



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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Feature

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

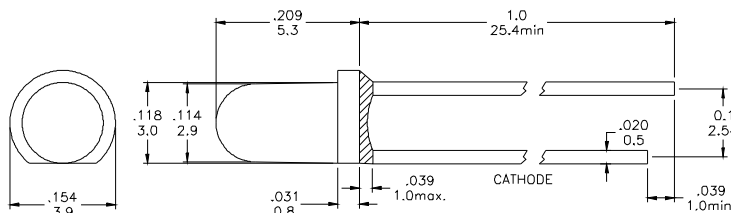
Applications

- 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:

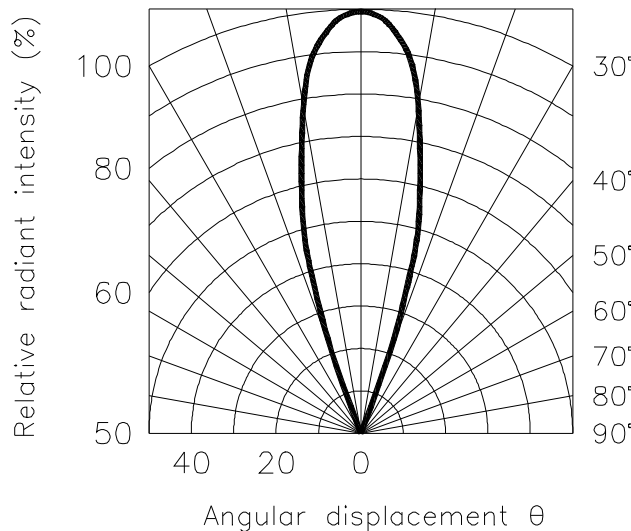
1. Static electricity and surge damages the LED. It is recommend to use a anti-static wrist band or anti-electrostatic glove when handing the LEDs. All devices, equipment and machinery must be properly grounded.
2. Specific binning requirements- please contact our home office

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)

