

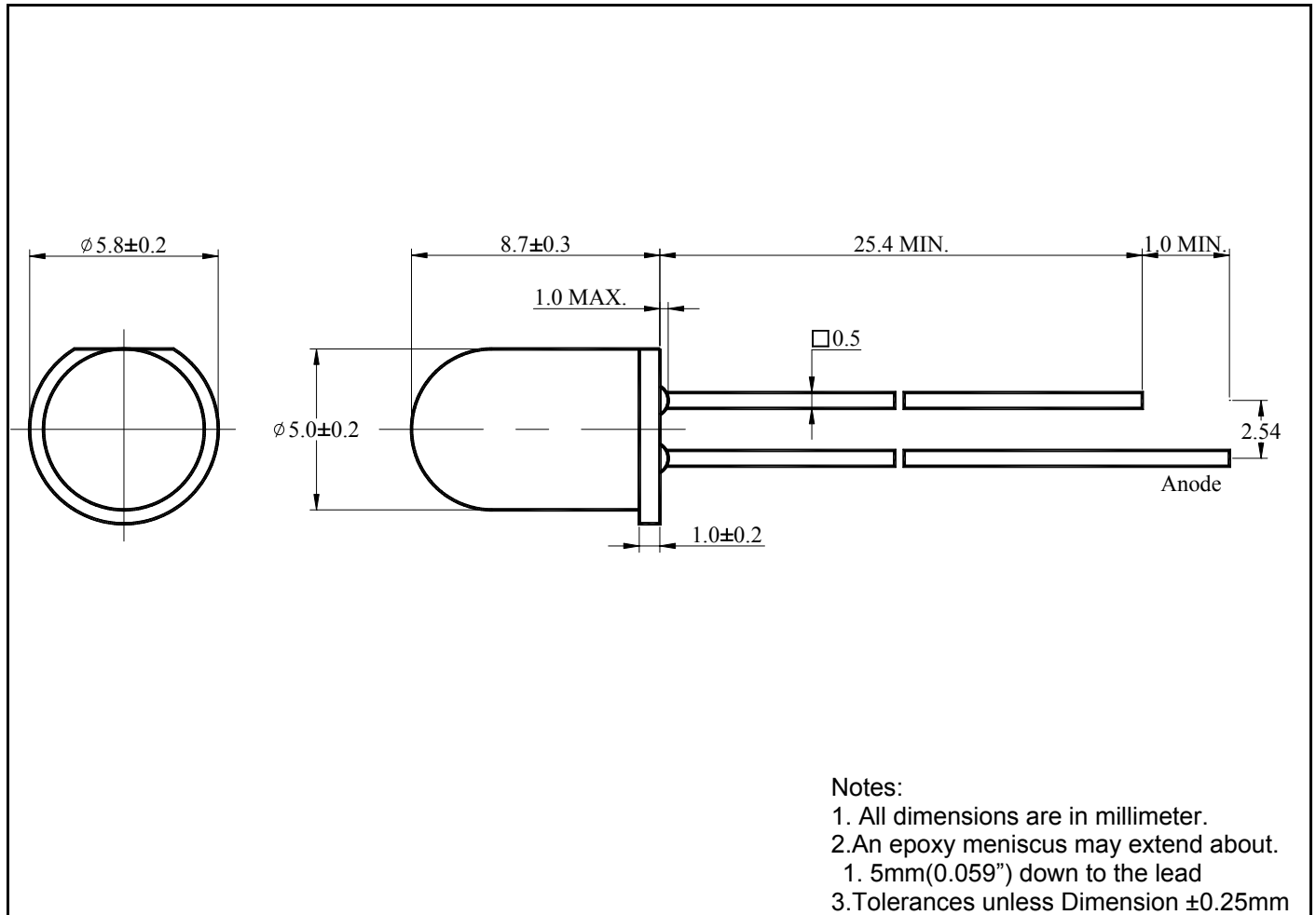
Part No. **55-552XB-0**

5 mm

Round

Type : LED Lamps

■ **Package Dimension:**



■ **Features :**

- Choice of various viewing angles.
- Available on Tape and Reel.
- Reliable and robust.

■ **Descriptions :**

- The series is specially designed for application requiring higher brightness.
- The LED lamps are available with different color, intensities, epoxy colors etc.

■ **Applications :**

- TV set
- Monitor
- Telephone

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LED Parts P/N.	Chip		Lens Color
	Material	Emitted Color	
55-552XB-0	AlGaInP	Super Red	Water Clear

■ Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I _F	50	mA
Operating Temperature	T _{opr}	-40~+85	°C
Storage Temperature	T _{stg}	-40~+85	°C
Soldering Temperature	T _{sol}	260±5	°C
Electrostatic Discharge	ESD	1000	V
Power Dissipation	P _D	120	mW
Peak Forward Current (Duty 1/10@1KHz)	I _F (Peak)	200	mA
Reverse Voltage	V _R	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _v	4600	7000	/	mcd	I _F =20mA
Viewing Angle	2 θ 1/2	/	15	/	deg	- - -
Peak Wavelength	λ _p	/	630	/	nm	I _F =20mA
Dominant Wavelength	λ _d	/	625	/	nm	I _F =20mA
Spectrum Radiation Bandwidth	△ λ	/	20	/	nm	I _F =20mA
Forward Voltage	V _F	/	2.0	2.4	V	I _F =20mA
Reverse Current	I _R	/	/	10	μA	V _R =5V

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■ **Reliability test items and conditions :**

The reliability of products shall be satisfied with items listed below.

Confidence level: 90%

LTPD: 10%

NO	ITEM	Test Conditions	Test hours/cycle	Sample Q'ty	Ac/Re
1	Solder Heat	Temp : 260°C±5°C	5 sec	22 pcs	0/1
2	Temperature Cycle	H : +100°C 15min └ 5min L : -40°C 15min	50 cycles	22 pcs	0/1
3	Thermal Shock	H : +100°C 15min └ 10sec L : -10°C 15min	50 cycles	22 pcs	0/1
4	High Temperature Storage	Temp : 100°C	1000 hrs	22 pcs	0/1
5	Low Temperature Storage	Temp : -40°C	1000 hrs	22 pcs	0/1
6	DC Operating Life	I _F =20mA	1000 hrs	22 pcs	0/1
7	High Temperature / High Humidity	85°C / 85%RH	1000 hrs	22 pcs	0/1

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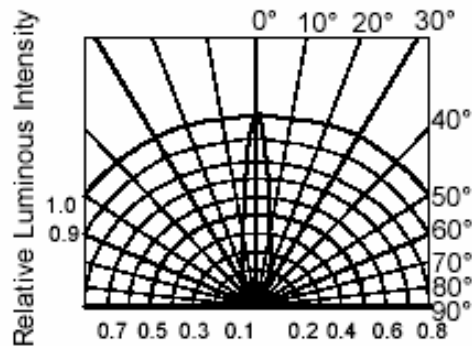
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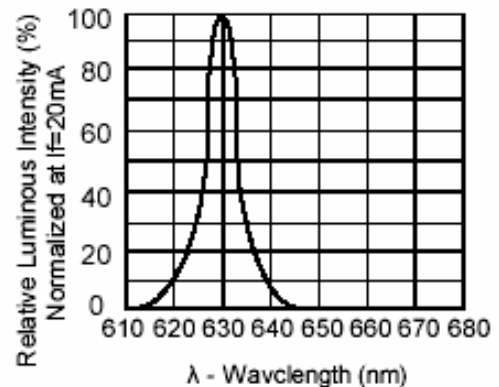
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■ **Typical electro-optical characteristics curves :**

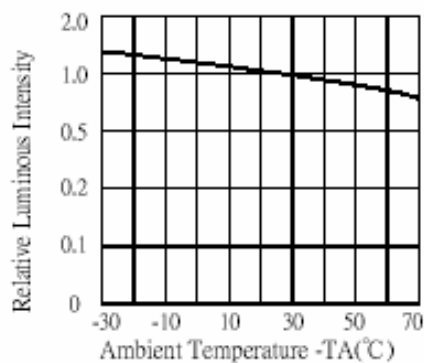
The data typical and the value are not guaranteed.



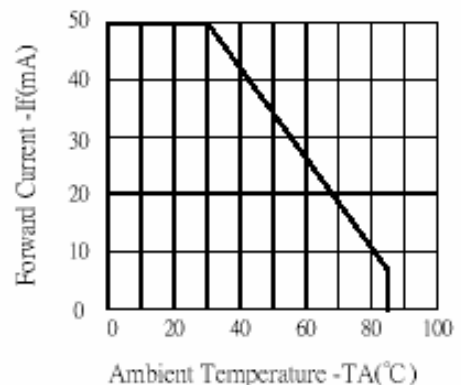
RADIATION DIAGRAM



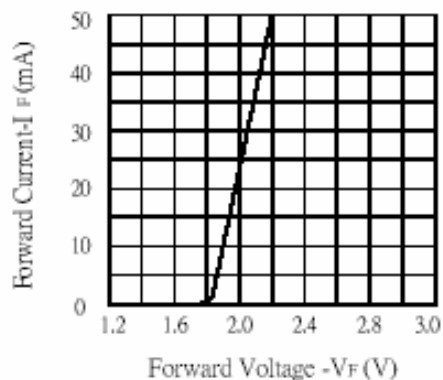
**RELATIVE LUMINOUS INTENSITY
Vs. WAVELENGTH**



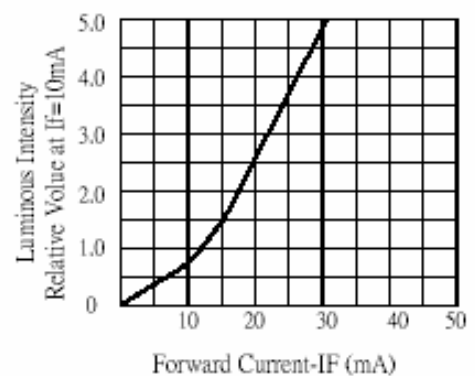
**LUMINOUS INTENSITY
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT
Vs. AMBIENT TEMPERATURE**



**FORWARD CURRENT
Vs. FORWARD VOLTAGE**



**LUMINOUS INTENSITY
Vs. FORWARD CURRENT**