

## **PRODUCT SPECIFICATION**

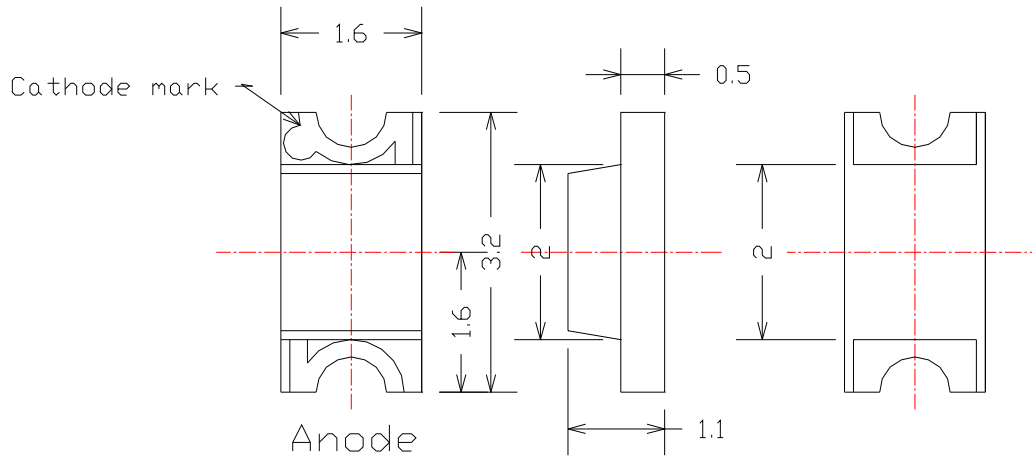
**Part No: 1206blue**

**Color: blue**

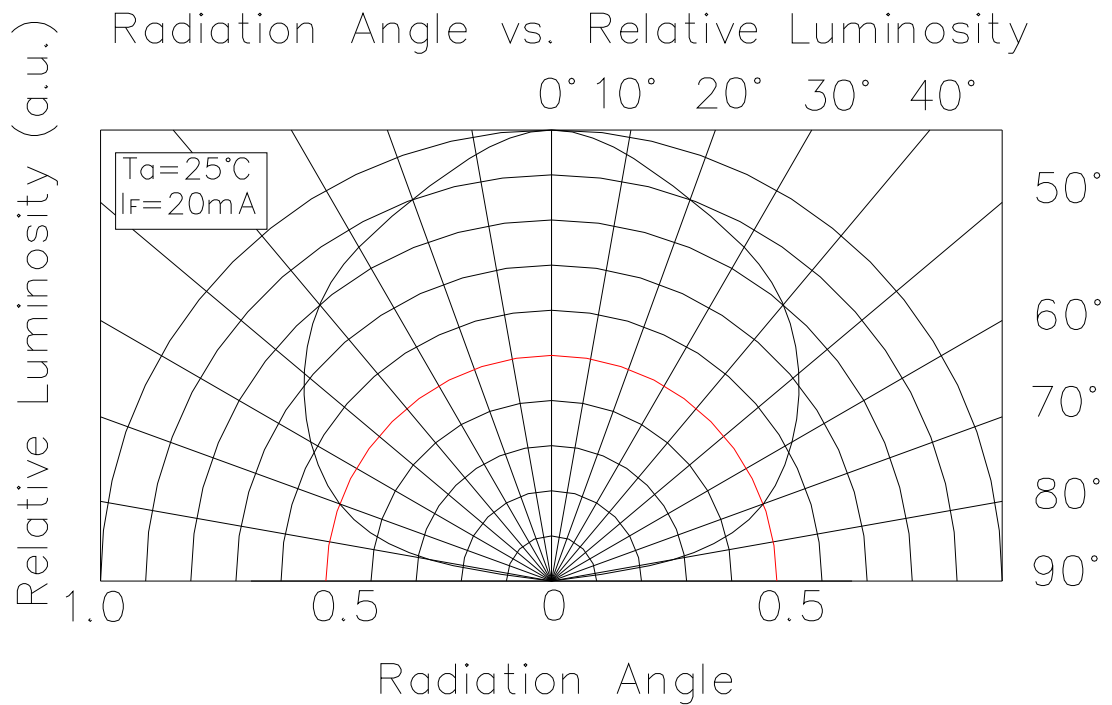
<b>Customer Approved</b>	<b>Checked</b>	<b>Prepared</b>

# SMD-LED 1206 blue

## ■ Outline Dimension:



## ■ View Angle:



# SMD-LED 1206 blue

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

Items	Symbol	Absolute maximum Rating	Unit
Power Dissipation	P <sub>D</sub>	120	mW
Forward Current(DC)	I <sub>F</sub>	25	mA
Peak Forward Current	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operation Temperature	T <sub>opr</sub>	- 20~ + 75	°C
Storage Temperature	T <sub>stg</sub>	- 30~ + 80	°C
Lead Soldering Temperature	T <sub>sol</sub>	Max.260°C for 5 sec Max. (3min from the base of the epoxy bulb)	

Pulse width ≤ 0.1msec duty ≤ 1/10

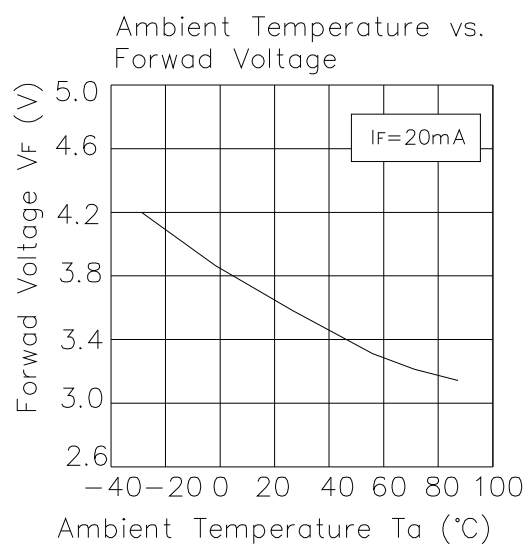
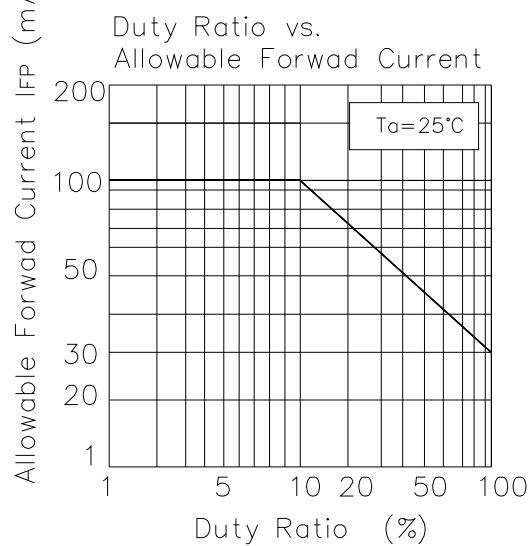
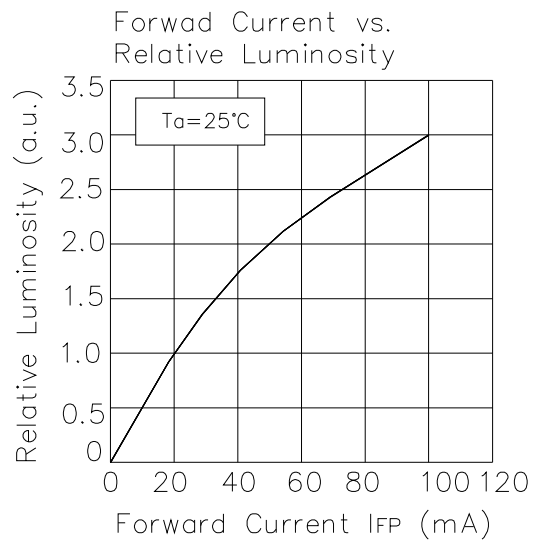
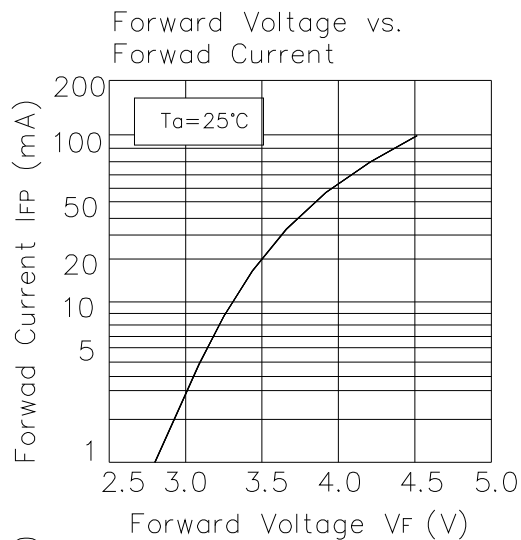
## ■ Typical Electrical & Optical Characteristics(Ta=25°)

Items	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA	3.0	3.4	3.6	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V	---	---	50	μ A
Dominant Wavelength	λ <sub>d</sub>	I <sub>F</sub> = 20mA	465	470	475	nm
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	80	110		mcd
View Angle	2 θ 1/2	I <sub>F</sub> = 20mA	---	140	---	Deg

Rank	Luminous Intensity (mcd)	Rank	Luminous Intensity (mcd)	Rank	Luminous Intensity (mcd)
J	80~105	K	105~150		

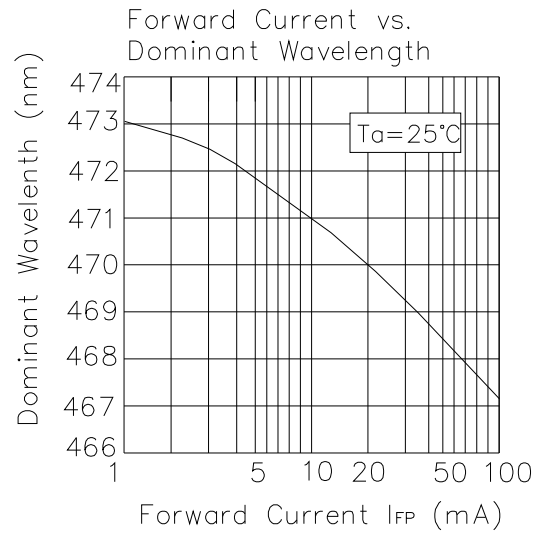
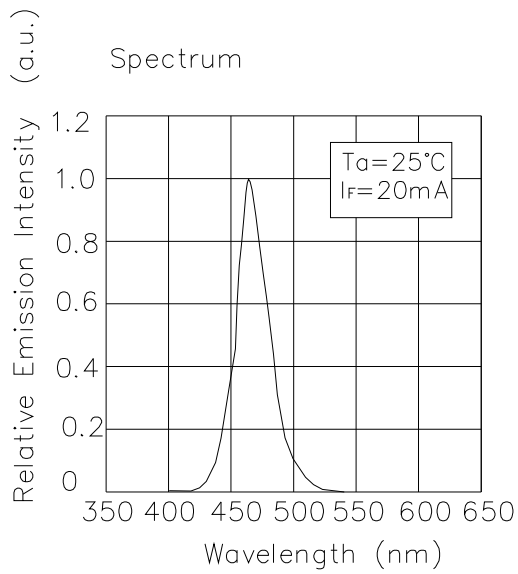
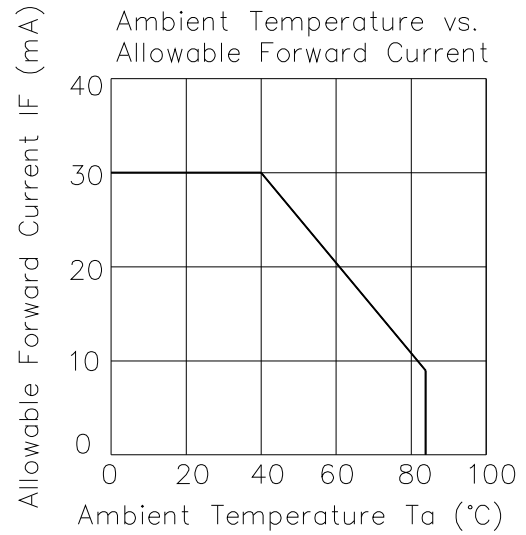
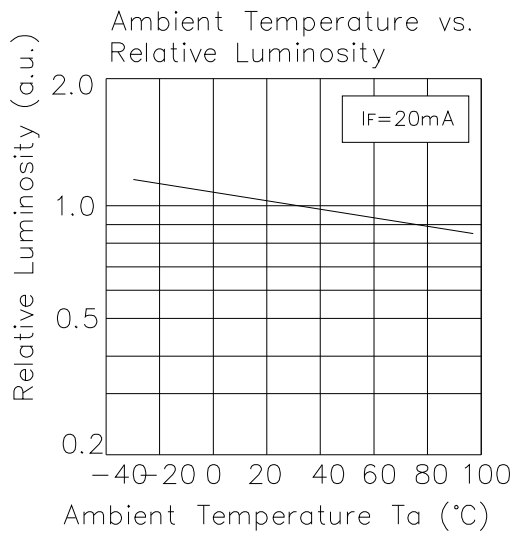
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## ■ Typical Electrical/Optical Characteristics Curves:



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## ■ Reliability Test :

Classification	Test Item	Standard Test Method	Test Conditions	Duration	Units Tested	Number of Damaged
Life Test	Operating Life Test	JIS7021:B4 MIL-STD-202:107D MIL-STD-750:1026	$T_A=25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ , $I_F=30\text{mA}$	1000h	22	0/22
Environment Test	High Temperature Storage	JIS7021:B10 MIL-STD-202:210A MIL-STD-750:2031	$T_A=100^{\circ}\text{C} \pm 5^{\circ}\text{C}$	1000h	22	0/22
	Low Temperature Storage	JIS7021:B12	$T_A= - 55^{\circ}\text{C} \pm 5^{\circ}\text{C}$	1000h	22	0/22
	Temp & Humidity Test	JIS7021:B11 MIL-STD-202:103D	$T_A=85^{\circ}\text{C} \pm 5^{\circ}\text{C}$ $\text{RH}=85\% \pm 5\% \text{RH}$	1000h	22	0/22
	Thermal Shock Test	JIS7021:B4 MIL-STD-202:107D MIL-STD-750:1026	$- 10^{\circ}\text{C} \pm 5^{\circ}\text{C}$ $\leftarrow \rightarrow 100^{\circ}\text{C} \pm 5^{\circ}\text{C}$ 5min - 5min	50 Cycles	22	0/22
	Temperature Cycling Test	JIS7021:A3 MIL-STD-202:107D MIL-STD-750:1051	$- 55^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim 85^{\circ}\text{C} \sim 25^{\circ}\text{C}$ 3min - 5min - 30min - 5min	50 Cycles	22	0/22
Mechanical Test	Resistance to Soldering Heat	JIS7021:A1 MIL-STD-202:210A MIL-STD-750:2031	$260 \pm 5^{\circ}\text{C}$ , $10 \pm 1\text{sec}$	1 time	22	0/22
	Lead Integrity	MIL-STD-750D Method 2036.3	Load 2.5N $0^{\circ} \sim 90^{\circ} \sim 0^{\circ}$	3time	22	0/22

### 2.Criteria for Judging The Damage

Item	Symbol	Test Conditions	Criteria for Judgment	
			Min	Max
Forward Voltage	$V_F$	$I_F=20\text{mA}$	---	Initial Data $\times 1.1$
Luminous Intensity	$I_V$	$I_F=20\text{mA}$	---	Initial Data $\times 0.7$
			Initial Data $\times 0.7$	---
Reverse Current	$I_R$	$V_R=5\text{V}$	---	$100 \mu \text{A}$