

Feature

- Low Power Consumption
- I.C. compatible

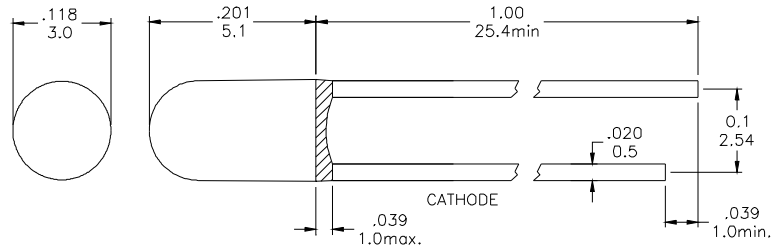
Applications

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

Description

- These LEDs are Based on GaP/GaP Material Technology
- Emitted color: Green
- Green Diffusion 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		2.2	2.4	V
IR	Reverse Current	VR = 5 V			50	μA
$\Delta \theta$	Half Intensity Angle	IF = 20 mA		60		Deg.
IV	Luminous Intensity	IF = 20 mA		80		mcd.
λd	Dominant Wavelength	IF = 20 mA		570		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
	--	--	D	2.0~2.1	G7	567~569
	--	--	E	2.1~2.2	G8	569~571
			F	2.2~2.3	G9	571~573
			G	2.3~2.4		

Intensit : Tolerance of minimum and maximum = ± 15%

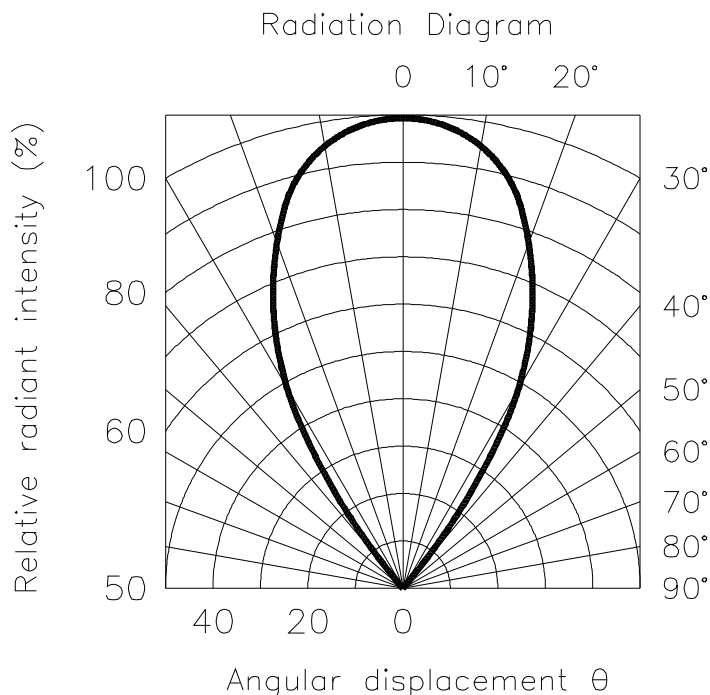
V_f: Tolerance of minimum and maximum = ± 0.05v

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

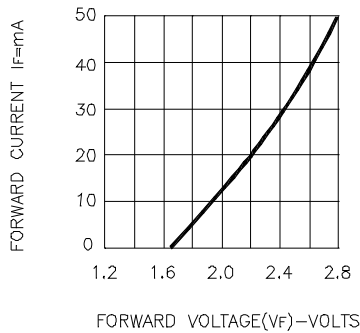
Radiation Diagram

IF=20 mA 50% Power Angle Angle =60°

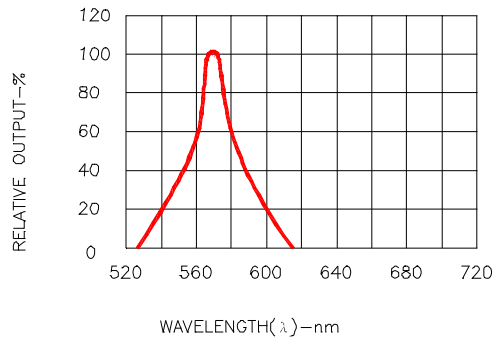


GREEN

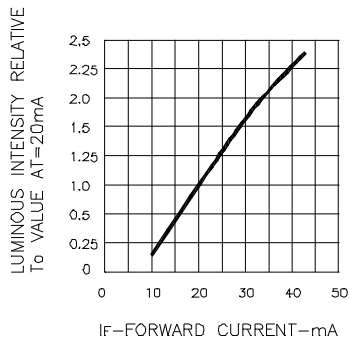
Typical Electro-optical Characteristic Curves (25°C Free Air Temperature Unless Otherwise Specified)



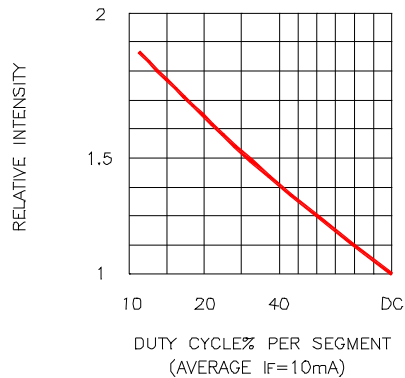
FORWARD VOLTAGE(V_f)-VOLTS
Fig.1 FORWARD CURRENT VS FORWARD VOLTAGE



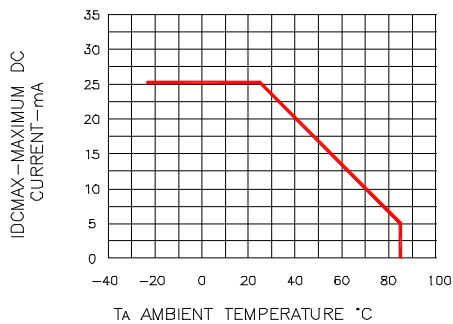
WAVELENGTH(λ)-nm
Fig.2 SPECTRAL RESPONSE



I_f-FORWARD CURRENT-mA
Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



DUTY CYCLE% PER SEGMENT (AVERAGE I_f=10mA)
Fig.4 LUMINOUS INTENSITY VS. DUTY CYCLE



T_a 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)