

Feature

- Low Power Consumption
- I.C. compatible

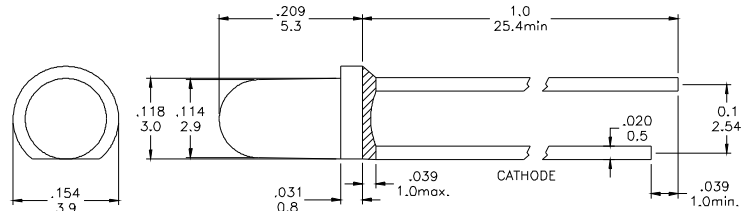
Applications

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

Description

- These LEDs are Based on GaAsP/GaP
- Material Technology
- Emitted color: Yellow
- 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 + 85	°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		1.8	2.0	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		150		mcd.
λd	Dominant Wavelength	IF= 20 mA		590		nm



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
	--	--	A	1.7~1.8	Y3	587~589
	--	--	B	1.8~1.9	Y4	589~591
			C	1.9~2.0	Y5	591~593

Intensity: Tolerance of minimum and maximum = ± 15%

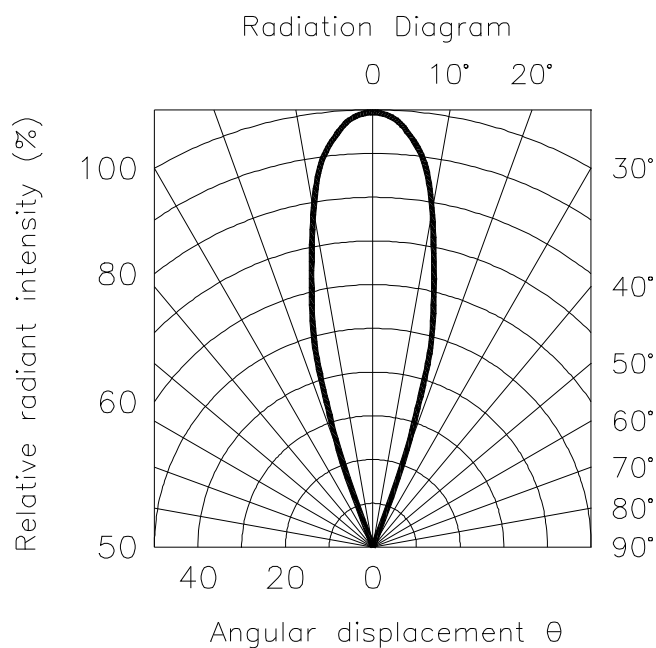
V_F: Tolerance of minimum and maximum = ±0.05v

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

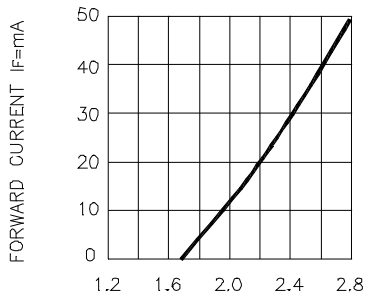
Radiation Diagram

IF=20 mA 50% Power Angle Angle =30°



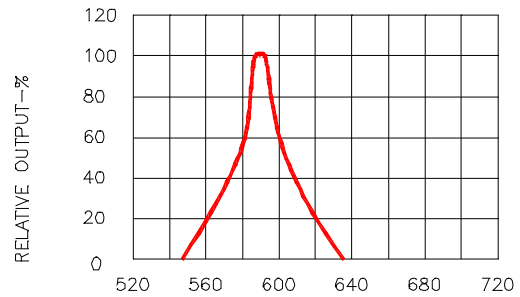
YELLOW

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



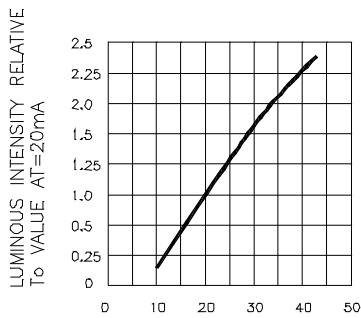
FORWARD VOLTAGE(Vf)-VOLTS

Fig.1 FORWARD CURRENT VS FORWARD VOLTAGE



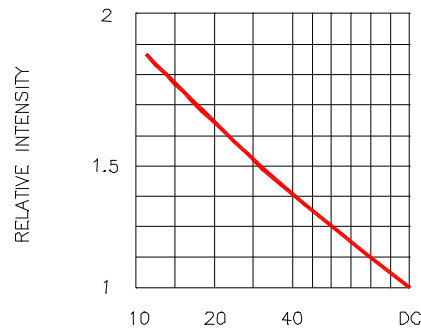
WAVELENGTH(λ)-nm

Fig.2 SPECTRAL RESPONSE



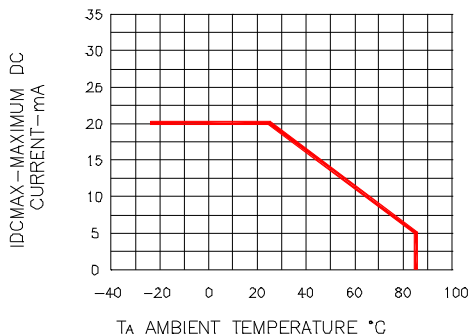
If-FORWARD CURRENT-mA

Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



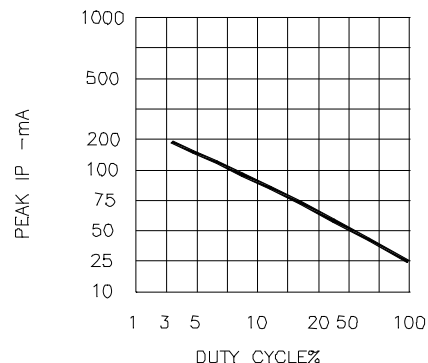
DUTY CYCLE% PER SEGMENT (AVERAGE If=10mA)

Fig.4 LUMINOUS INTENSITY VS. DUTY CYCLE



Ta AMBIENT TEMPERATURE °C

Fig.5 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE



DUTY CYCLE%

Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1KHz)