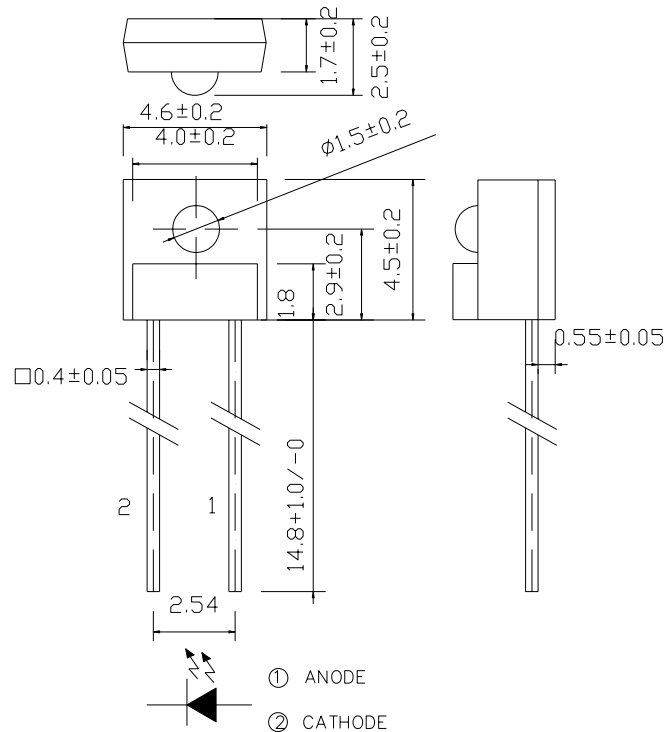


## Package Dimensions



- Notes:** 1.All dimensions are in millimeters  
2.Tolerances unless dimensions  $\pm 0.25\text{mm}$

## Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Rating	Units
Continuous Forward Current	$I_F$	50	mA
Peak Forward Current(*1)	$I_{FP}$	1.0	A
Reverse Voltage	$V_R$	5	V
Operating Temperature	$T_{opr}$	$-25 \sim +85$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-40 \sim +85$	$^\circ\text{C}$
Soldering Temperature(*2)	$T_{sol}$	260	$^\circ\text{C}$
Power Dissipation at(or below) 25 $^\circ\text{C}$ Free Air Temperature	$P_d$	75	mW

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

\*2:Soldering time  $\leq 5$  seconds.

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Light Current	I <sub>c</sub> (ON)	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V	306	--	1870	μ A
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	--	940	--	nm
Spectral Bandwidth	Δ λ	I <sub>F</sub> =20mA	--	50	--	nm
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	--	1.2	1.5	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	--	--	10	μ A
View Angle	2 θ 1/2	I <sub>F</sub> =20mA	--	40	--	deg

**Wide Rank**

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

Parameter	Symbol	Min	Max	Unit	Test Condition
5-2	I <sub>c</sub> (ON)	1053	1870	μ A	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
6-1	I <sub>c</sub> (ON)	650	1274	μ A	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
6-2	I <sub>c</sub> (ON)	465	750	μ A	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
7-1	I <sub>c</sub> (ON)	347	550	μ A	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V
7-2	I <sub>c</sub> (ON)	306	441	μ A	I <sub>F</sub> =4mA, V <sub>CE</sub> =3.5V

## Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs.  
Ambient Temperature

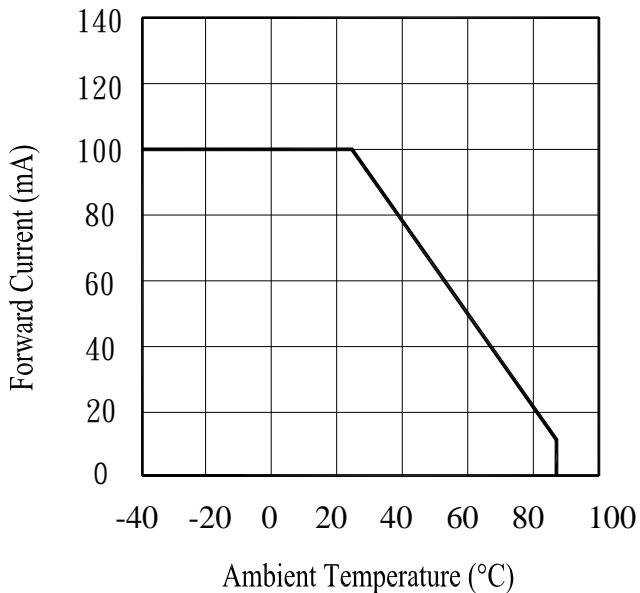


Fig.2 Spectral Distribution

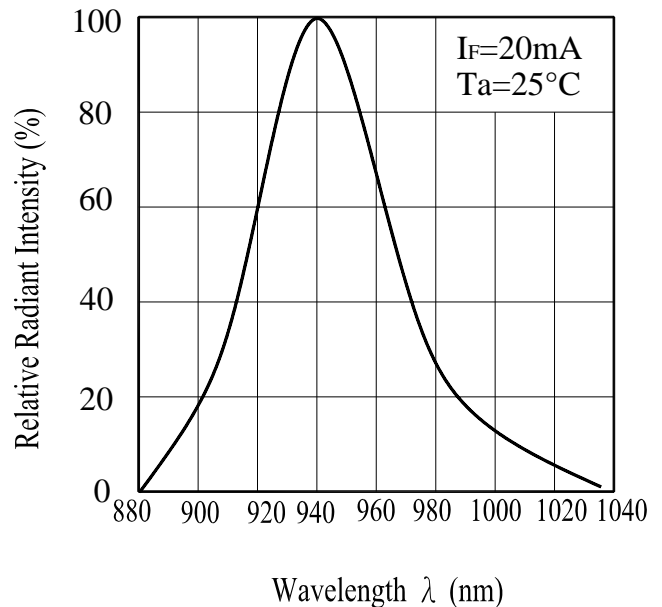


Fig.3 Peak Emission Wavelength  
Ambient Temperature

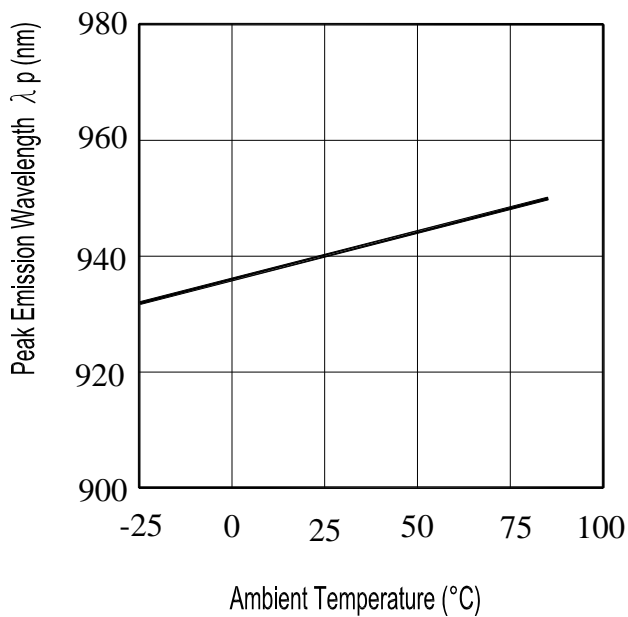
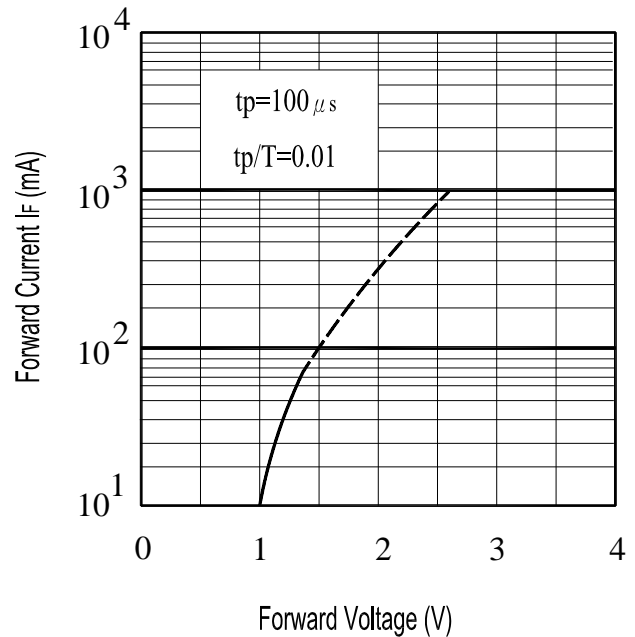


Fig.4 Forward Current  
vs. Forward Voltage



## Typical Electro-Optical Characteristics Curves

Fig.5 Forward Voltage vs.

Ambient Temperature

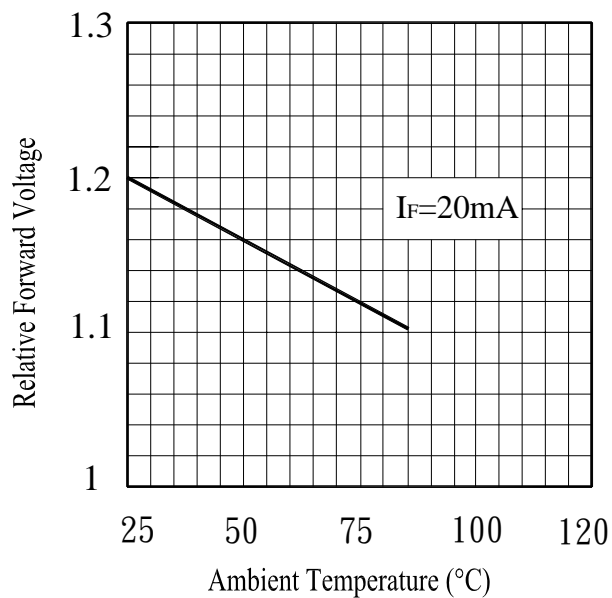
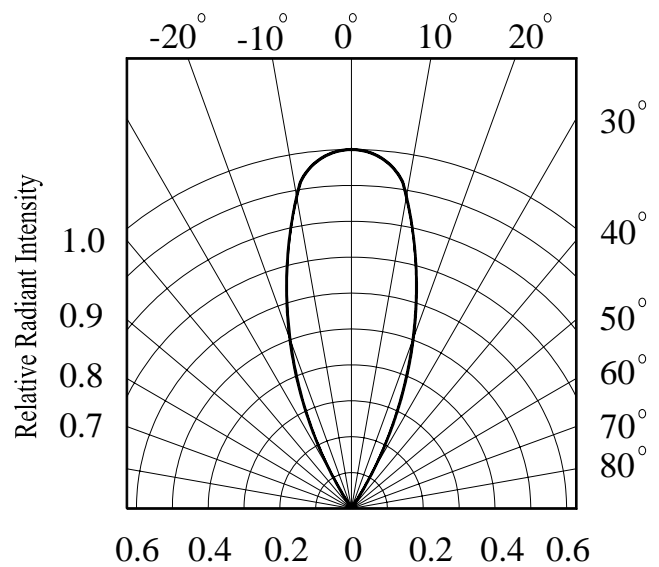


Fig.6 Relative Radiant Intensity vs.

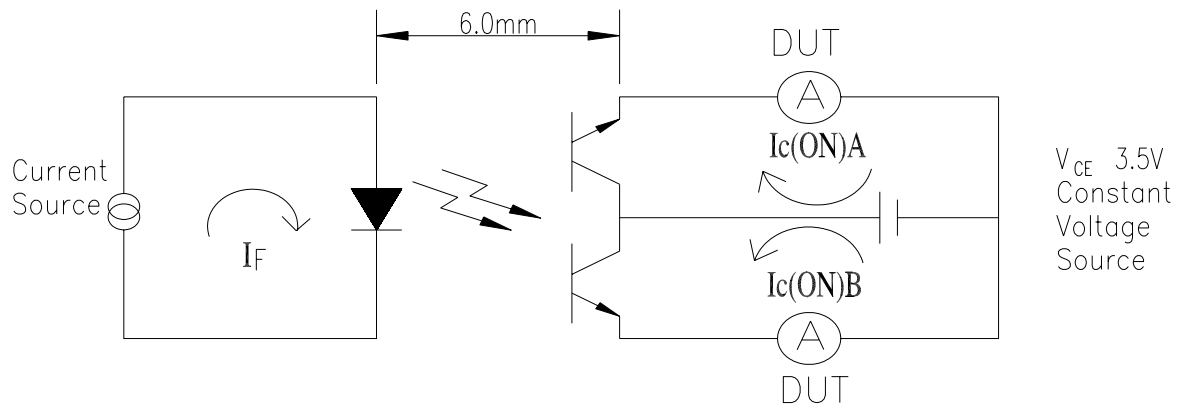
Angular Displacement



■ **Test Method For  $I_{C(ON)}$ :**

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

The intensity testing method for infrared emitting diode



**Reliability Test Item And Condition**

The reliability of products shall be satisfied with items listed below.

Confidence level : 90%




LTPD : 10%

NO.	Item	Test Conditions	Test Hours/ Cycles	Sample Sizes	Failure Judgement Criteria	Ac/Re
1	Solder Heat	TEMP. : $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$	10secs	22pcs	$I_R \geq U \times 2$ $E_e \leq L \times 0.8$ $V_F \geq U \times 1.2$  U : Upper Specification  Limit L : Lower Specification Limit	0/1
2	Temperature Cycle	H : $+100^{\circ}\text{C}$ 15mins $\updownarrow$ 5mins L : $-40^{\circ}\text{C}$ 15mins	300Cycles	22pcs		0/1
3	Thermal Shock	H : $+100^{\circ}\text{C}$ 5mins $\updownarrow$ 10secs L : $-10^{\circ}\text{C}$ 5mins	300Cycles	22pcs		0/1
4	High Temperature Storage	TEMP. : $+100^{\circ}\text{C}$	1000hrs	22pcs		0/1
5	Low Temperature Storage	TEMP. : $-40^{\circ}\text{C}$	1000hrs	22pcs		0/1
6	DC Operating Life	$I_F = 20\text{mA}$	1000hrs	22pcs		0/1
7	High Temperature/ High Humidity	$85^{\circ}\text{C}$ / 85% R.H	1000hrs	22pcs		0/1

**Packing Quantity Specification**

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

**Label Form Specification**

<b>EVERLIGHT</b>	
CPN:	
P/N:	
	
QTY:	IR928-6C
LOT NO:	
	
	

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

CAT: Ranks

HUE: Peak Wavelength

REF: Reference

LOT No: Lot 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 instructions 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.
3. These specification sheets include materials protected under copyright of EVERLIGHT corporation. Please don't reproduce or cause anyone to reproduce them without EVERLIGHT's consent.

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