



Ledman Optoelectronic Co., Ltd.

DATA SHEET

MODEL No : LL2508QUHR4-A02

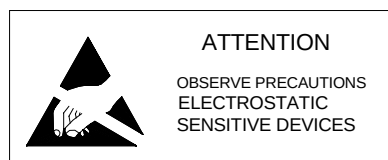
ENG. No: B0511021

Description:

- 5mm Oval lamp
- Lens Color: Colored Diffused
- Emitting Color: Red
- Viewing Angle :100°
- Stopper

Dice Material: AlGaInP

PREPARED BY	CHECKED BY	APPROVED BY	CUSTOMER APPROVED SIGNATURES



Add: 7th Floor Haoyitong Building, North of Hi-Tech Industry Garden,
Nanshan District, Shenzhen, China

Tel: 86-755-86139688

Fax: 86-755-86139001



Model No.	LL2508QUHR4-A02
Revision:	B0511021

Applications:

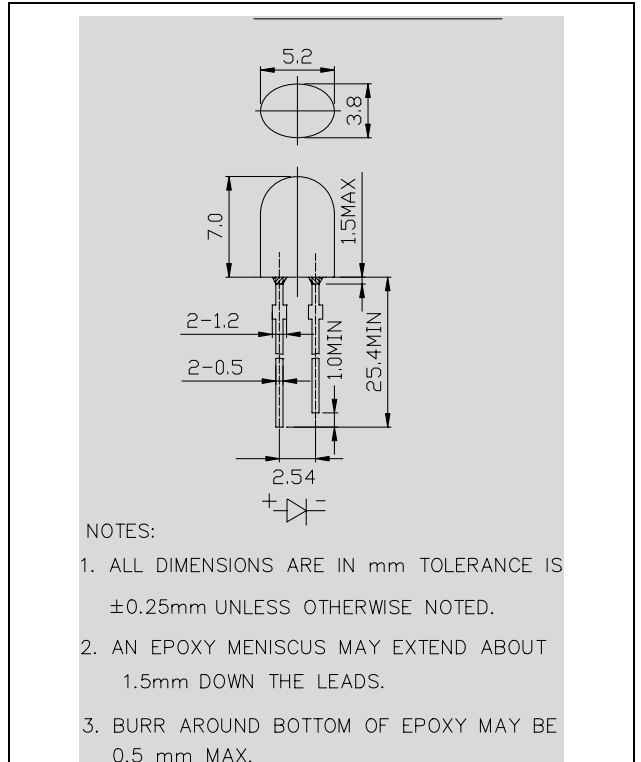
Full Color Display
Moving Message Board

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	120	mW
Operation Temperature	T_{opr}	-30 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T_{sol}	Max.260°C for 3 sec Max. (3mm from the base of the epoxy bulb)	

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

Dimension Drawing



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	2.0	2.6	V
Reverse Current	I_R	$V_R = 5\text{V}$	---	---	10	μA
Dominant Wavelength	λ_D	$I_F = 20\text{mA}$	---	624	---	nm
Luminous Intensity	I_V	$I_F = 20\text{mA}$	---	1200	---	mcd
50% Power Angle	20°H-H	$I_F = 20\text{mA}$	---	100	---	deg
	20°V-V	$I_F = 20\text{mA}$	---	50	---	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 V_f 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.

Typical Optical-Electronic Characteristic Curves

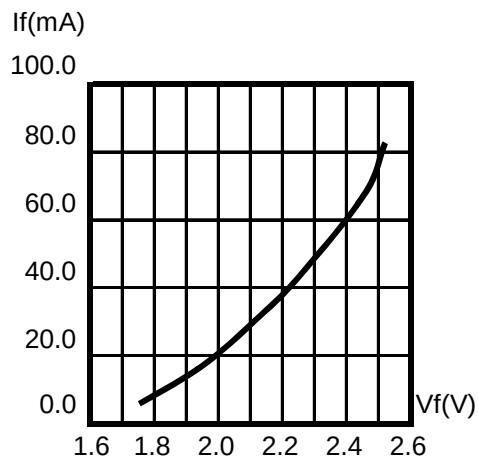


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

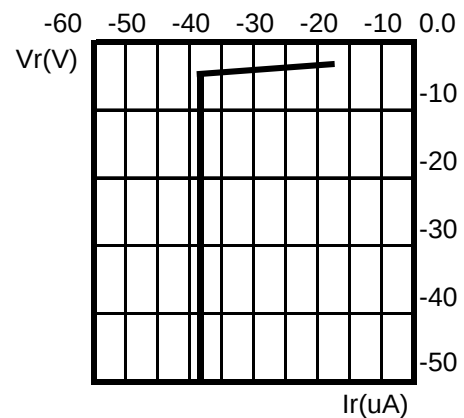


Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

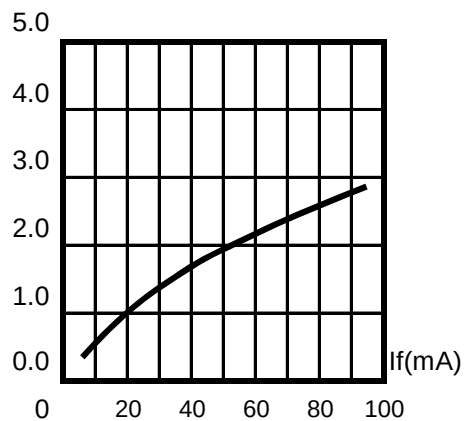


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

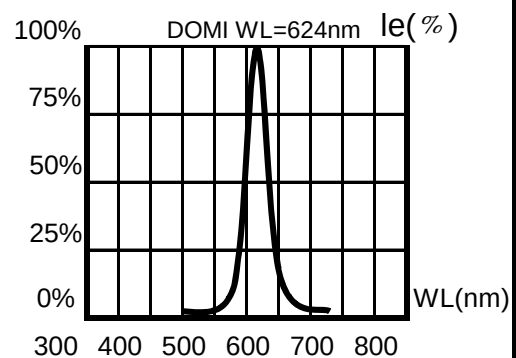


Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

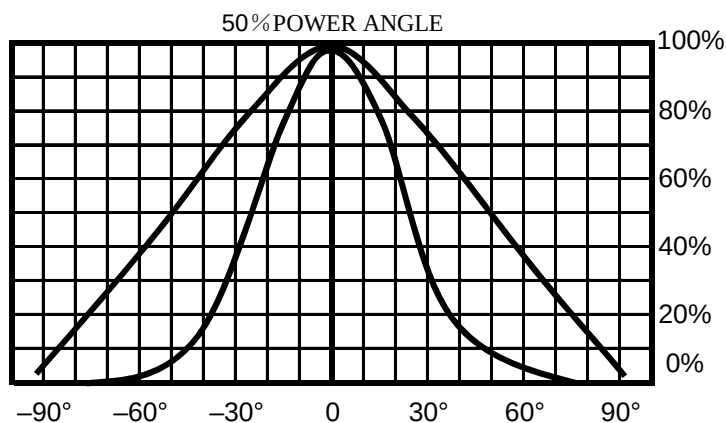


Fig.5 FAR FIELD PATTERN

Items	Signatures	Date	R&D ISSUE
Prepared by	Zhao Meiling	11-16-2005	
Checked by			
Approved by			