



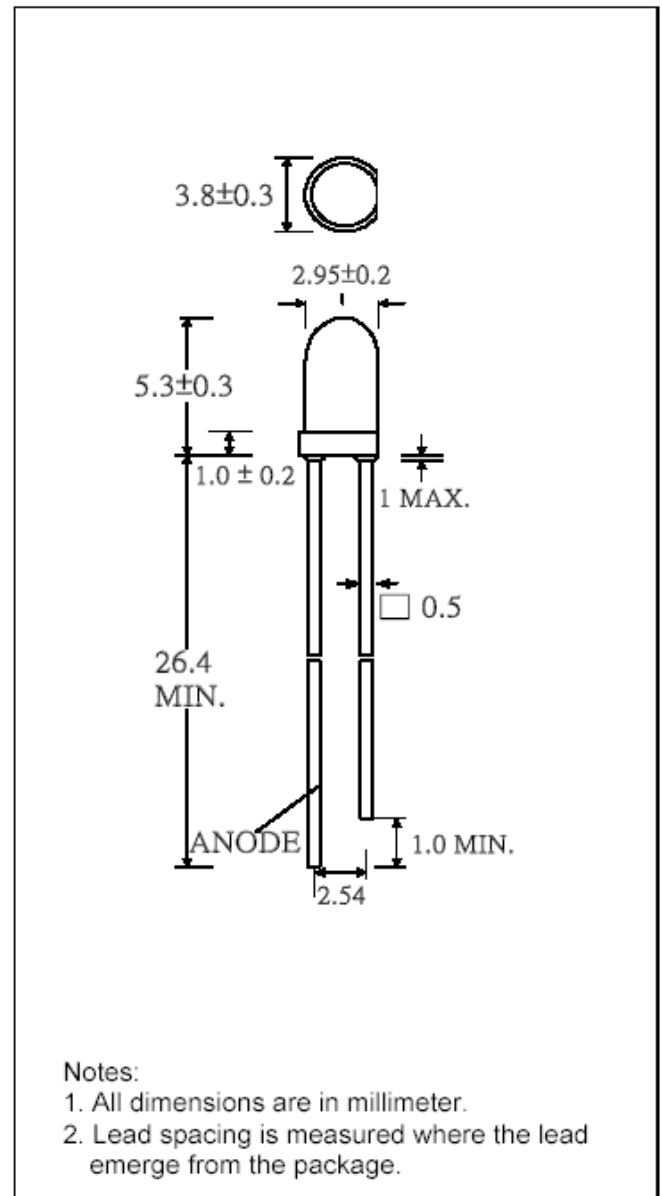
B3b-447-IX

DESCRIPTION

- Super bright LED Lamp
- Round type
- T-1 3mm diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off

FEATURES

- Emitted color: Super Blue
- High Luminous intensity
- Technology: InGaN
- Peak wavelength $\lambda_p = 472\text{nm}$
- Viewing angle: 15°



SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
InGaN	Super Blue	Water Clear	15°



ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P_D	120	mW
Peak Forward Current (1/10 Duty Cycle @1KHz)	I_{PF}	100	mA
Continuous Forward Current	I_{AF}	30	mA
Reverse Voltage	V_R	5.0	V
Operating Temperature Range	T_{OPR}	-40~+85	°C
Storage Temperature Range	T_{STG}	-40~+100	°C

Solder temperature 1.6 mm from body for 3 seconds at 260°C

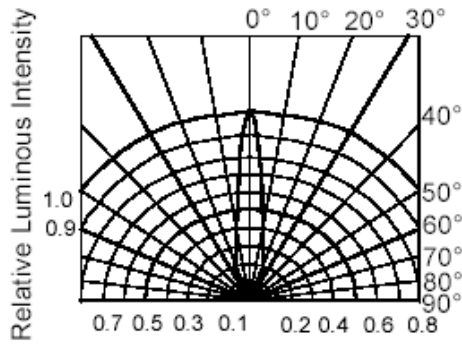
OPTICAL-ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I_V	$I_F = 20\text{mA}$	1330	2000		mcd
Forward Voltage	V_F	$I_F = 20\text{mA}$		3.5	4.0	V
Reverse Current	I_R	$V_R = 5\text{V}$			10	uA
Viewing Angle	$2\theta_{1/2}$	$I_F = 20\text{mA}$		15		deg.
Peak Wavelength	λ_P	$I_F = 20\text{mA}$		472		nm
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$		470		nm
Spectrum Radiation Bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$		30		nm

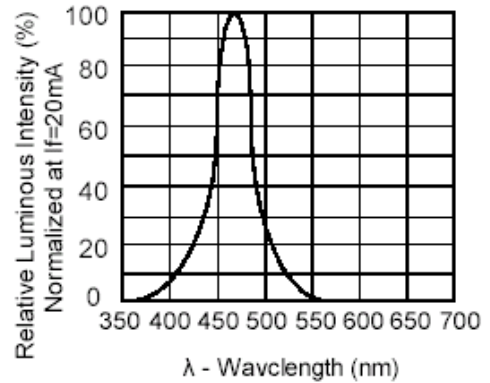
*Tolerance of Viewing Angle: -10 / +5 deg.



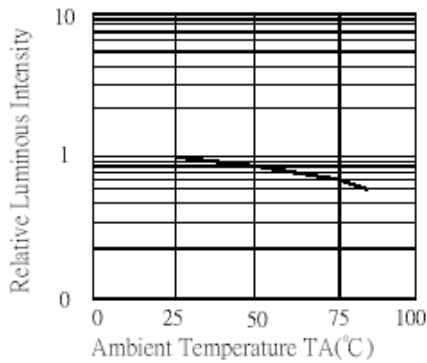
TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



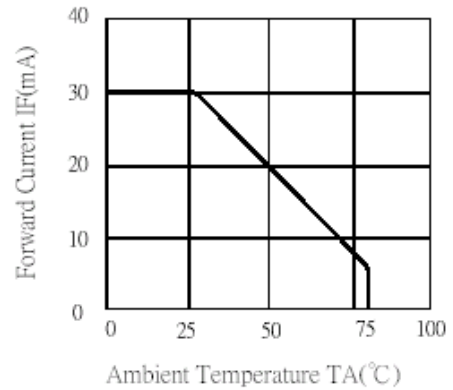
RADIATION DIAGRAM



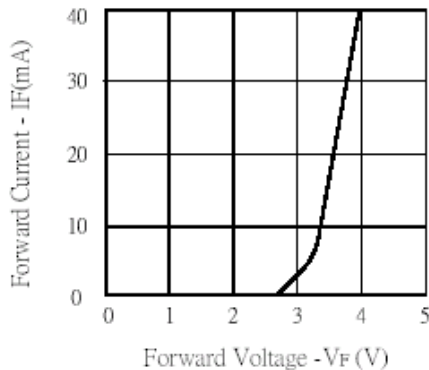
RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH



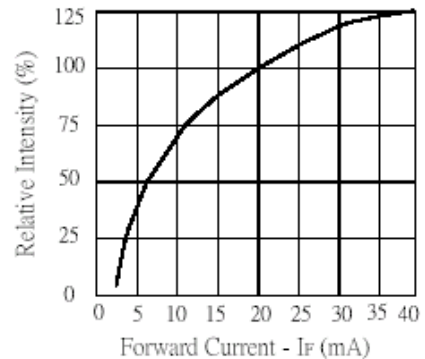
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. AMBIENT TEMPERATURE



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT