



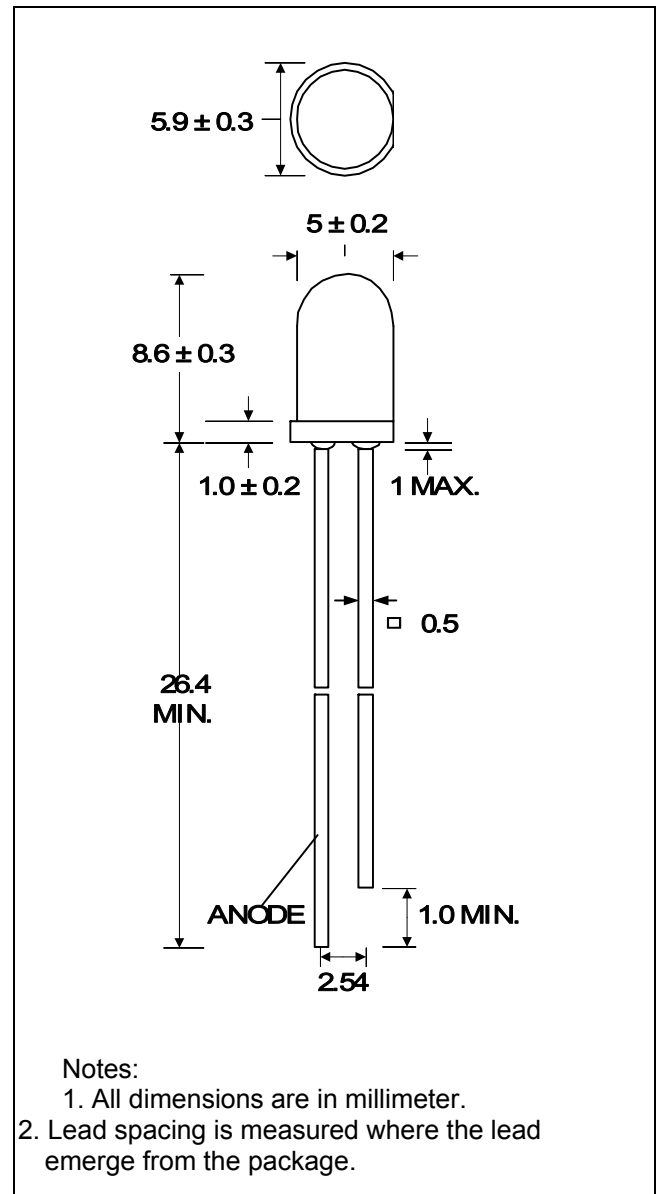
## B5-433-20D

### DESCRIPTION

- Super bright LED Lamp
- Round type
- T1-3/4 (5mm) diameter
- Lens color: Water Clear
- With Flange
- Solder leads without stand-off

### FEATURES

- Emitted color: Super Green
- High Luminous intensity
- Technology: AlGaInP
- Peak wavelength  $\lambda_p = 575 \text{ nm}$
- Viewing angle:  $30^\circ$



### SELECTION GUIDE

Chip Material	Chip Emitted	Lens Color	Viewing Angle
AlGaInP	Super Green	Water Clear	$30^\circ$



## ABSOLUTE MAXIMUM RATINGS

(Ta=25 °C)

PARAMETER	SYMBOL	MAX. RATING	Unit
Power Dissipation	P <sub>D</sub>	80	mW
Peak Forward Current (1/10 Duty Cycle @1kHz )	I <sub>PF</sub>	200	mA
Continuous Forward Current	I <sub>AF</sub>	50	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~+85	°C

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

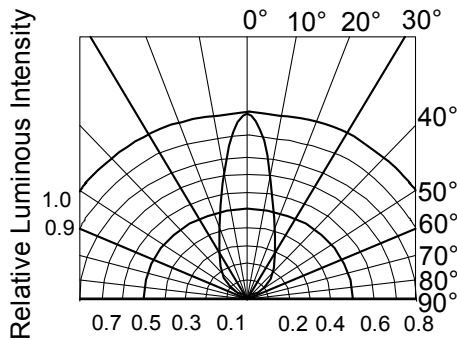
## OPTICAL-ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	1200	1700		mcd
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 20mA		2.0	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V			10	µA
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> = 20mA		30		deg.
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> = 20mA		575		nm
Dominant Wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA		572		nm
Spectrum Radiation Bandwidth	Δλ	I <sub>F</sub> = 20mA		25		nm

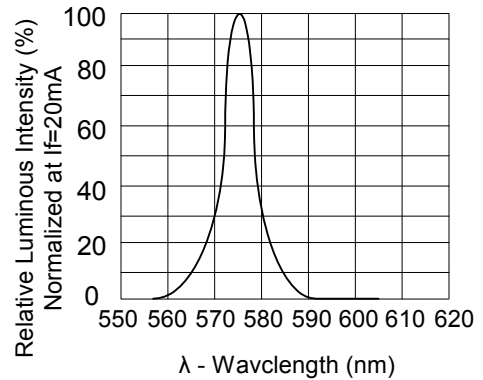
\*Tolerance of Viewing Angle: -10 / +5 deg.



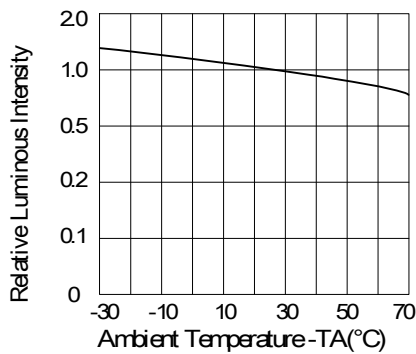
## TYPICAL OPTICAL-ELECTRICAL CHARACTERISTIC CURVES



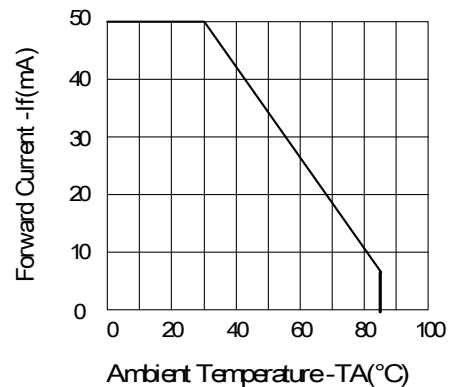
**RADIATION DIAGRAM**



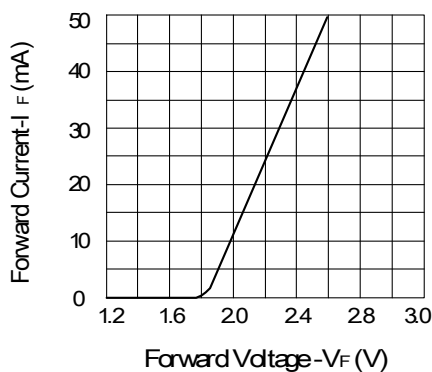
**RELATIVE LUMINOUS INTENSITY Vs. WAVELENGTH**



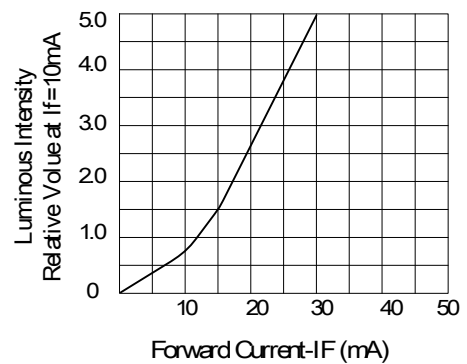
**LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY Vs. FORWARD CURRENT**