

DATA SHEET for LED Lamp



Part No.	<i>LUB30243/G-C(B)</i>	
Emitted Color	Chip Material	Lens Color
Ultra Super Blue	InGaN	Water Clear

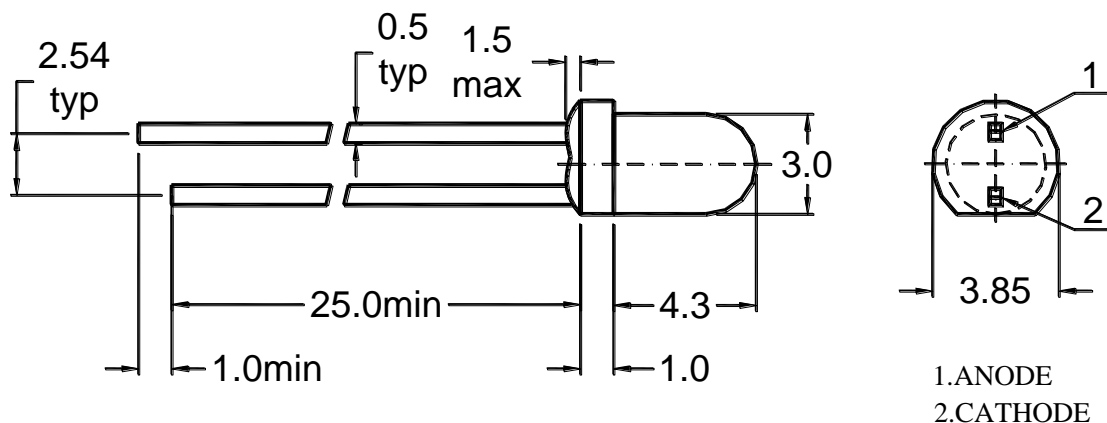
Features :

- High speed response
- High reliability and long life
- Low power consumption
- Available in red, blue, white, green, yellow colors
- Suitable for pulse operation
- This product doesn't contain restriction Substance, comply RoHS standard

Descriptions :

- The LED lamps are available with different colors, intensities, epoxy colors, etc.
- The series specially designed for applications requiring higher brightness.
- Superior performance in outdoor environment.

Package Dimensions :



Note :

1. All dimensions are in millimeters(mm)
2. Tolerance is ± 0.25 mm unless otherwise noted
3. Protruded resin under flange is 1.5mm Max LED.

Absolute Maximum Rating (Ta = 25 °C)

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P _d	80	mW
Pulse Forward Current (Duty 1/10 @ 1kHz)	I _{FP}	70	mA
Continuous Forward Current	I _F	20	mA
Reverse Voltage	V _R	5	V
Operation Temperature	T _{opr}	- 30 ~ 85	°C
Storage Temperature	T _{stg}	- 40 ~ 100	°C
Soldering Temperature	T _{sol}	260±5	°C

Note : Soldering Time ≤5 seconds

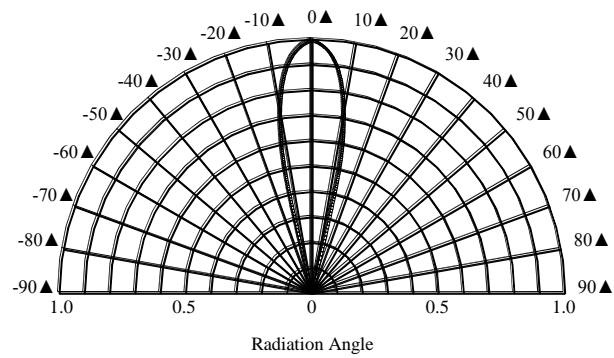
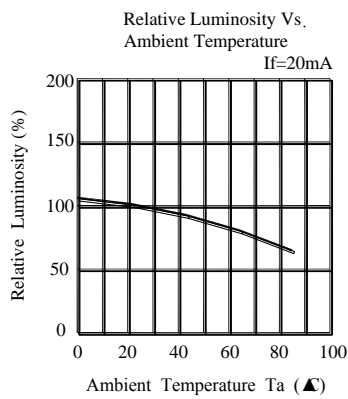
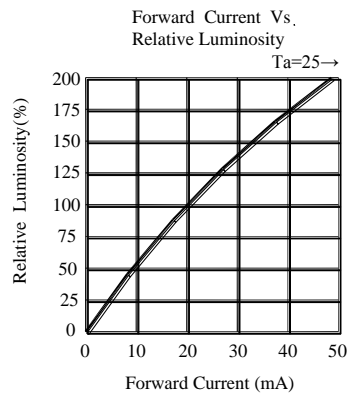
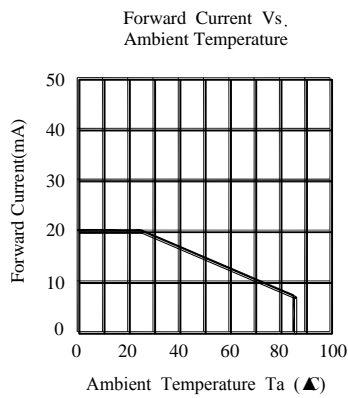
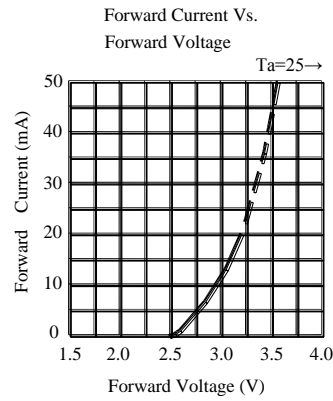
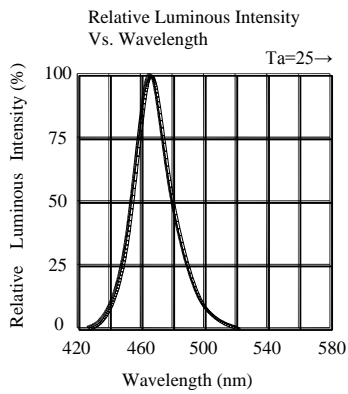
Electron-Optical Characteristics (Ta = 25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	3,000	4,200	5,500	mcd	I _F =20 mA
Forward Voltage	V _F		3.0	3.5	V	I _F =20 mA
Reverse Current	I _R			20	μA	V _R =6V
Dominant Wavelength	λ _d		468	475	nm	I _F =20 mA
Peak Emission Wavelength	λ _p		465		nm	I _F =20 mA
Spectral Line Half Width	Δλ		30		nm	I _F =20 mA
Viewing Angle	2θ1/2		20		deg	I _F =20 mA

Reliability Test Items and Conditions

Test Item	Test Conditions	Duration	Sample	Ac/Re
Temperature Cycle	-40°C(30 min.) ~ 25°C(5 min.) ~ 100°C(30 min.) ~ 25°C(5 min.)	100 cycles	20	0/1
High Temp. Storage	Ta=100°C	1,000 hours	20	0/1
Temp. & Humidity Test	Ta=85°C, RH=85%	1,000 hours	20	0/1
Low Temp. Storage	Ta=-40°C	1,000 hours	20	0/1
Operating Life Test	Ta=25±5°C, DC IF=20mA	1,000 hours	20	0/1
Solder Heat	Tsol=260±5°C, 5sec	1 time	20	0/1
Thermal Shock	-40 ±5°C → 100 ±5°C 15 min. 15 min.	100 cycles	20	0/1

Typical Characteristic Curves :



Precautions In Use

A. Soldering Conditions

1. Maximum allowable soldering conditions are

Solder dipping : 260 °C max., 5 seconds max., one time.

Soldering iron : 350 °C max., 5 seconds max., one time.

2. In soldering, do not put any stress on the lead frame, particularly when heated.

B. Lead frame Forming and Use

1. When mounting the LEDs onto a printed circuit board ,the holes on the circuit board should be exactly aligned with the leads of the LEDs.
2. Please avoid conditions which may cause the LED to corrode, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations. It is recommended that the LEDs be used as soon as possible.
3. Please avoid rapid transitions in ambient temperature, especially, in high humidity environments.

C. Static Electricity

1. These products are sensitive to static electricity charge, and users are required to handle with care. Particularly, if an current and or voltage which exceeds the Absolute Maximum Rating of Products is applied, the overflow in energy may cause damage to, or possibly result in electrical destruction of, the Products. The customer is requested to take adequate countermeasures against static electricity charge and surge when handling Products.
2. Proper grounding of Products , use of conductive mat, conductive working uniform and shoes, and conductive containers are effective against static electricity and surge.
3. Ground low-resistance areas where the product contacts, such as metal surfaces of the work platform, with a conductive mat (surface resistance 10^6 - $10^8 \Omega$).
4. A tip of soldering iron is requested to be grounded. An ionizer should also be installed where risk of static generation is high.

Notes :

1. Above specification may be changed without notice. We will reserve authority on material change for above specification.
2. When using this product, please observe the absolute maximum ratings and the instructions for the specification sheets. We assume no responsibility for any damage resulting from use of the product which does not comply with the instructions included in the specification sheets.

Label Form Specifications

