

# DATA SHEET

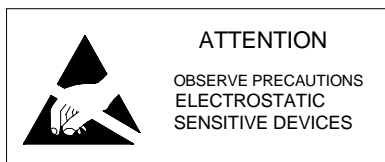
MODEL No : LL2508JQHR4-702  
DOC. No : LMS-25-069  
Revision: 02

Description:

- 5mm Oval lamp
- Lens Color: Colored Diffused
- Emitting Color: Highr Red
- Viewing Angle :70°
- Stopper

Dice Material: AlGaInP

PREPARED BY	CHECKED BY	APPROVED BY	CUSTOMER APPROVED SIGNATURES



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### Applications:

Full Color Display  
Moving Message Board

### Absolute Maximum Ratings at Ta = 25°C

Items	Symbol	Absolute maximum Rating	Unit
Forward Current	$I_F$	50	mA
Peak Forward Current*	$I_{FP}$	200	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_D$	130	mW
Operation Temperature	$T_{opr}$	-40 ~ +95	°C
Storage Temperature	$T_{stg}$	-40 ~ +100	°C
Lead Soldering Temperature	$T_{sol}$	Max.260°C for 5 sec Max. (3mm from the base of the epoxy bulb)	

\*pulse width  $\leq 0.1\text{msec}$  duty  $\leq 1/10$

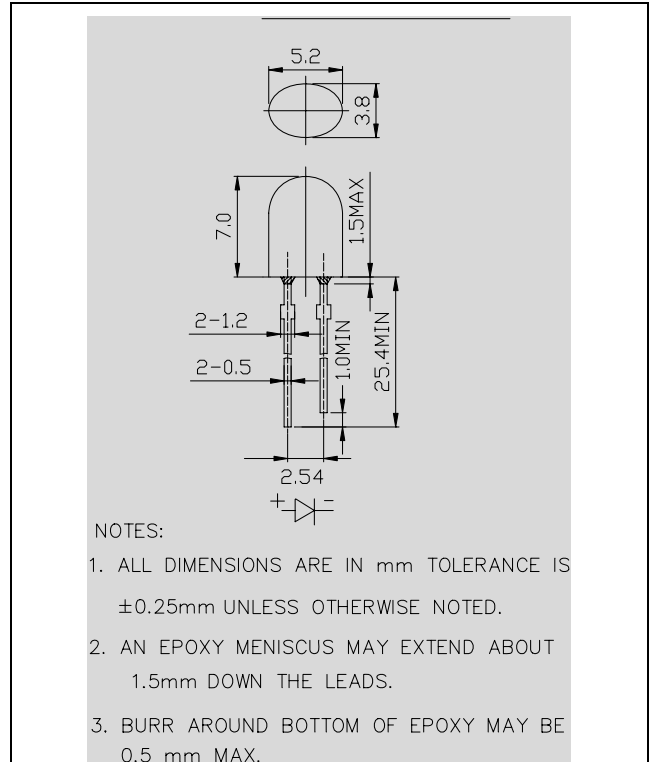
### Typical Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	1.7	2.1	2.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	---	---	10	$\mu\text{A}$
Dominant Wavelength	$\lambda_D$	$I_F = 20\text{mA}$	---	624	---	nm
Luminous Intensity	$I_v$	$I_F = 20\text{mA}$	---	1700	---	mcd
50% Power Angle	$2\theta_{H-H}$	$I_F = 20\text{mA}$	---	70	---	deg
	$2\theta_{V-V}$	$I_F = 20\text{mA}$	---	35	---	deg

### Important Notes:

- 1) All ranks will be included per delivery, rank ratio will be determined by LEDMAN.
- 2) Tolerance of measurement of luminous intensity is  $\pm 15\%$ .
- 3) Tolerance of measurement of dominant wavelength is  $\pm 1\text{nm}$ .
- 4) Tolerance of measurement of Vf is  $\pm 0.05\text{V}$ .
- 5) Packaging methods are available for selection, please refer to PACKAGING STANDARD.
- 6) Please refer to LED LAMP RELIABILITY TEST STANDARD for reliability test conditions.

### Dimension Drawing



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## Typical Optical-Electronic Characteristic Curves

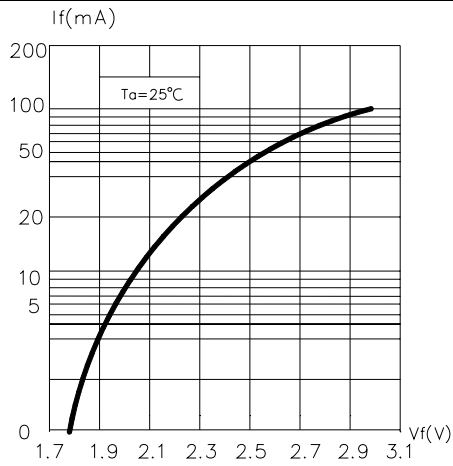


Fig.1 Forward Current vs. Forward Voltage

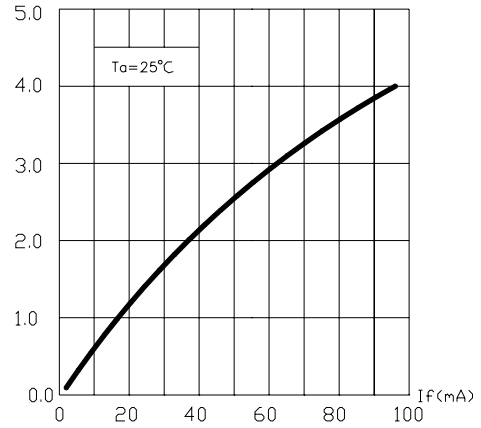


Fig.2 Relative Luminous Intensity vs. Forward Current

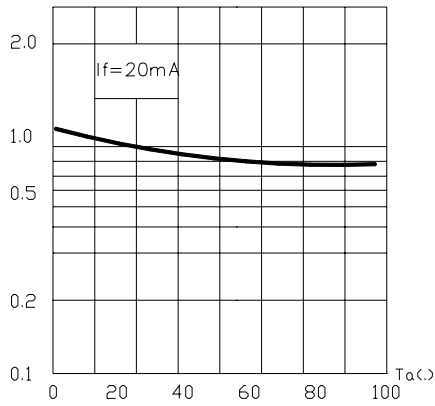


Fig.3 Relative Luminous Intensity vs. Ambient Temperature

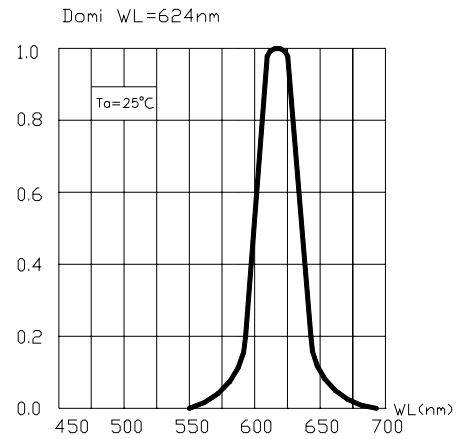


Fig.4 Relative Luminous Flux vs. Wavelength

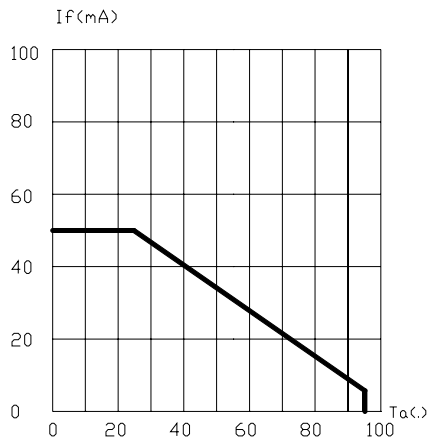


Fig.5 Maximum Forward Current vs. Ambient Temperature

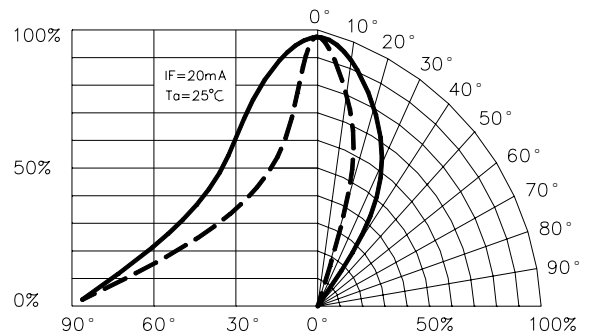


Fig.6 Relative Luminous Intensity vs. Radiation Angle

Items	Signatures	Date	
Prepared by	Dan yang	1-01-2008	
Checked by	Zhensheng Xie	1-01-2008	
Approved by	Yanshan Liu	1-01-2008	