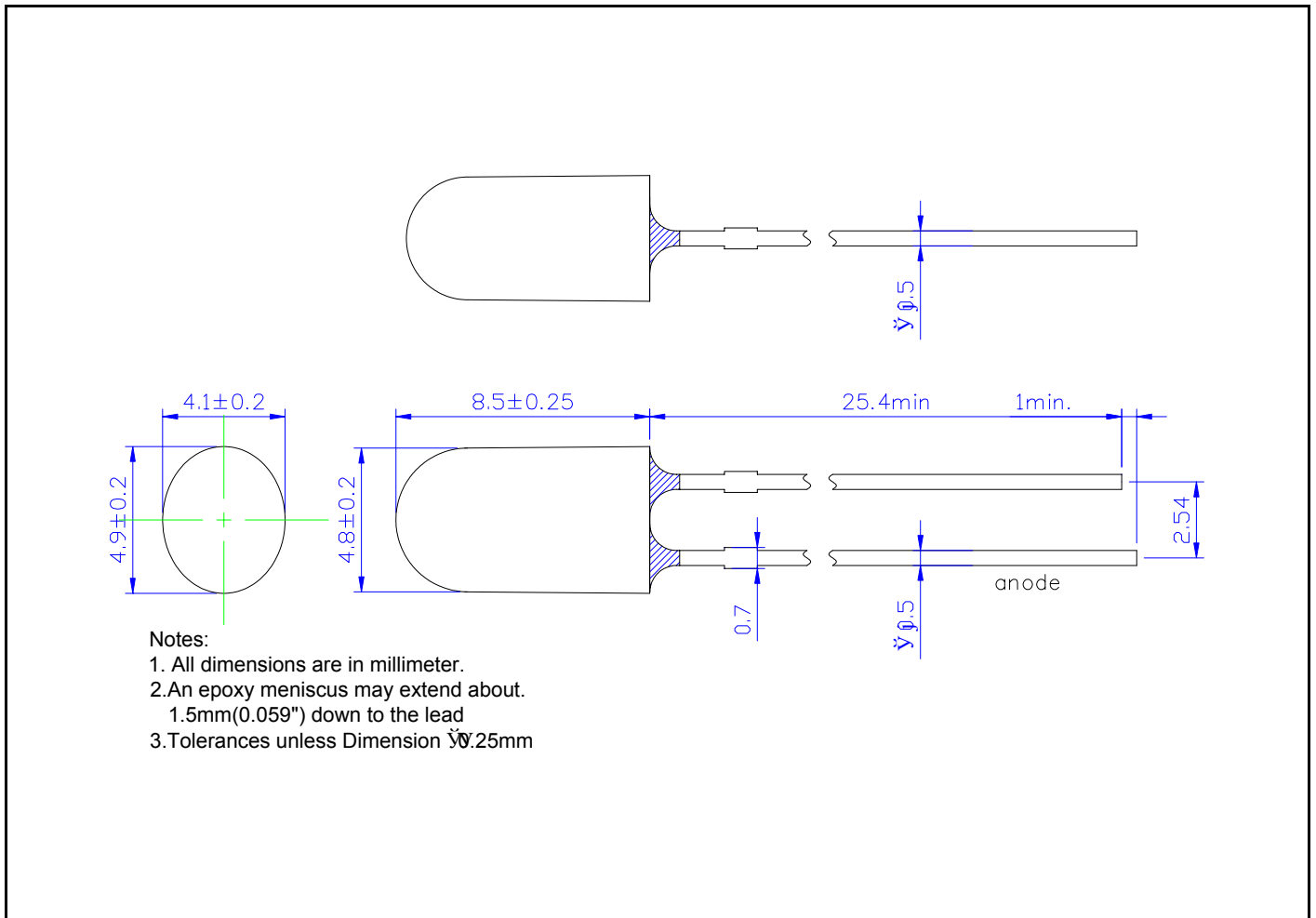


■ Package Dimension:



■ 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

LED Parts P/N.	Chip		Lens Color	Viewing Angle
	Material	Emitted Color		

4.9×4.1 mm Oval

Type □ LED Lamps

AL-V5K3IRC-850-002	GaAlAs	Infrared	Water Clear	50 □ 20°
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■ Absolute Maximum Ratings at Ta=25□

Parameter	Symbol	Rating	Unit
Continuous Forward Current	I _{AF}	100	mA
Operating Temperature	T _{opr}	-40~+85	□
Storage Temperature	T _{stg}	-40~+85	□
Soldering Temperature	T _{sol}	260±5	□
Power Dissipation	P _D	120	mW
Peak Forward Current □Duty 1/10@1KHz□	I _F □Peak□	1	A
Reverse Voltage	V _R	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Radiated Output Power	P _O	1.4	2.0	□	mW/sr	I _F =50mA
Peak Wavelength	λ _d	□	850	□	nm	I _F =20mA
Spectrum Radiation Bandwidth	□λ	□	30	□	nm	I _F =20mA
Forward Voltage	V _F	1.5	1.8	□	V	I _F =50mA
Forward Voltage	V _F	□	1.8	2.0	V	I _F =100mA
Reverse Current	I _R	□	100	□	μA	V _R =5V

*Tolerance of Viewing Angle □+5□-10°.

■ 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
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4.9×4.1 mm Oval

Type□LED Lamps

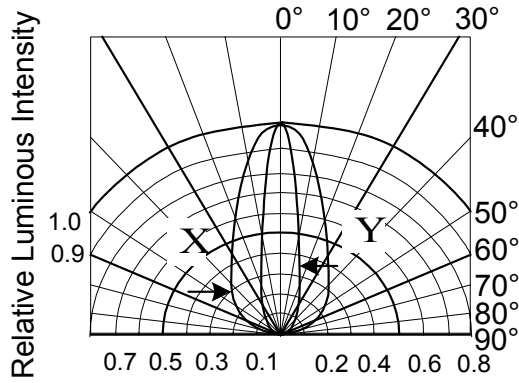
1	Solder Heat	Temp□260 ±5	5 sec	76 pcs	0/1
2	Temperature Cycle	H□+85 30min □ 5min L□-55 30min	50 cycles	76 pcs	0/1
3	Thermal Shock	H□+100 5min □ 10min L□-10 5min	50 cycles	76 pcs	0/1
4	High Temperature Storage	Temp□100	1000 hrs	76 pcs	0/1
5	Low Temperature Storage	Temp□-55□	1000 hrs	76 pcs	0/1
6	DC Operating Life	Temp□25 I _F =20mA	1000 hrs	76 pcs	0/1
7	High Temperature□ High Humidity	85 85%RH	1000 hrs	76 pcs	0/1

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

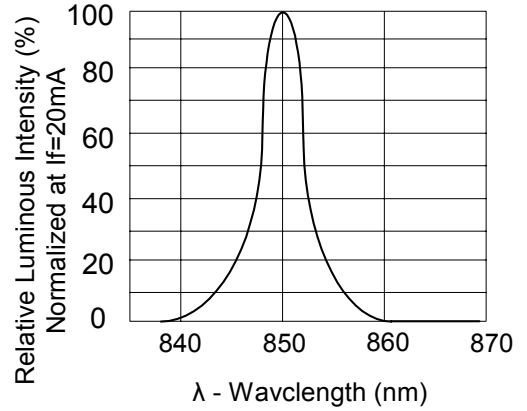
The data typical, and the value is not guaranteed.

4.9×4.1 mm Oval

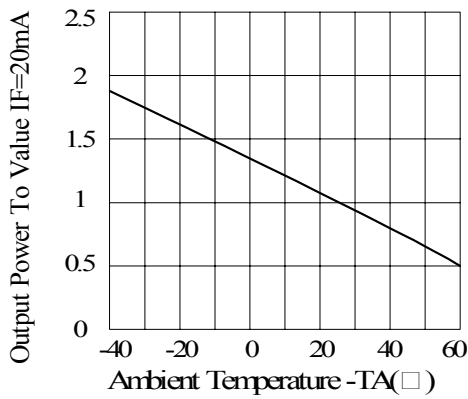
Type □ LED Lamps



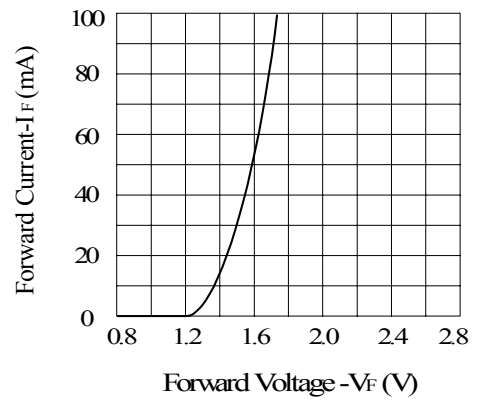
Radiation Diagram



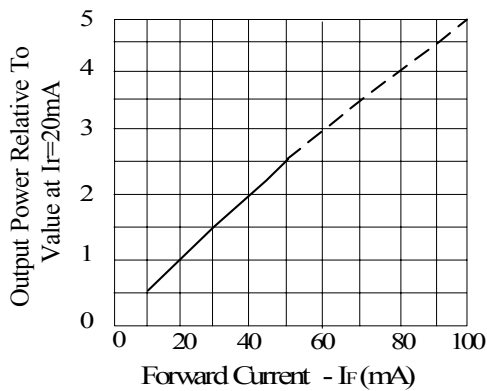
Relative Luminous Intensity vs. Wavelength



Luminous Intensity Vs. Ambient Temperature



Forward Current Vs. Forward Voltage



Forward Current Vs. Forward Voltage