



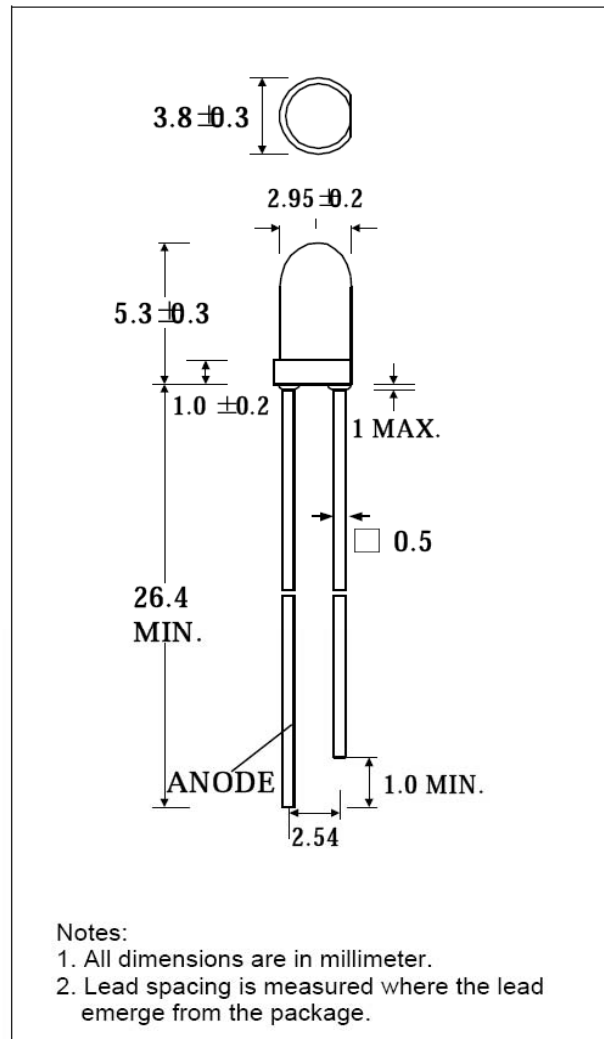
## B3B-440-JB

### DESCRIPTION

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

### FEATURES

- Emitted color: White
- High Luminous intensity
- Technology: InGaN
- Typical emission color: x=0.31, y=0.32
- Viewing angle: 20°



### SELECTION GUIDE

Chip Material	Emitted Color	Lens Color	Viewing Angle
InGaN	White	Water Clear	20°



## ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P <sub>D</sub>	120	mW
Peak Forward Current (1/10 Duty Cycle @1KHz )	I <sub>FP</sub>	100	mA
Continuous Forward Current	I <sub>F</sub>	30	mA
Reverse Voltage	V <sub>R</sub>	5.0	V
Operating Temperature Range	T <sub>OPR</sub>	-40~+85	°C
Storage Temperature Range	T <sub>STG</sub>	-40~+100	°C

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

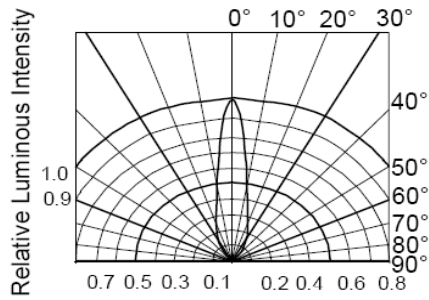
## OPTICAL-ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	2400	3500		mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA		3.5	4.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	uA
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> = 20mA		20		deg.

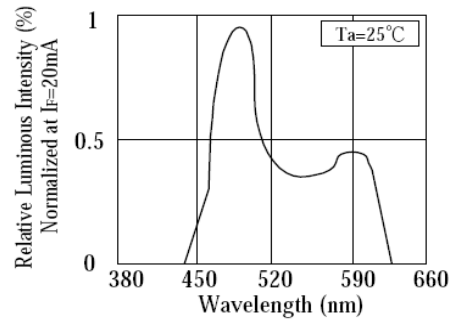
\*Tolerance of Viewing Angle: -10 / +5 deg.



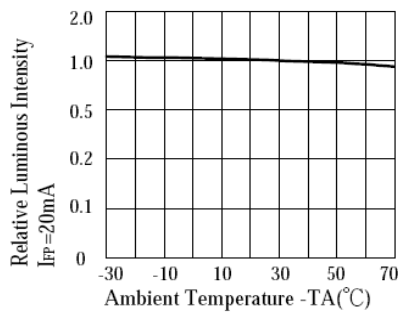
## TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



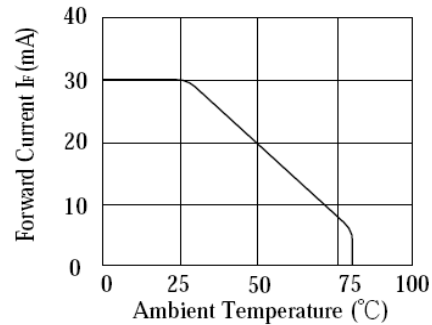
**RADIATION DIAGRAM**



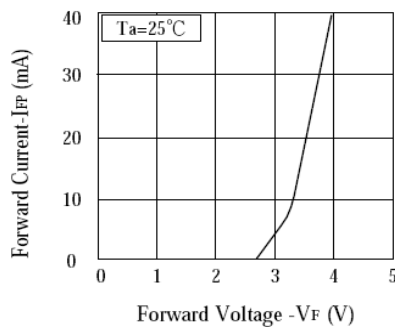
**RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH**



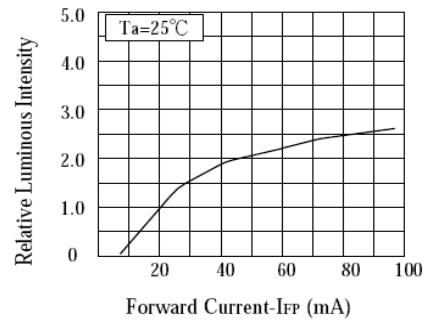
**LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE**



**MAX FORWARD CURRENT Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY Vs. FORWARD CURRENT**