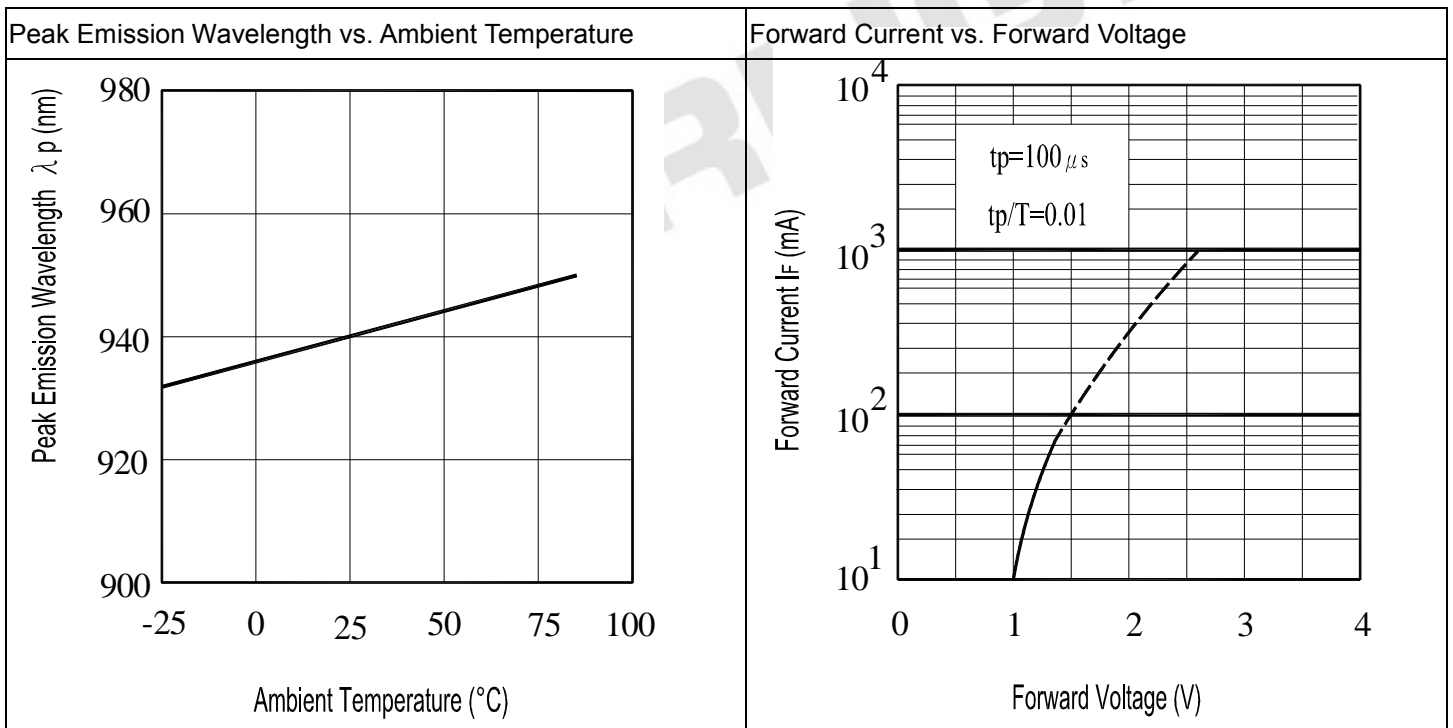
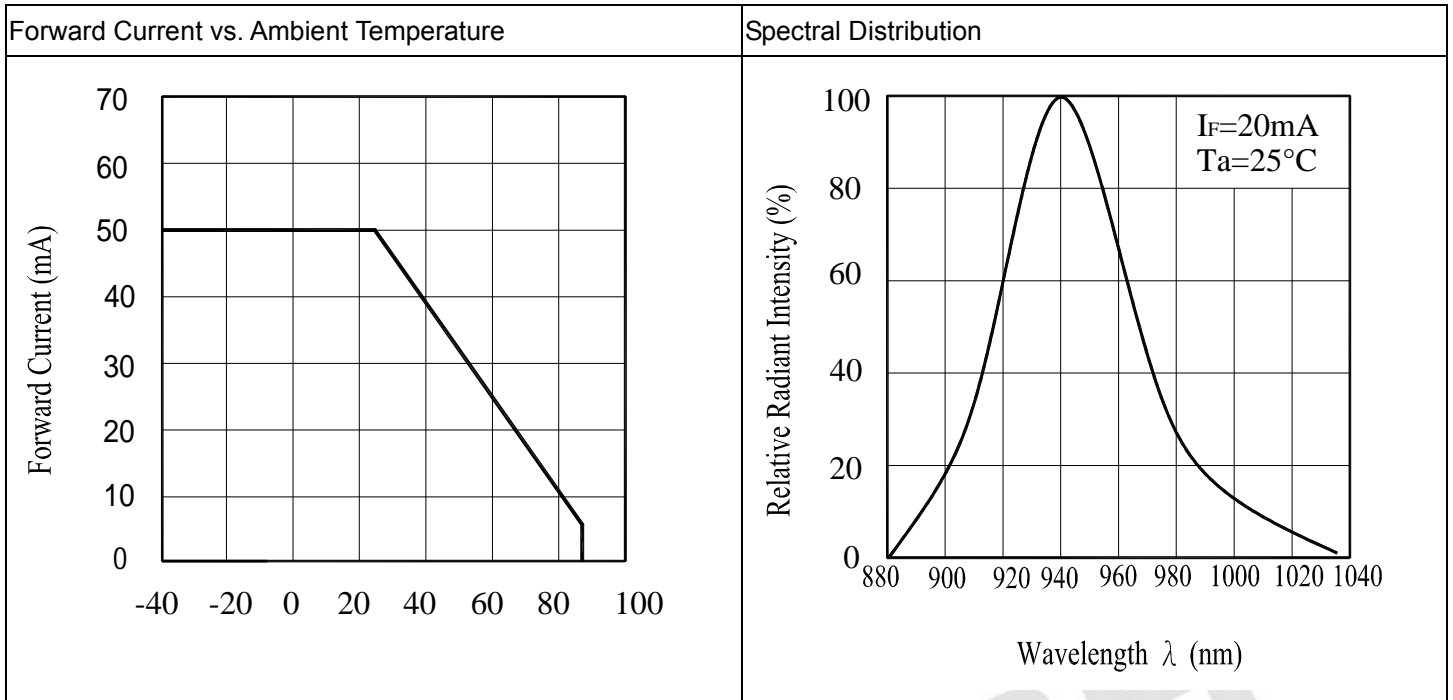
Test Method For I_{C(ON)}:

Condition: I_F=4mA, V_{CE}=3.5V

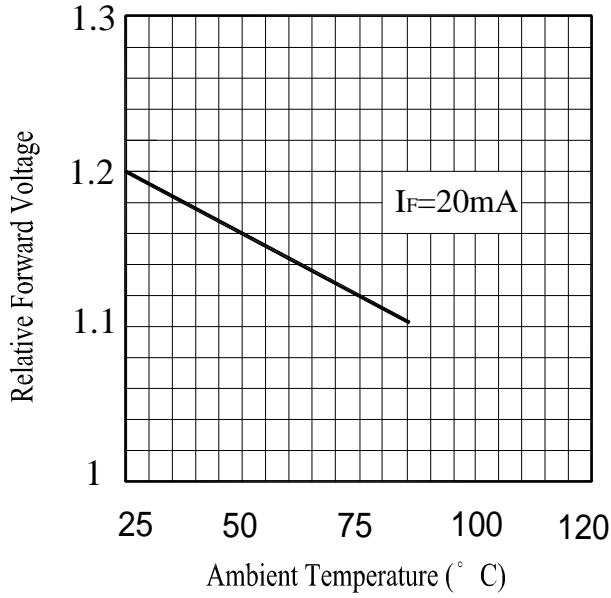
The intensity testing method for infrared emitting diode



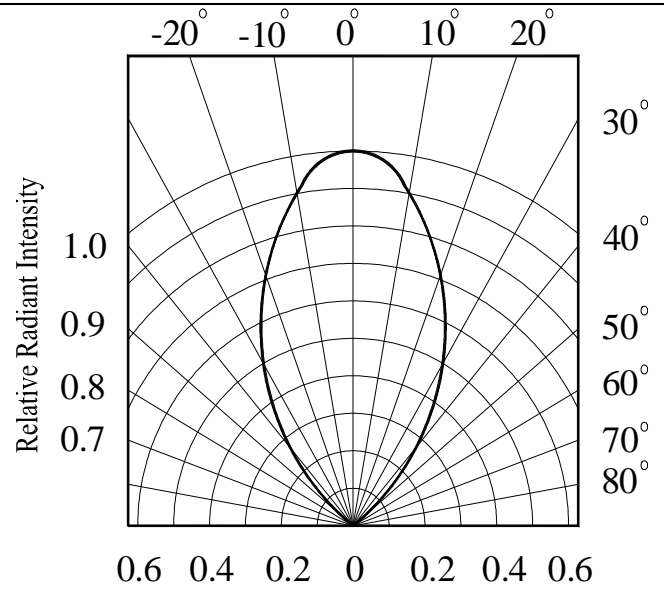
Typical Electro-Optical Characteristics Curves



Forward Current vs. Ambient Temperature

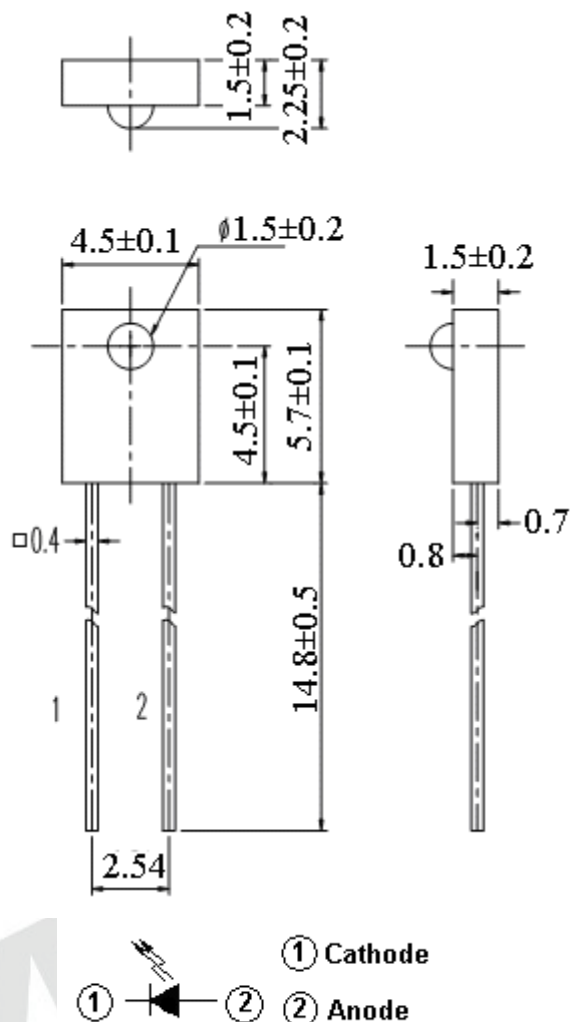


Relative Radiant Intensity vs. Angular Displacement



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Package Dimension



Note: Tolerances unless dimensions ± 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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