

Feature

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

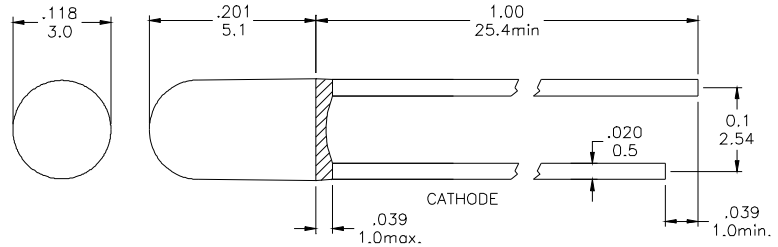
Applications

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

Description

- These High Intensity LEDs are Based on InGaN/Sapphire Material Technology
- Emitted color: White
- Water Transparent Lens

Package Dimension



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

Absolute Maximum Ratings at Ta = 25°C

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°C	0.4	mA / °C
Topr	Operating Temperature Range	- 40 to + 80	°C
Tstg	Storage Temperature Range	- 40 to + 100	°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 = 20 mA		3.5	4.0	V
IR	Reverse Current	VR = 5 V			50	μA
$\Delta \theta$	Half Intensity Angle	IF = 20 mA		30		Deg.
IV	Luminous Intensity	IF = 20 mA		3500		mcd.
X	Chromaticity	IF = 20 mA		0.24		
Y	Coordination	IF = 20 mA		0.25		



Electrical Characteristics at Ta=25°C

Symbol	I _v		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 18	1800~2500	P1	3.0~3.2	WA	Bluish White
	BIN 19	2500~3500	P2	3.2~3.4	WB	Pure White
	BIN 20	3500~4500	P3	3.4~3.6	WC	White
			P4	3.6~3.8	WD	Yellowish White
			P5	3.8~4.0		

Intensit : Tolerance of minimum and maximum = ± 15%

Vf: Tolerance of minimum and maximum = ± 0.05v

NOTE:

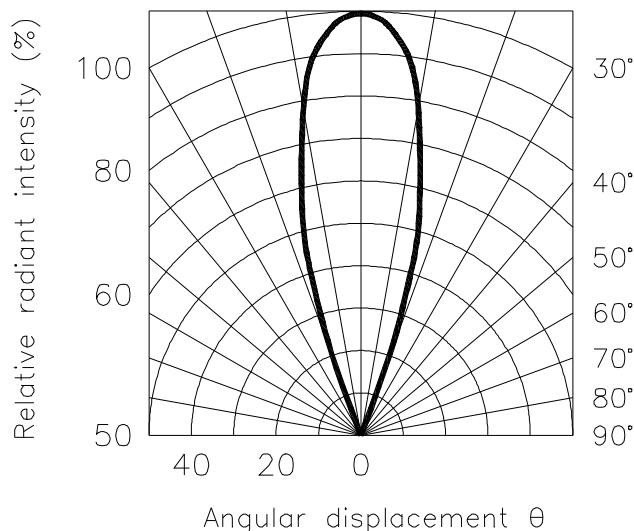
1. Static electricity and surge damages the LED. It is recommend to use a anti-static wrist band or anti-electrostatic glove when handing the LEDs. All devices, equipment and machinery must be properly grounded.
2. Specific binning requirements- please contact our home office

Radiation Diagram

IF=20 mA 50% Power Angle Angle =30°

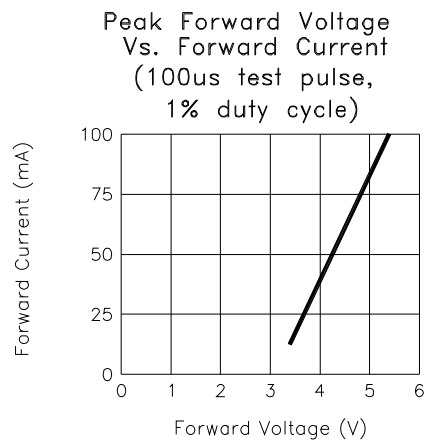
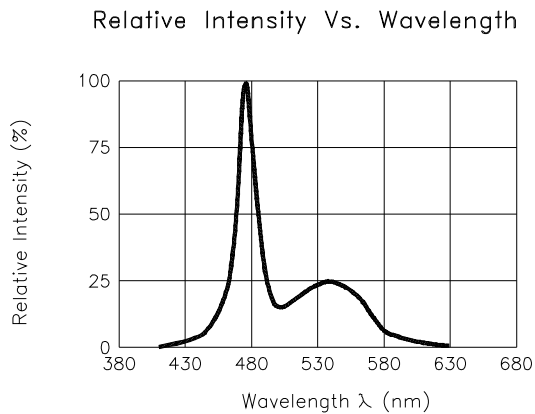
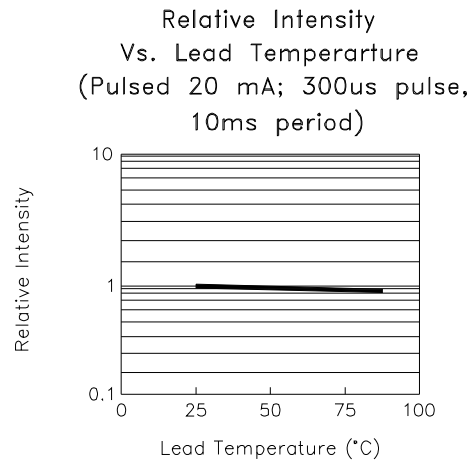
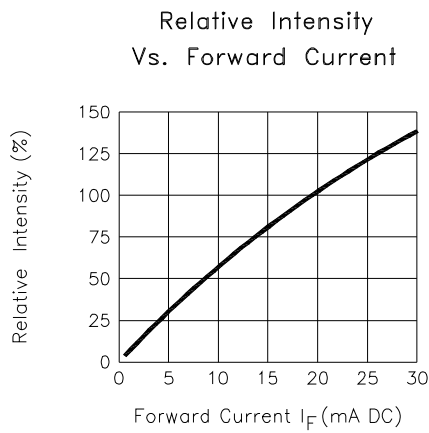
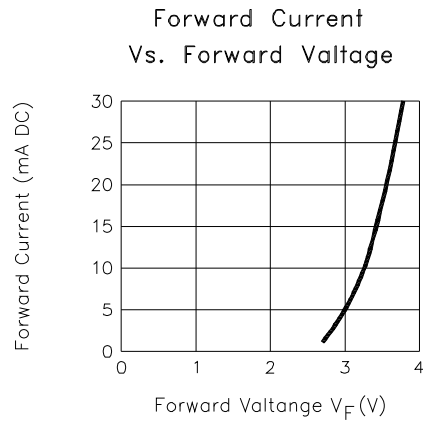
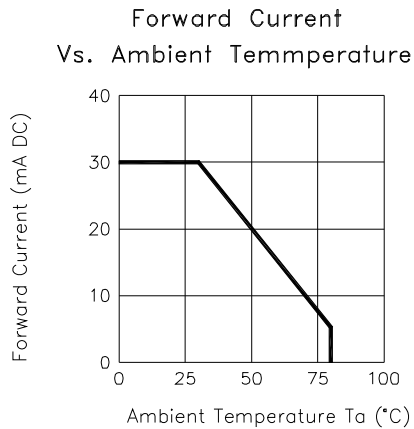
Radiation Diagram

0 10° 20°



WHITE

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



Mouser Electronics

Authorized Distributor

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VCC:

[VAOL-3HWY4](#)