



## **LED LAMP**

### **VAOL-5LCE2**

#### **Feature**

- Low Power Consumption
- I.C. compatible

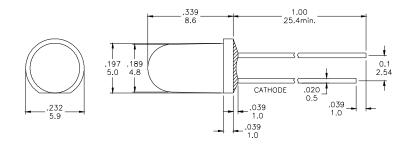
## **Applications**

- Commercial Outdoor Sign Board
- Front Panel Indicator
- § **Dot-Matrix Module**
- § LED Bulb

# **Description**

- These LEDs are Based on GaAsP/GaP Material Technology
- Emitted color: Yellow
- Yellow Diffusion Lens

# **Package Dimension**



Unit: ± inch mm \*Tolerance:  $\pm \frac{0.01}{0.25}$ 

# Absolute Maximum Ratings at Ta=25℃

Symbol	Parameter	Max.	Unit			
PD	Power Dissipation	100	mW			
VR	Reverse Voltage	5	V			
IAF	Average Forward Current	30	mA			
IPF	Peak Forward Current (Duty=0.1, 1kHz)	100	mA			
_	Derating Linear Form 25°C	0.4	mA/°C			
Topr	Operating Temperature Range	-20 to +80	$^{\circ}$			
Tstg	Storage Temperature Range	-20  to + 100	$^{\circ}\!\mathbb{C}$			
Lead Soldering Temperature [1.6mm (0.063inch) From Body] 260°C For 5 Seconds.						

# Electrical / Optical Characteristics and Curves at Ta=25°C

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Unit
VF	Forward Voltage	IF= 20 mA		2.0	2.4	V
IR	Reverse Current	VR = 5 V			100	$\mu$ A
$\triangle \theta$	Half Intensity Angle	IF= 20 mA		60		Deg.
IV	Luminous Intensity	IF= 20 mA		80		mcd.
λd	Dominant Wavelength	IF= 20 mA		590		nm





## Electrical Characteristics at Ta=25°C

2100011001 0100100100100 00 10 20 0									
Symbol	Iv		V <sub>F</sub>		λD				
Parameter	Lum	inous Intensity	Forward Voltage		Dominant Wavelength				
Condition	IF=20mA		IF=20mA		IF=20mA				
Unit		mcd	V		nm				
	Grade	Range	Grade	Range	Grade	Range			
		-80	С	1.9~2.0	Y4	589~591			
			D	2.0~2.1	Y5	591~593			
Binning			Е	2.1~2.2	Y6	593~595			
			F	2.2~2.3					
			G	2.3~2.4					

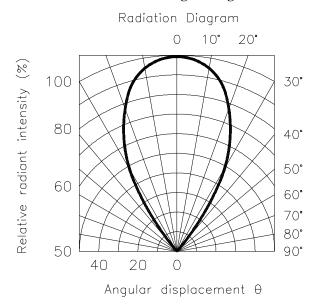
Intensity: Tolerance of minimum and maximum =  $\pm$  15% Vf: Tolerance of minimum and maximum =  $\pm$  0.025v

#### NOTE:

- 1. Static electricity and surge damages the LED. It is recommend to use a anti-static wrist band or anti-electrostatic glove when handing the LEDs. All devices, equipment and machinery must be properly grounded.
- 2. Specific binning requirements -please contact our home office

# **Radiation Diagram**

#### IF=20 mA 50% Power Angle Angle Y=60°

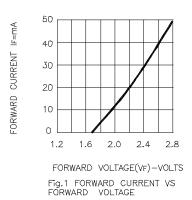


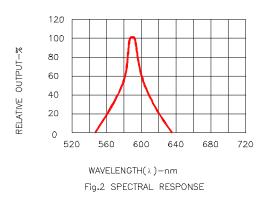


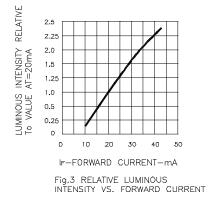


# **YELLOW**

# Typical Electro-optical Characteristic Curves (25°C Free Air Temperature Unless Otherwise Specified)









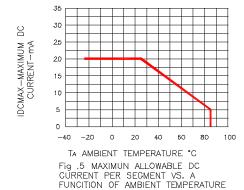




Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE %

(REFRESH RATE f=1KHz)

Fig. 4 LUMINOUS INTENSITY VS.DUTY CYCLE



