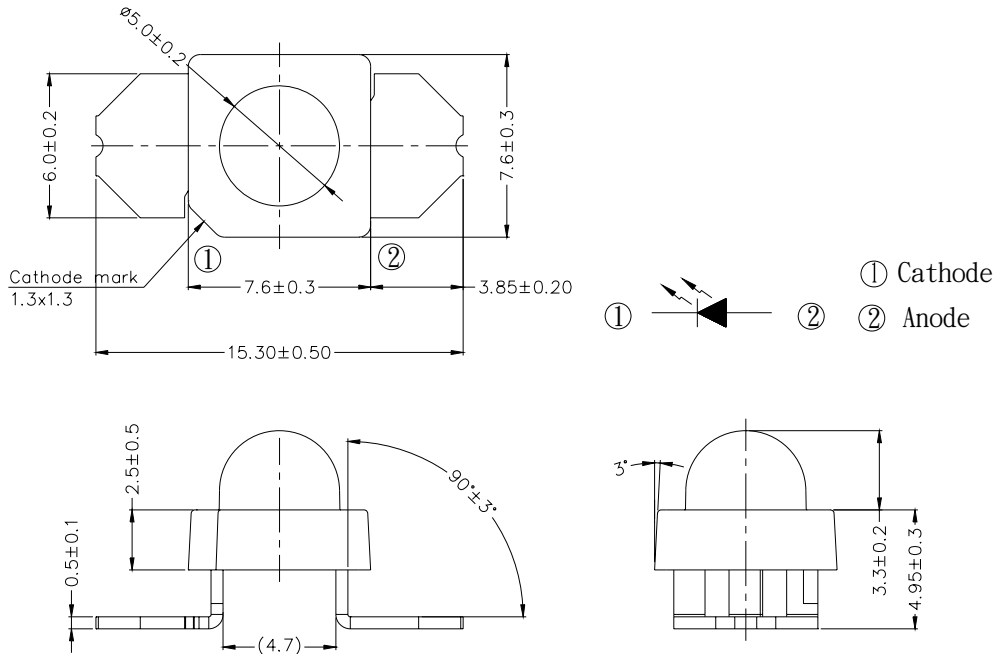


Package Dimensions



- 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(@DC)	I_F	150	mA
Reverse Voltage	V_R	5	V
Operating Temperature	T_{opr}	-40 ~ +85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85	$^\circ\text{C}$
Thermal resistance, junction to heat-sink	R_{th}	125	K/W
LED junction Temperature	T_j	58	$^\circ\text{C}$
Soldering Temperature*2	T_{sol}	260	$^\circ\text{C}$
Power Dissipation at(or below) 25 $^\circ\text{C}$ Free Air Temperature	P_d	300	mW

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

*2: Soldering time ≤ 5 seconds.



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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Radiant Intensity	I _e	I _F =20mA	11	15	--	mW/sr
		I _F =150mA	--	100	--	
		I _F =400mA (@DC Continue 1 sec)	--	300	--	
Peak Wavelength	λ _p	I _F =20mA	--	850	--	nm
Spectral Bandwidth	Δλ	I _F =20mA	--	40	--	nm
Forward Voltage	V _F	I _F =20mA	--	1.35	1.7	V
		I _F =150mA	--	1.50	2.1	
		I _F =400mA (@DC Continue 1 sec)	--	1.80	2.5	
Reverse Current	I _R	V _R =5V	--	--	10	μA
View Angle	2θ _{1/2}	I _F =20mA	--	30	--	deg



Typical Electro-Optical Characteristics Curves

Fig.1 Forward Current vs. Ambient Temperature

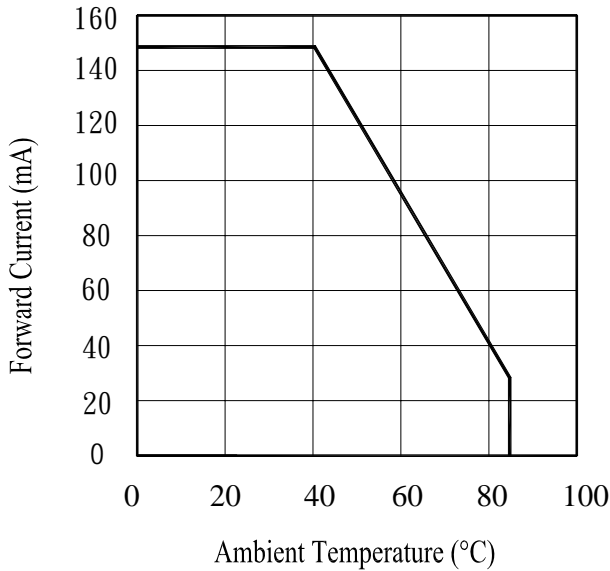


Fig.2 Spectral Distribution

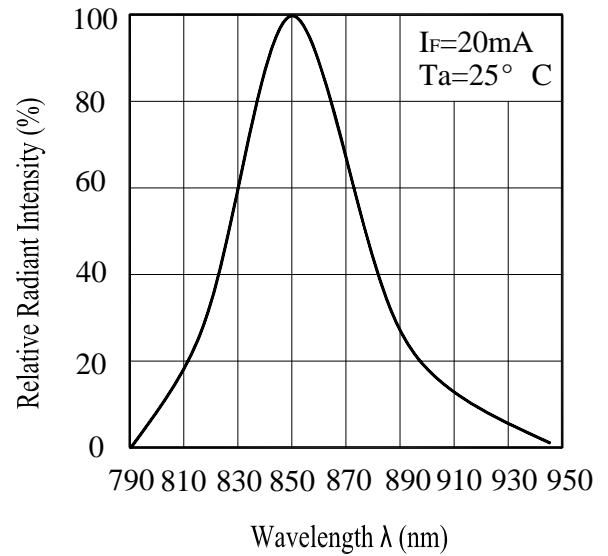


Fig.3 Peak Emission Wavelength vs. Ambient Temperature

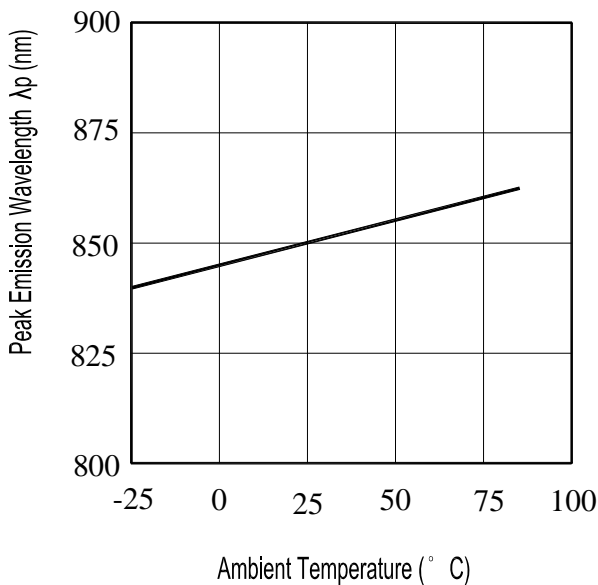
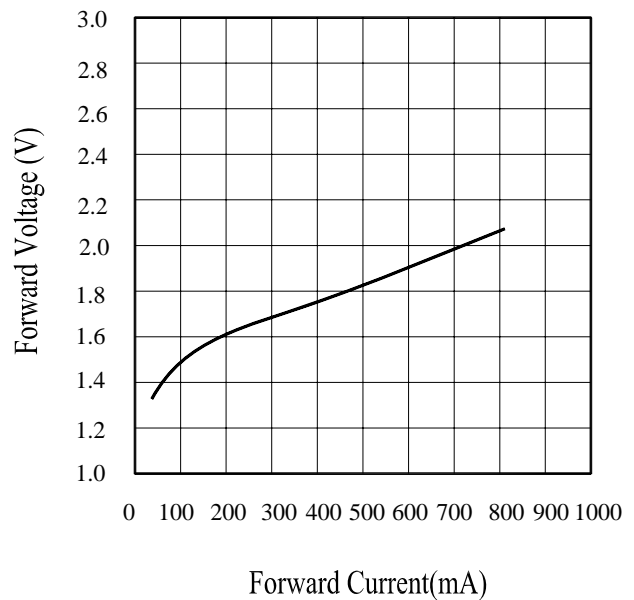


Fig.4 Forward Current vs. Forward Voltage





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Typical Electro-Optical Characteristics Curves

Fig.5 Relative Intensity vs.
Forward Current

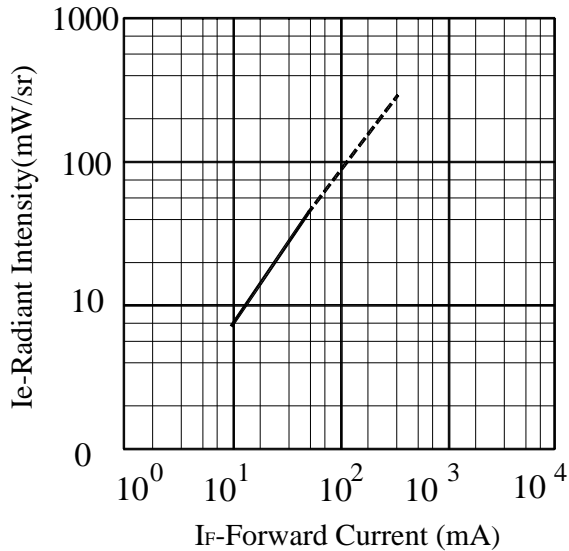
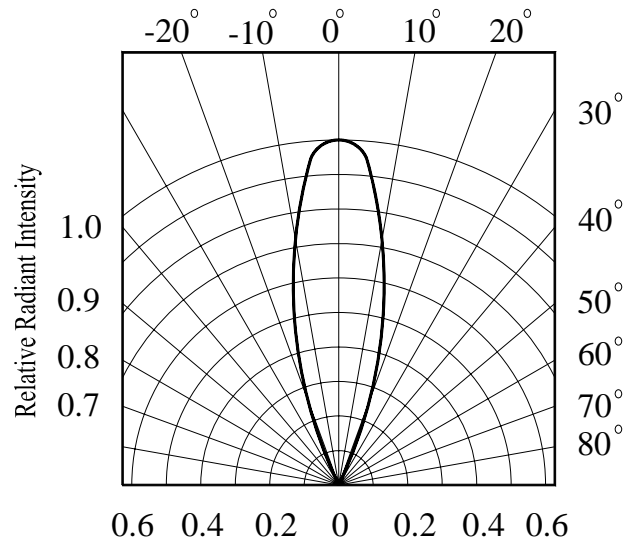


Fig.6 Relative Radiant Intensity vs.
Angular Displacement





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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°C±5°C	10secs	22pcs		0/1
2	Temperature Cycle	H : +100°C 15mins ↑ 5mins ↓ L : -40°C 15mins	300Cycles	22pcs	$I_R \geq U \times 2$ $E_e \leq L \times 0.8$ $V_F \geq U \times 1.2$	0/1
3	Thermal Shock	H : +100°C 5mins ↑ 10secs ↓ L : -10°C 5mins	300Cycles	22pcs	U : Upper Specification	0/1
4	High Temperature Storage	TEMP. : +100°C	1000hrs	22pcs	Limit L : Lower	0/1
5	Low Temperature Storage	TEMP. : -40°C	1000hrs	22pcs	Specification Limit	0/1
6	DC Operating Life	$I_F = 20\text{mA}$	1000hrs	22pcs		0/1
7	High Temperature/ High Humidity	85°C / 85% R.H	1000hrs	22pcs		0/1