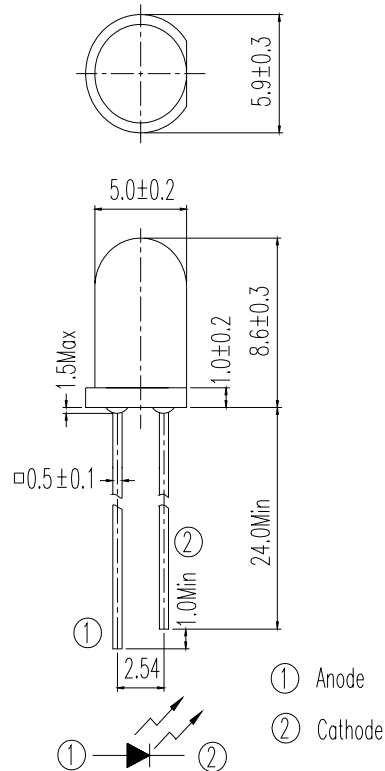


Package Dimensions



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

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Continuous Forward Current	I _F	100	mA
Peak Forward Current (*1)	I _{FP}	1.0	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature (*2)	T _{sol}	260	°C
Power Dissipation at(or below) 25°C Free Air Temperature	P _d	150	mW

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

*2:Soldering time ≤ 5 seconds.

Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Radiant Intensity	I _e	I _F =20mA	5.6	7.8	--	mW/sr
		I _F =100mA Pulse Width ≤ 100 μs and Duty ≤ 1%	--	45	--	
		I _F =1A Pulse Width ≤ 100 μs and Duty ≤ 1%	--	450	--	
Peak Wavelength	λ _p	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
		I _F =100mA Pulse Width ≤ 100 μs and Duty ≤ 1%	--	1.4	1.8	
		I _F =1A Pulse Width ≤ 100 μs and Duty ≤ 1%	--	2.6	4.0	
Reverse Current	I _R	V _R =5V	--	--	10	μA
View Angle	2θ _{1/2}	I _F =20mA	--	40	--	deg

Rank

Condition : I_F=20mA

Unit : mW/sr

Bin Number	L	M	N	P	Q	R
Min	5.60	7.80	11.00	15.00	21.00	30.00
Max	8.90	12.50	17.60	24.00	34.00	48.00

Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs.

Ambient Temperature

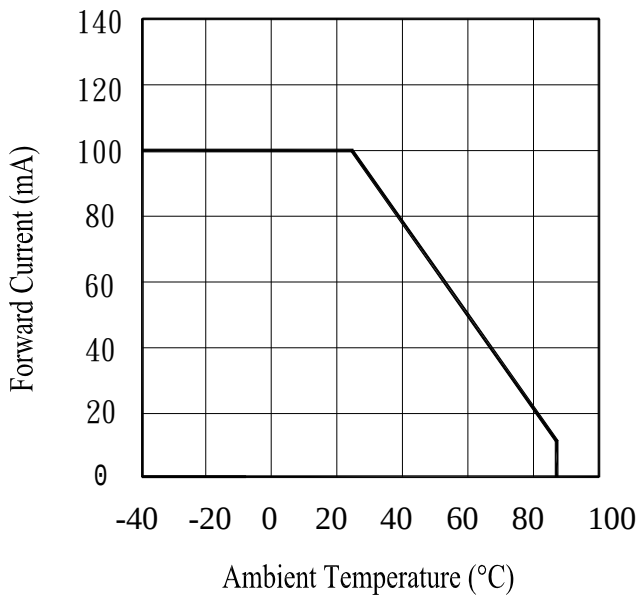


Fig.2 Spectral Distribution

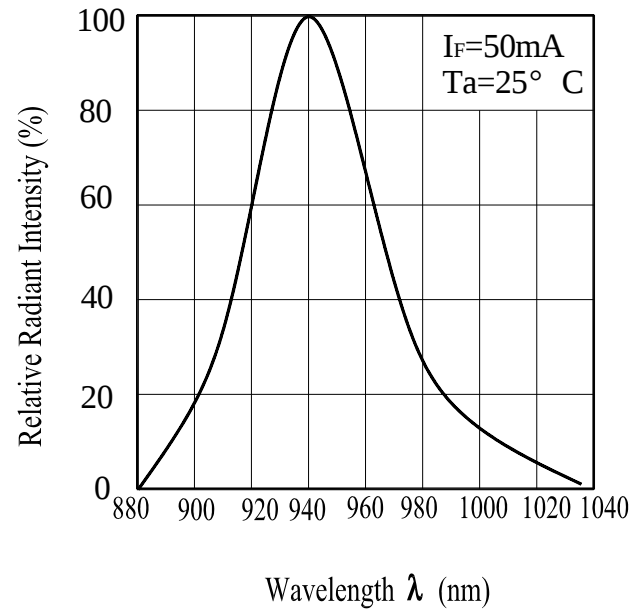


Fig.3 Peak Emission Wavelength vs.

Ambient Temperature

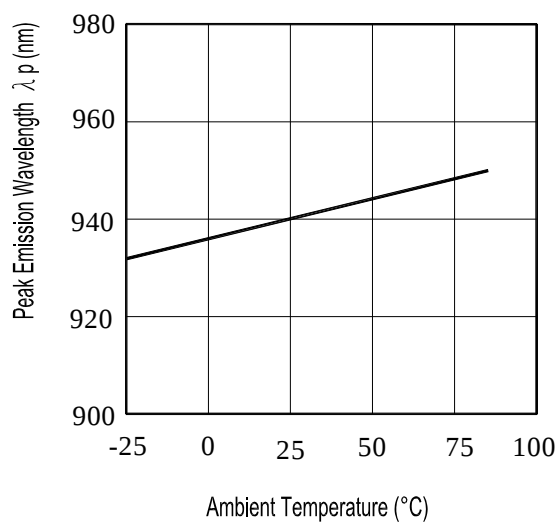
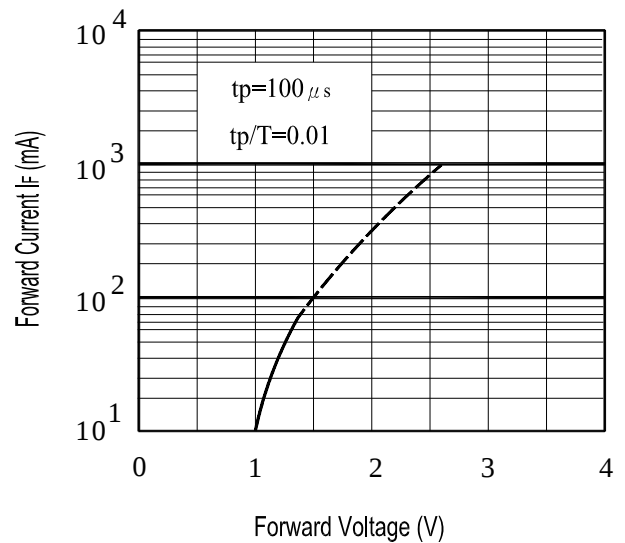


Fig.4 Forward Current vs

Forward Voltage



IR333C/H0-A

Fig.5 Radiant Intensity vs.
Forward Current

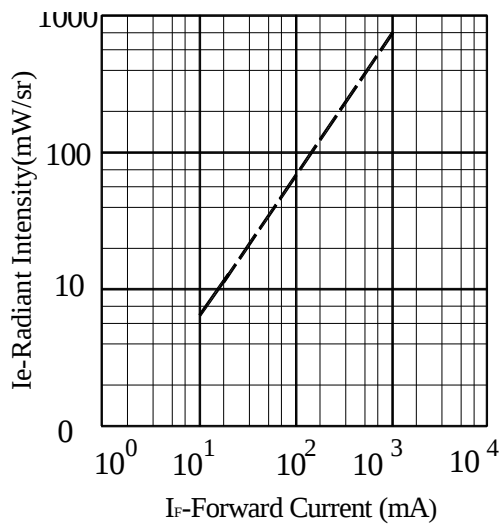
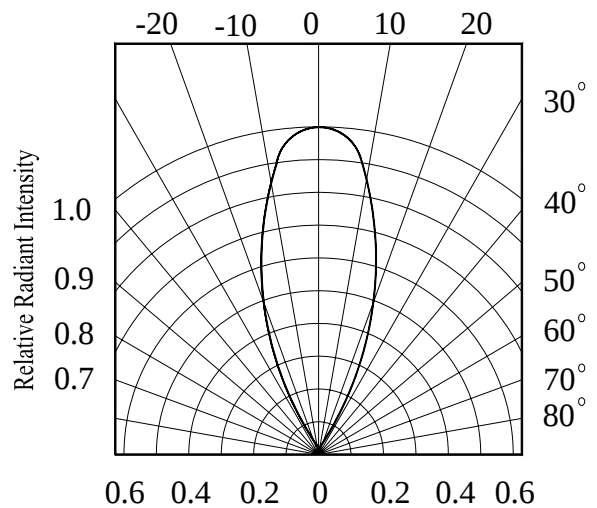


Fig.6 Relative Radiant Intensity vs.
Angular Displacement



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		0/1
2	Temperature Cycle	$\begin{matrix} \text{H : } +100^{\circ}\text{C} & 30\text{mins} \\ \updownarrow & 5\text{mins} \\ \text{L : } -40^{\circ}\text{C} & 30\text{mins} \end{matrix}$	300Cycles	22pcs	$I_R \geq U \times 2$ $I_e \leq L \times 0.8$ $V_F \geq U \times 1.2$	0/1
3	Thermal Shock	$\begin{matrix} \text{H : } +100^{\circ}\text{C} & 5\text{mins} \\ \updownarrow & 10\text{secs} \\ \text{L : } -10^{\circ}\text{C} & 5\text{mins} \end{matrix}$	300Cycles	22pcs	U : Upper Specificatio	0/1
4	High Temperature Storage	TEMP. : $+100^{\circ}\text{C}$	1000hrs	22pcs	n Limit	0/1
5	Low Temperature Storage	TEMP. : -40°C	1000hrs	22pcs	L : Lower Specificatio	0/1
6	DC Operating Life	$I_F = 20\text{mA}$	1000hrs	22pcs	n Limit	0/1
7	High Temperature/ High Humidity	$85^{\circ}\text{C} / 85\% \text{ R.H}$	1000hrs	22pcs		0/1

Packing Quantity Specification

1.500PCS/1Bag , 5Bags/1Box

2.10Boxes/1Carton

Label Form Specification

EVERLIGHT	
CPN:	
P/N:	
	
IR333C/H0-A	
QTY:	CAT:
	HUE:
LOT NO:	REF:
	

CPN: Customer's Production Number

P/N : Production Number

QTY: Packing Quantity

AT: 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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