VCC OPTOELECTRONICS
lighting:theway

SUPERBRIGHT LED LAMP
VAOL-10GYE4

Feature
- Low Power Consumption
- High Intensity
- I.C. compatible

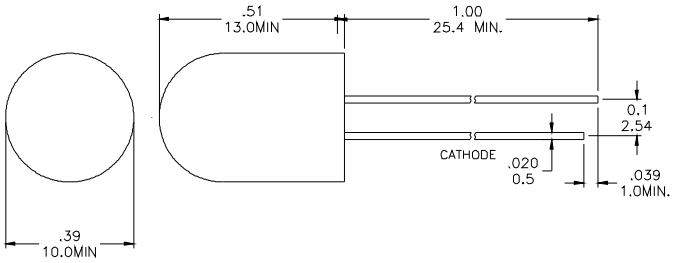
Applications
- Commercial Outdoor Sign Board
- Front Panel Indicator
- Dot-Matrix Module
- LED Bulb

Description
These High Intensity LEDs are Based on AlGaInP Material Technology

Emitted color: Yellow

Water Transparent Lens

Package Dimension



Tolerance± 0.01 / 0.25 Unit± inch / mm

Absolute Maximum Ratings at Ta＝25℃

Symbol	Parameter	Max.	Unit
PD	Power Dissipation	100	mW
VR	Reverse Voltage	5	V
IAF	Average Forward Current	25	mA
IPF	Peak Forward Current（Duty＝0.1，1kHz）	85	mA
—	Derating Linear Form 25℃	0.4	mA／℃
Topr	Operating Temperature Range	－40 to ＋ 80	℃
Tstg	Storage Temperature Range	－ 40 to ＋ 100	℃
Lead Soldering Temperature [1.6mm（0.063inch）From Body] 260℃ For 5 Seconds.			

Electrical / Optical Characteristics and Curves at Ta＝25℃

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
VF	Forward Voltage	IF＝ 20 mA		2.0	2.4	V
IR	Reverse Current	VR＝ 5 V			100	μA
△θ	Half Intensity Angle	IF＝ 20 mA		25		Deg.
IV	Luminous Intensity	IF＝ 20 mA		2500		mcd.
λp	Peak Wavelength	IF＝ 20 mA		593		nm
λd	Dominant Wavelength	IF＝ 20 mA		590		nm

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RoHS
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Electrical Characteristics at Ta＝25℃

Symbol	Iv		V_F		λ D	
Parameter	Luminous Intensity		Forward Voltage		Dominant Wavelength	
Condition	IF＝20mA		IF＝20mA		IF＝20mA	
Unit	mcd		V		nm	
Binning	Grade	Range	Grade	Range	Grade	Range
	BIN 19	2500~3500	B	1.8~1.9	Y2	587~589
	BIN 20	3500~4900	C	1.9~2.0	Y3	589~591
			D	2.0~2.1	Y4	591~593
			E	2.1~2.2	Y5	593~595
			F	2.2~2.3		

Intensity: Tolerance of minimum and maximum = ± 15%
Vf: Tolerance of minimum and maximum = ± 0.05v
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.

Radiation Diagram

IF=20 mA　　50% Power Angle　　Angle =25°