

Feature

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

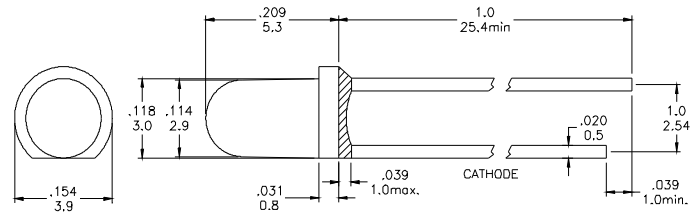
Applications

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

Description

- § These LEDs are Based on AlInGaP/GaAsMaterial Technology
- § Emitted Color: RED
- § Water Transparent Lens

Package Dimension



* 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	120	mW
VR	Reverse Voltage	5	V
I _{AF}	Average Forward Current	30	mA
I _{PF}	Peak Forward Current (Duty=0.1, 1kHz)	100	mA
—	Derating Linear Form 25°C	0.4	mA/°C
T _{opr}	Operating Temperature Range	-40 to + 85	°C
T _{stg}	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
V _F	Forward Voltage	I _F = 20 mA		2.1	2.4	V
I _R	Reverse Current	V _R = 5 V			100	μ A
Δ θ	Half Intensity Angle	I _F = 20 mA		30		Deg.
I _V	Luminous Intensity	I _F = 20 mA		2000		mcd.
λ _d	Peak Wavelength	I _F = 20 mA		625		nm

Electrical Characteristics at Ta=25°C

Symbol	Iv		VF		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 17	1300~1800	C	1.9~2.0	O2	620~625
	BIN 18	1800~2500	D	2.0~2.1	O3	625~630
			E	2.1~2.2		
			F	2.2~2.3		
			G	2.3~2.4		

Intensity: Tolerance of minimum and maximum = ± 15%

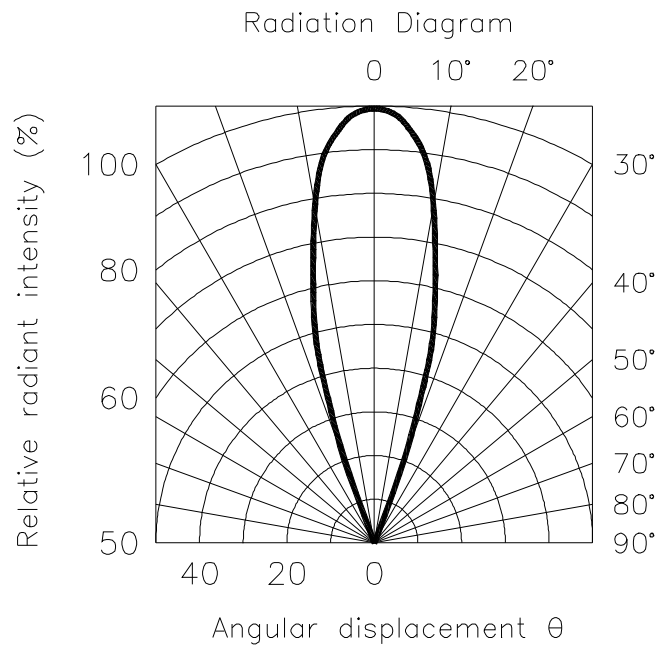
Vf: Tolerance of minimum and maximum = ± 0.05v

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.
2. Specific binning requirements –please contact our home office

Radiation Diagram

IF=20 mA 50% Power Angle Angle =30°



RED

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

Fig 1. Forward Current vs. Forward Voltage

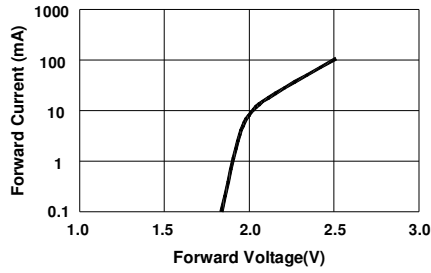


Fig 2. Relative Intensity vs. Forward Current

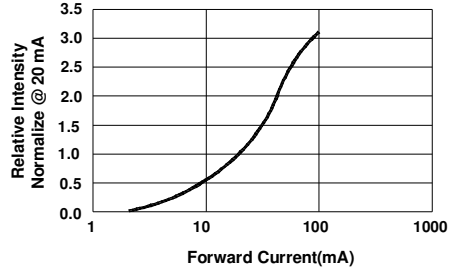


Fig 3. Forward Voltage vs. Temperature

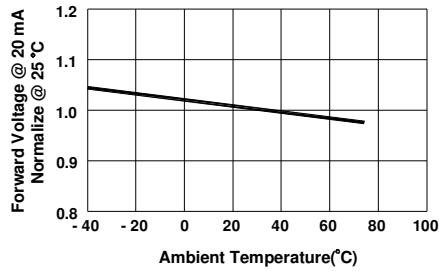


Fig 4. Relative Intensity vs. Temperature

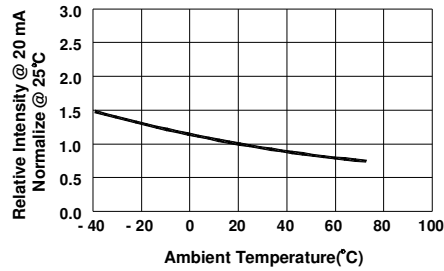


Fig 5. Relative Intensity vs. Wavelength

