



# Ledman Optoelectronic Co., Ltd.

## DATE SHEET

MODEL No : LL2508QVYL4-A02

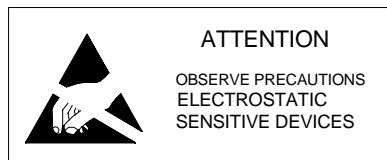
ENG. No:

Description:

- 5mm Oval lamp
- Lens Color: Colored Diffused
- Emitting Color: Yellow
- 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,  
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### Applications:

### Dimension Drawing

### 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	$P_D$	150	mW
Operation Temperature	$T_{opr}$	-30 ~ +85	°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)	

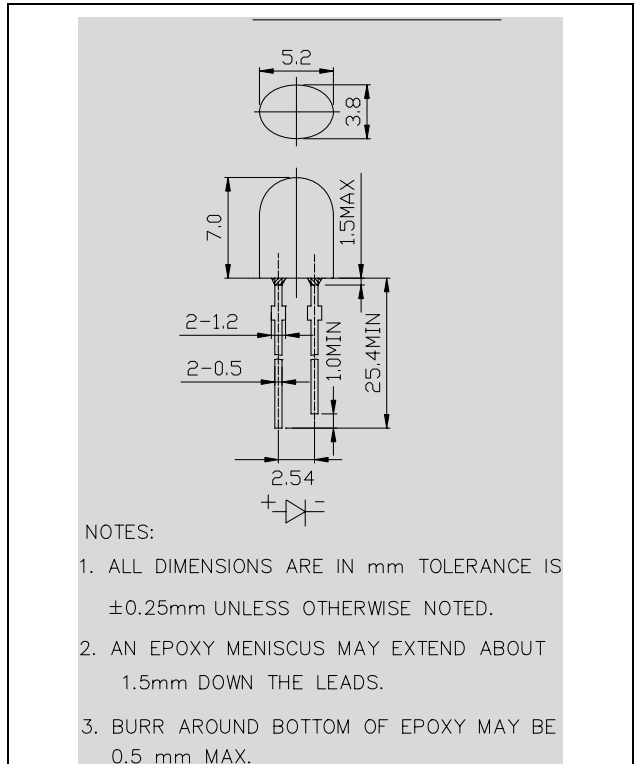
\*pulse width  $\leq 0.1\text{msec}$  duty  $\leq 1/10$

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

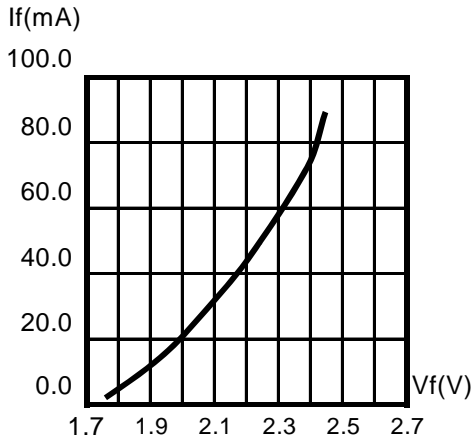
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 20\text{mA}$	1.7	2.0	2.6	V
Reverse Current	$I_R$	$V_R = 5\text{V}$	---	---	10	$\mu\text{A}$
Dominant Wavelength	$\lambda_D$	$I_F = 20\text{mA}$	---	590	---	nm
Luminous Intensity	$I_V$	$I_F = 20\text{mA}$	---	900	---	mcd
50% Power Angle	20½H-H	$I_F = 20\text{mA}$	---	100	---	deg
	20½V-V	$I_F = 20\text{mA}$	---	50	---	deg

### Important Notes:

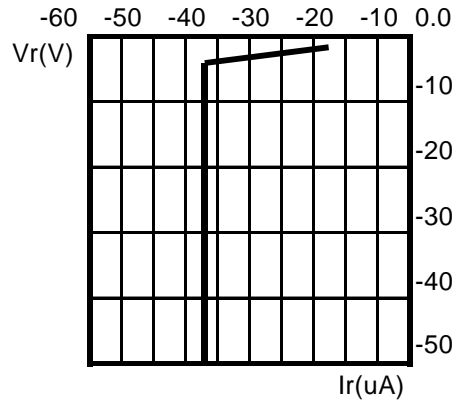
- 1) All ranks will be included per delivery, rank ratio will be determined by LEDMAN.
- 2) Tolerance of measurement of luminous intensity is  $\pm 15\%$ .
- 3) Tolerance of measurement of dominant wavelength is  $\pm 1\text{nm}$ .
- 4) Tolerance of measurement of Vf is  $\pm 0.05\text{V}$ .
- 5) Packaging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



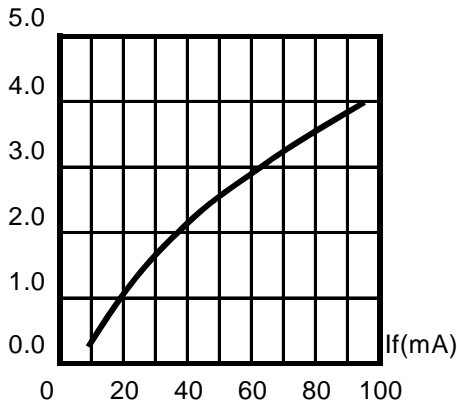
**Typical Optical-Electronic Characteristic Curves**



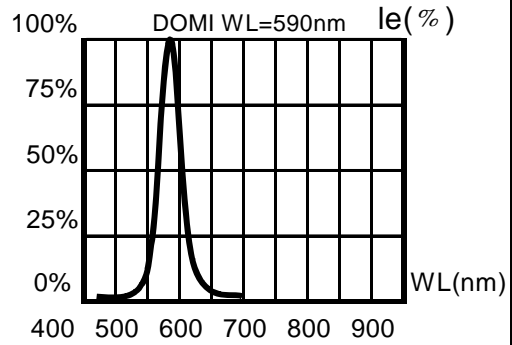
**Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE.**



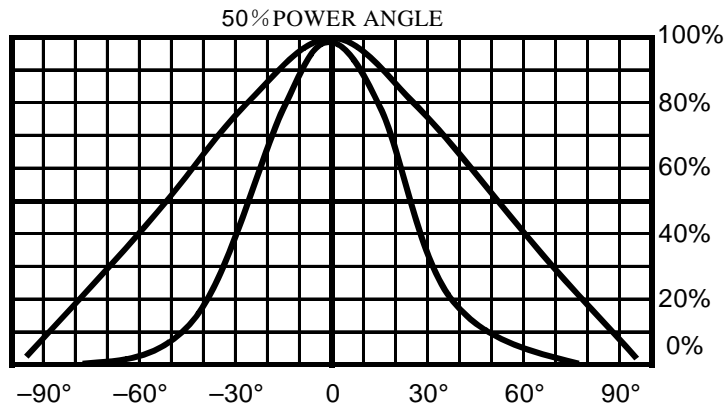
**Fig.2 REVERSE CURRENT VS. REVERSE VOLTAGE.**



**Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.**



**Fig.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.**



**Fig.5 FAR FIELD PATTERN**

Items	Signatures	Date
Prepared by	Meiling Zhao	12-06-2005
Checked by		
Approved by		

R&D ISSUE