APEX OPTO CORP

SUPERBRIGHT LED LAMP

AOL-5EYS4

Feature

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

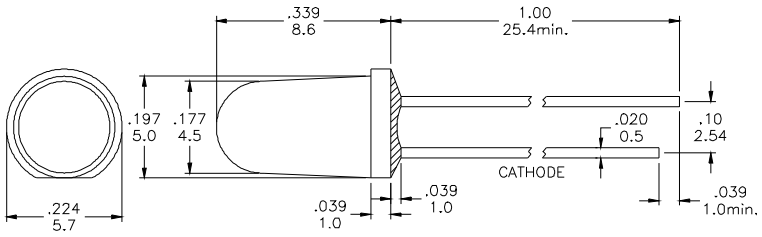
Applications

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

Description

- § These High Intensity LEDs are Based on AlInGaP/GaAs Material Technology
- § 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	120	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℃	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			50	μA
△θ	Half Intensity Angle	IF＝ 20 mA		15		Deg.
IV	Luminous Intensity	IF＝ 20 mA		11000		mcd.
λd	Peak Wavelength	IF＝ 20 mA		592		nm

n

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版 本	製 訂 日 期	變 更 項 目
A	2004/11/2	新規格發行

電 性 圖	V	尺 寸 圖	V	角 度 圖	V

核 准:	審 核:	製 作:
		Tony.Kuo.

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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
	BIN22	6900~9700	B	1.8~1.9	Y4	589~591
	BIN 23	9700~13600	C	1.9~2.0	Y5	591~593
	BIN24	13600~15000	D	2.0~2.1	Y6	593~595
			E	2.1~2.2		
			F	2.2~2.3		
			G	2.3~2.4		

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 =15°

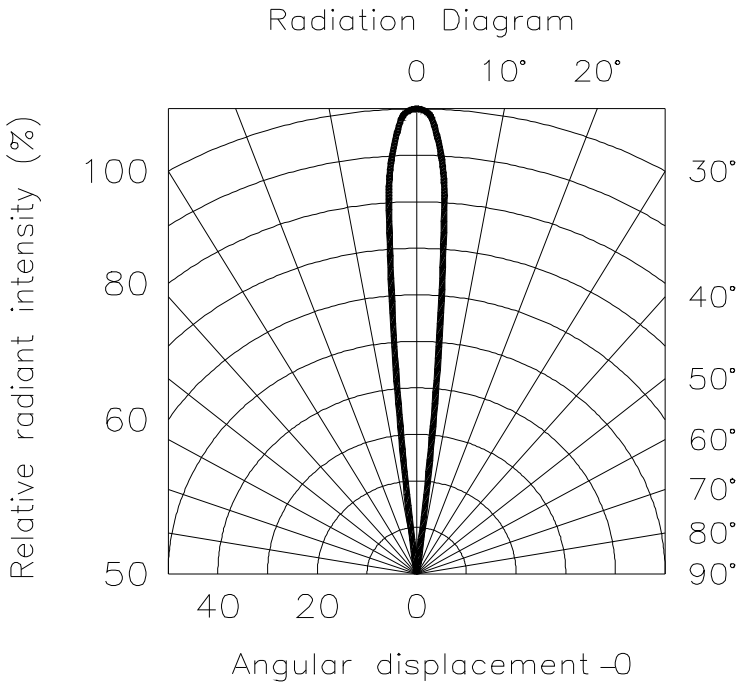

Fig 1. Forward Current vs. Forward Voltage

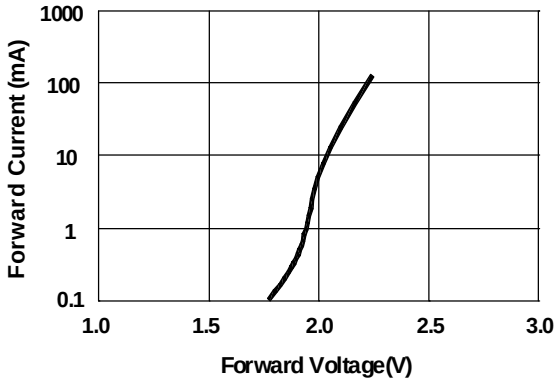

Fig 2. Relative Intensity vs. Forward Current

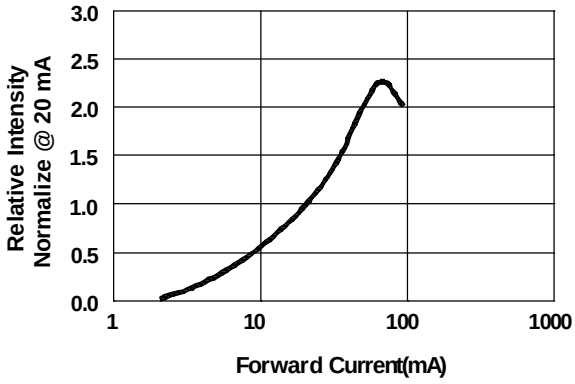

Fig 3. Forward Voltage vs. Temperature

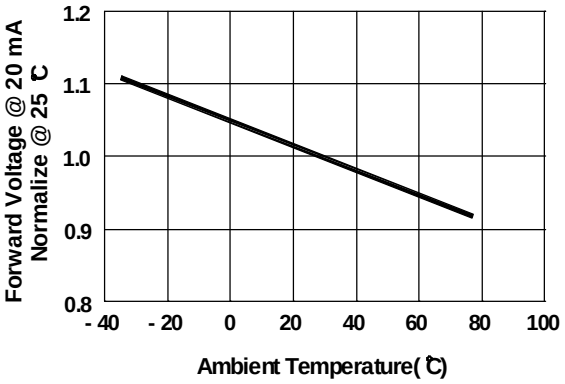

Fig 4. Relative Intensity vs. Temperature

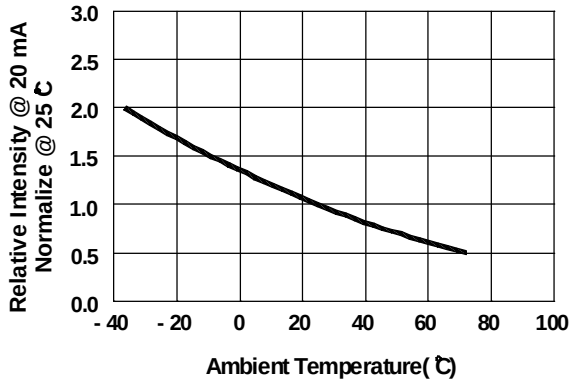

Fig 5. Relative Intensity vs. Wavelength