

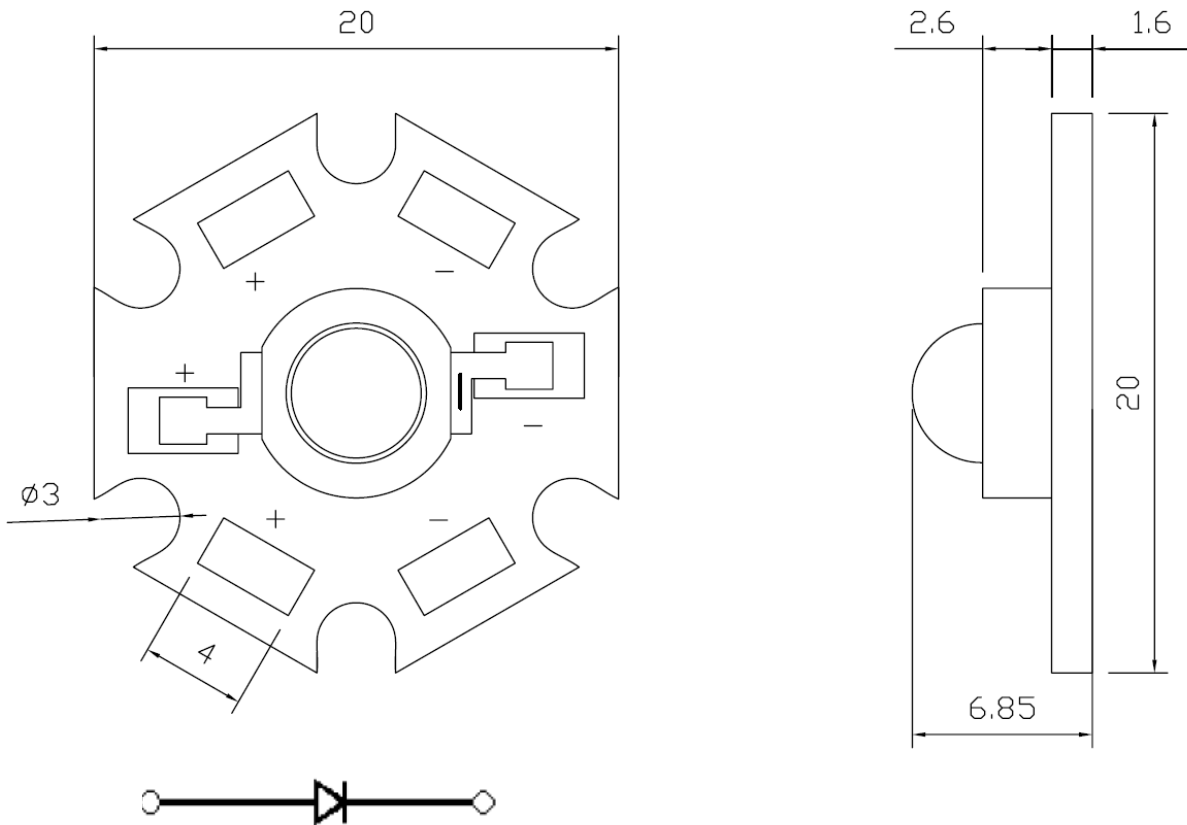
■ Features

- PB Free.
- Mono-color type.
- Suitable for all SMT assembly methods.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase reflow solder process.

■ Typical Applications:

- Status indicators: Consumer & industrial electronics.
- General use.

■ Package Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.50 mm unless otherwise specified.

■ Device Selection Guide

Chip Material	Emitted Color	Lens Color
InGaN	White	Yellow Diffused

■ Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Maximum	Unit
Power Dissipation	Pd	3	W
Peak Forward Current (Duty 1/10 @1KHz)	IFP	1000	mA
Forward Current	IF	700	mA
Electrostatic Discharge(HBM)	ESD	2000	V
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr	-25°C to + 80°C	
Storage Temperature Range	Tstg	-30°C to + 85°C	
Lead Soldering Temperature	Tsol	Preheating: 140°C~160°C±5°C, within 2 minutes. Operation heating:260°C(Max) within 10 seconds.(Max) Gradual Cooling (Avoid quenching).	

■ Electrical/Optical Characteristics at Ta=25°C

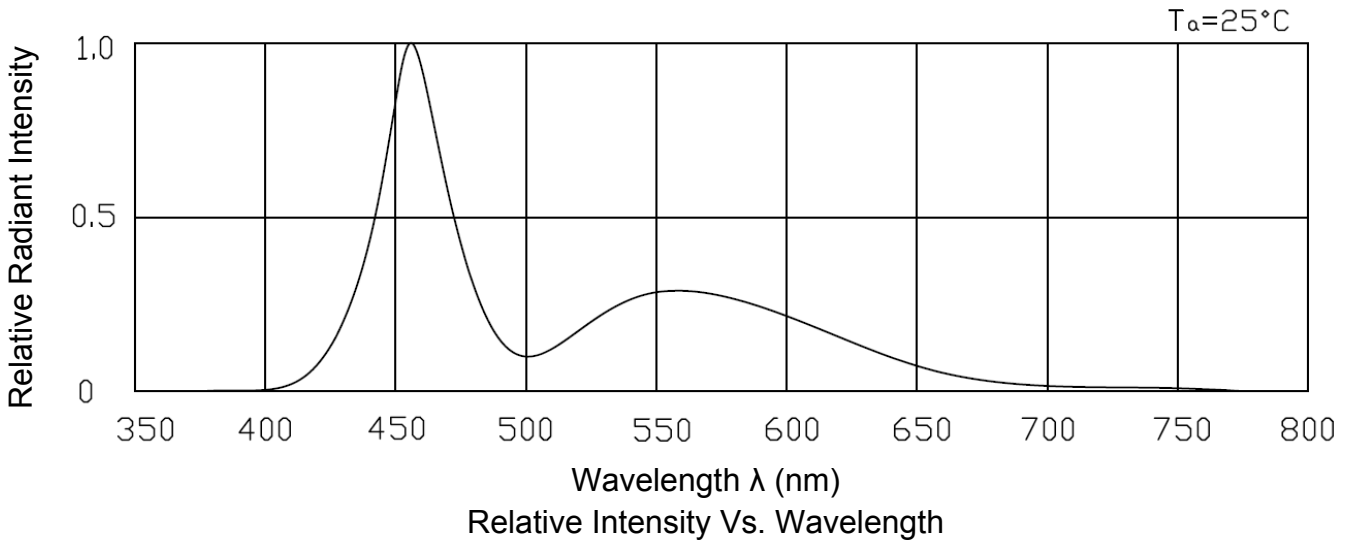
Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Luminous Flux	ΦV	IF=700mA	200	230	—	lm
Correlated Color Temperature	CCT	IF=700mA	6000	—	7000	K
Color Rendering Index	Ra	IF=700mA	80	—	—	—
Forward Voltage	VF	IF=700mA	2.8	—	3.6	V
Viewing Angle	2θ1/2	IF=700mA	—	120	—	deg
Reverse Current	IR	VR=5V	—	—	10	uA

Notes:

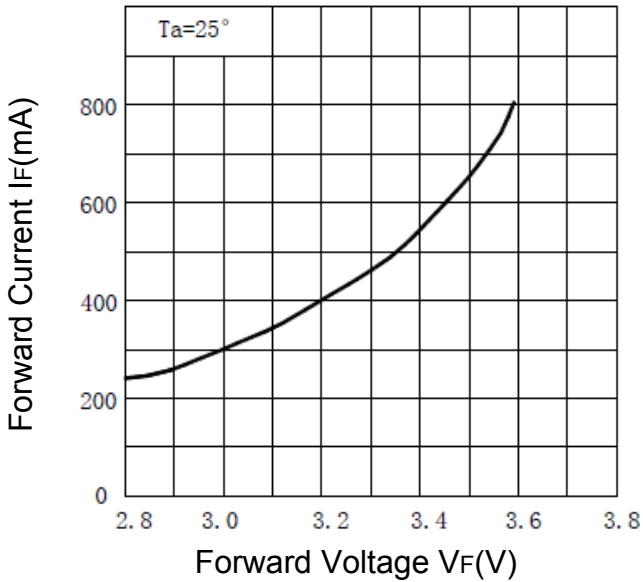
1. Tolerance of Luminous Flux ±0.5 lm
2. Tolerance of Forward Voltage ±0.1V
3. Tolerance of Correlated Color Temperature ±10%

■ Typical Electrical/Optical Characteristic Curves

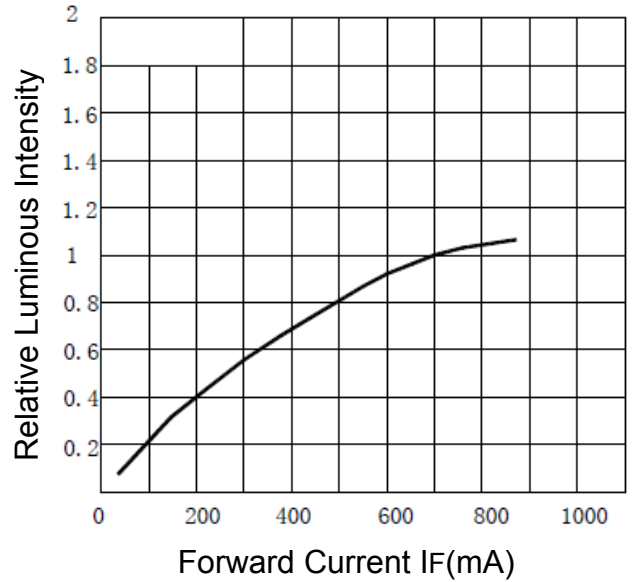
(25°C Ambient Temperature Unless Otherwise Noted)



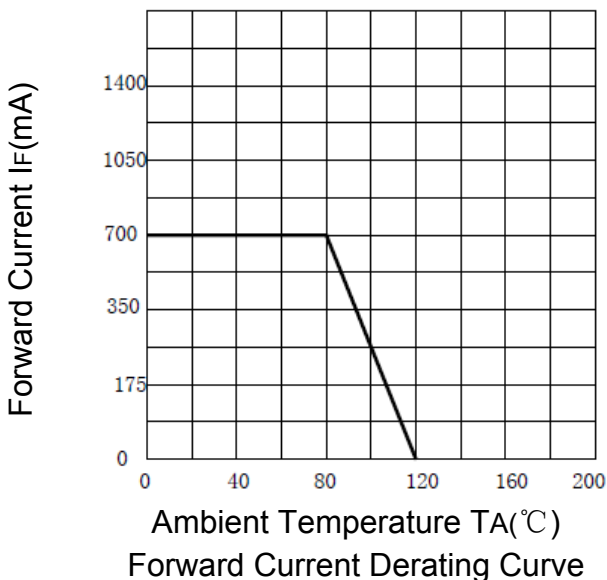
Relative Intensity Vs. Wavelength



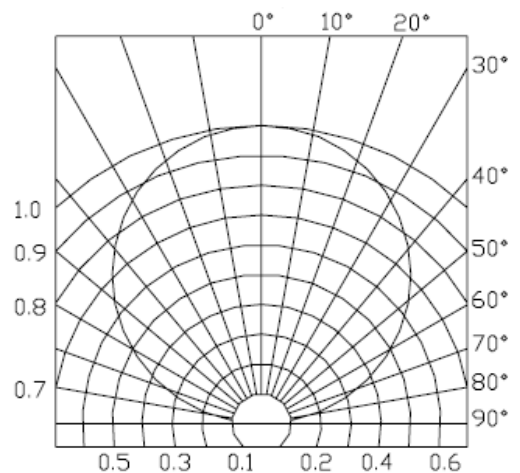
Forward Current vs. Forward Voltage



Relative Luminous Intensity vs. Forward Current



Forward Current Derating Curve



Radiation Diagram

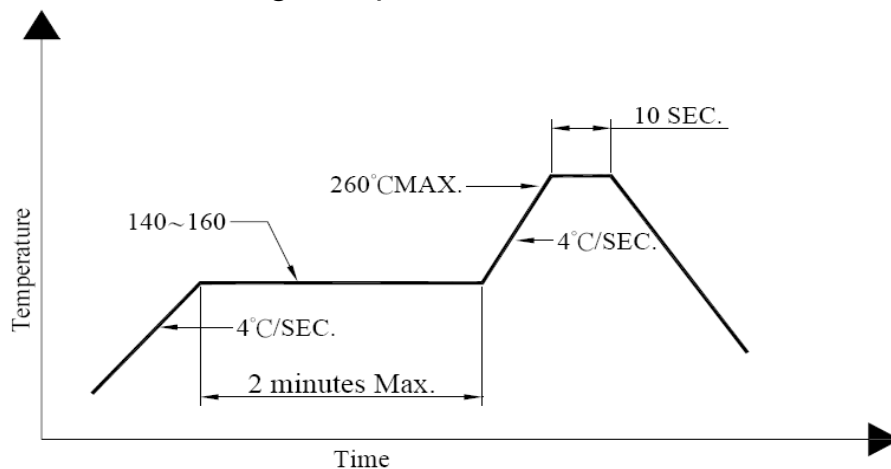
■ Precautions :

1. Storage

- Recommend storage environment:
Temperature: 5°C~30°C (41°F~86°F) Relative Humidity: 60% RH Max.
- Product in the original sealed package is recommended to be assembled within 168 hours of opening.
- If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.
 - a. Baking treatment: 60±5°C for 24 hours.
 - b. Fold the opened bag firmly and keep in dry environment.

2. Cleaning

- Surface condition of this device may change when organic solvents such as trichloroethylene or acetone were applied.
- Avoid using organic solvent.
- Recommend ultrasonic method 300W Max.

■ SMT Reflow Soldering Temp/Time:**■ Reflow soldering**

- Recommend use of upper and lower heater type reflow furnace.
- 260°C Max for up to 10 seconds, one time only.
- Pre-heat is 150°C Max for up to 2 minutes Max.
- In case of screen-printing, keep metal mask thickness between 0.2mm and 0.3mm.
- When soldering, do not put stress on the LEDs during heating.

■ Soldering iron

- When hand soldering, keep the temperature of iron below less 300°C less than 3 seconds.
- The hand solder should be done only one times.