

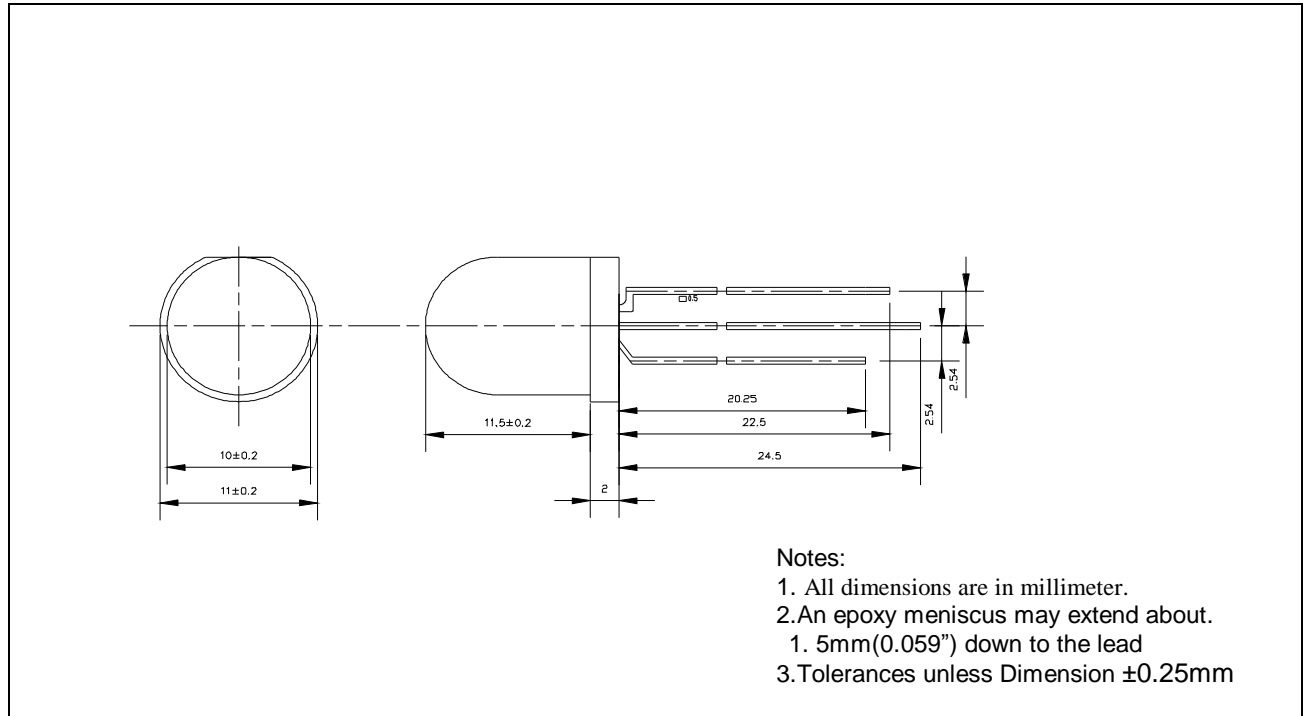
Part No. AL-109EGW-C

Diff No.

10 mm

Type

LED Lamps

**Package Dimension:****n Features:**

- I** Choice of various viewing angles.
- I** Available on tape and reel.
- I** Reliable and robust

**n Descriptions**

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

**n Applications:**

- I** TV set
- I** Monitor
- I** Telephone

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PART NO.	Chip		Lens Color
	Material	Emitted Color	
AL-109EGW-C	GaAsP/GaP	ORANGE	WHITE DIFFUSED
	GaP	GREEN	

**n** Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Rating	Unit
Forward Current	IF	E: 30	mA
		G: 30	
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +85	°C
Soldering Temperature	Tsol	260 ±5	°C
Power Dissipation	Pd	E: 100	mW
		G: 100	
Peak Forward Current (Duty 1/10@1KHz)	IF(Peak)	E: 160	mA
		G: 160	
Reverse Voltage	VR	5	V

**n** Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition	
Luminous Intensity	IV	E	2.5	10.0	/	mcd	IF=10mA
		G	2.5	10.0			
Viewing Angle	2θ 1/2	/	75	/	deg	IF=20mA	
Peak Wavelength	λp	E	/	635	/	nm	IF=20mA
		G		565			
Dominant Wavelength	λd	E	/	625	/	nm	IF=20mA
		G		570			
Spectrum Radiation Bandwidth	Δλ	E	/	45	/	nm	IF=20mA
		G		30			
Forward Voltage	VF	E	1.7	2.0	2.4	V	IF=20mA
		G	1.7	2.1	2.4		
Reverse Current	IR	/	/	10	μA	VR=5V	

Reliability test items and conditions :

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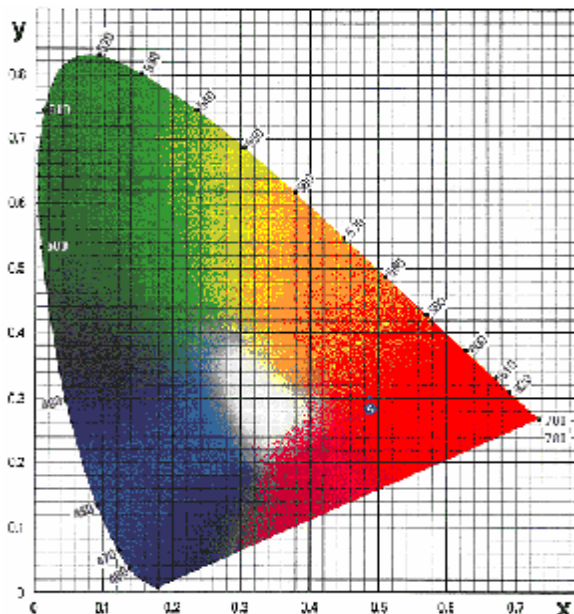
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NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ±5°C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H:+85°C 30min ∫ 5min L:-55°C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H:+100°C 5min ∫ 10set L:-10°C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP :25°C IF=20mA	1000 HRS	76 PCS	0/1
7	High Temperature/High Humidity	85°C /85%RH	1000 HRS	76 PCS	0/1

**I CHROMATICITY DIAGRAM:**



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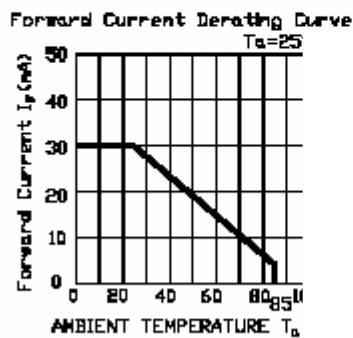
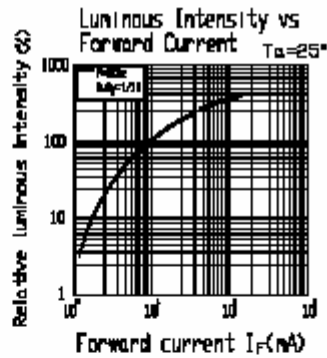
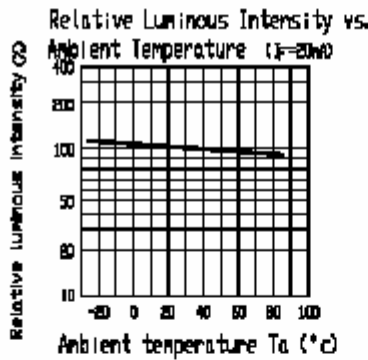
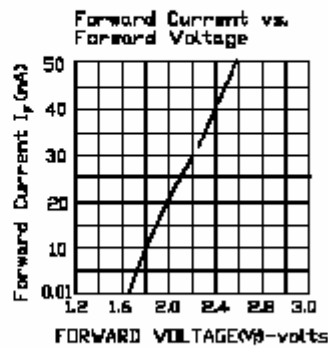
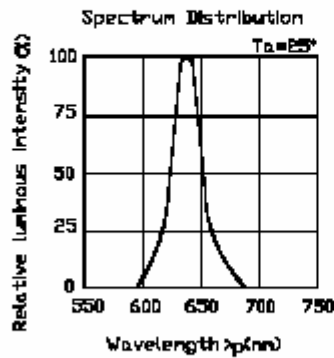
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Type LED Lamps

■ Typical Electro-Optical Characteristic Curves

(E)



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Type

LED Lamps

■ Typical Electro-Optical Characteristic Curves:

(G)

