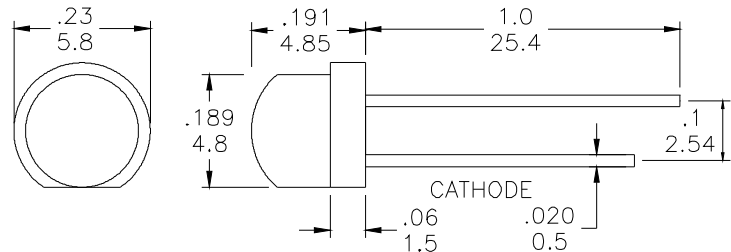


Feature

- § Low Power Consumption
- § Higher High Intensity
- § I.C. compatible
- § Long Lifetime
- § Yellow Light Emitting Diode

Applications

- § Commercial Outdoor Sign Board
- § Front panel indicator
- § Message Boards
- § Automotive Lighting

Package Dimension

Description

- § These High Intensity LEDs are Based on AlGaInP/GaP Material Technology
- § Water Transparent Lens

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

Absolute Maximum Ratings at Ta = 25°C

Symbol	Parameter	Max.	Unit
PD	Power Dissipation	200	mW
VR	Reverse Voltage	8	V
IAF	Average Forward Current	70	mA
IPF	Peak Forward Current (Duty=1/10 · 1kHz)	150	mA
—	Derating Linear Form 25°C	1.4	mA / °C
Topr	Operating Temperature Range	- 40 to + 100	°C
Tstg	Storage Temperature Range	- 45 to + 120	°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.	Typ.	Max.	Unit
VF	Forward Voltage	IF = 70 mA	1.8	2.4	2.6	V
IR	Reverse Current	VR = 8 V			100	μA
$\Delta \theta$	Half Intensity Angle	IF = 70 mA		120		Deg.
Φ	Luminous Flux	IF = 70 mA	1.23	--	--	lm
λd	Dominant Wavelength	IF = 70 mA	587	592	598	nm



**APEX OPTO
CORP**

SUPERBRIGHT LED LAMP

AOL-5S29SYP4

Electrical Characteristics at Ta = 25°C

Symbol	Φ		V_F		λ_d	
Parameter	Luminous Flux		Forward Voltage		Dominant Wavelength	
Condition	IF=70mA		IF=70mA		IF=70mA	
Unit	lm		V		nm	
Binning	Grade	Range	Grade	Range	Grade	Range
	BIN A	1.23~1.63	C1	1.8~2.0	Y34	587~591
	BIN B	1.63~2.03	D1	1.9~2.1	Y56	590~594
	BIN C	2.03~2.43	E1	2.0~2.3	Y7	593~597
	BIN D	2.43~2.83	F1	2.2~2.4		
			G1	2.3~2.5		
			H1	2.4~2.6		

FLUX: Tolerance of minimum and maximum = $\pm 10\%$

Vf: Tolerance of minimum and maximum = $\pm 0.05v$

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=70 mA 50% Power Angle Angle =120°



Fig 1. Forward Current vs. Forward Voltage

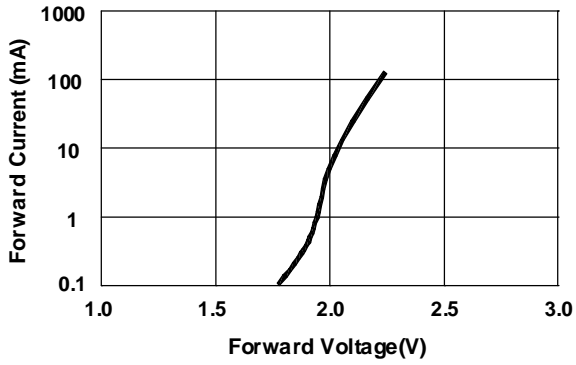


Fig 2. Relative Intensity vs. Forward Current

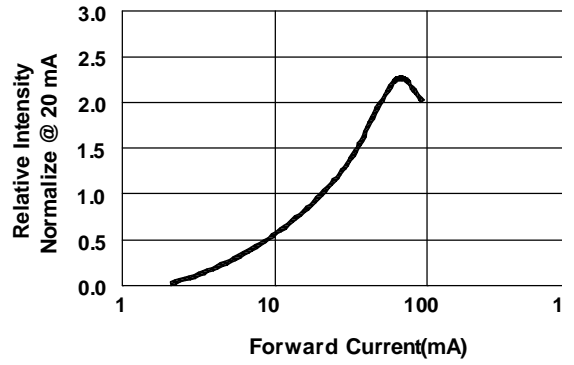


Fig 3. Forward Voltage vs. Temperature

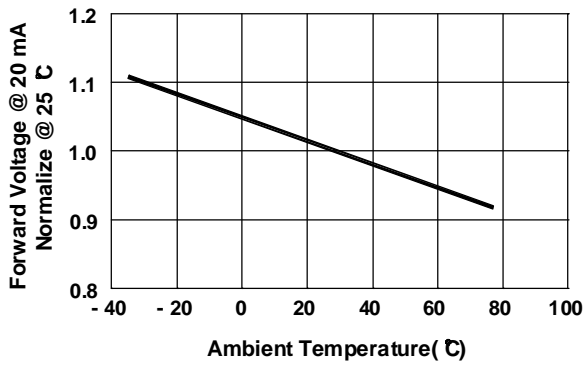


Fig 4. Relative Intensity vs. Temperature

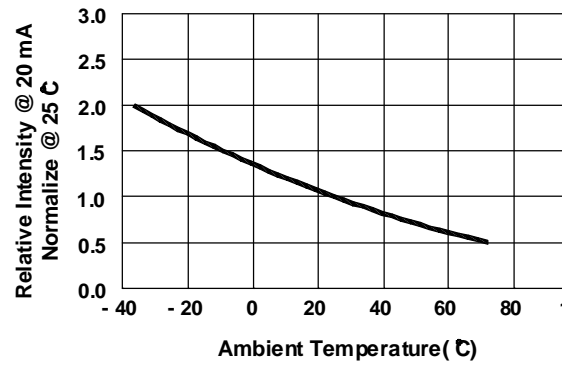


Fig 5. Relative Intensity vs. Wavelength

