

**Feature**

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

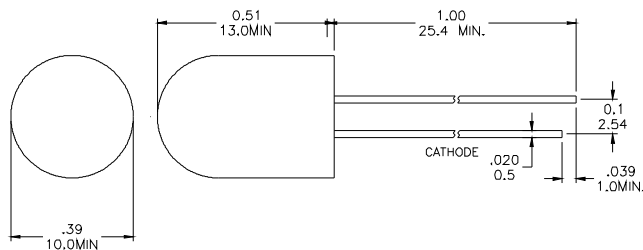
**Applications**

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

**Description**

- § These High Intensity LEDs are Based on InGaN/(ITO)Sapphire Materia Technology
- § Emitted color:Blue
- § 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                     | 100          | mW    |
| VR     | Reverse Voltage                       | 5            | V     |
| IAF    | Average Forward Current               | 25           | mA    |
| IPF    | Peak Forward Current (Duty=0.1, 1kHz) | 85           | 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        |      |      | 100  | $\mu$ A |
| $\Delta \theta$ | Half Intensity Angle | IF= 20 mA      |      | 30   |      | Deg.    |
| IV              | Luminous Intensity   | IF= 20 mA      |      | 7000 |      | mcd.    |
| $\lambda p$     | Peak Wavelength      | IF= 20 mA      |      | 470  |      | 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 21             | 4900~6900 | P1              | 3.0~3.2 | B6                  | 465~470 |
|           | BIN 22             | 6900~9700 | P2              | 3.2~3.4 | B7                  | 470~475 |
|           |                    |           | P3              | 3.4~3.6 |                     |         |
|           |                    |           | P4              | 3.6~3.8 |                     |         |
|           |                    |           | P5              | 3.8~4.0 |                     |         |
|           |                    |           |                 |         |                     |         |

Intensity: Tolerance of minimum and maximum = ± 15%

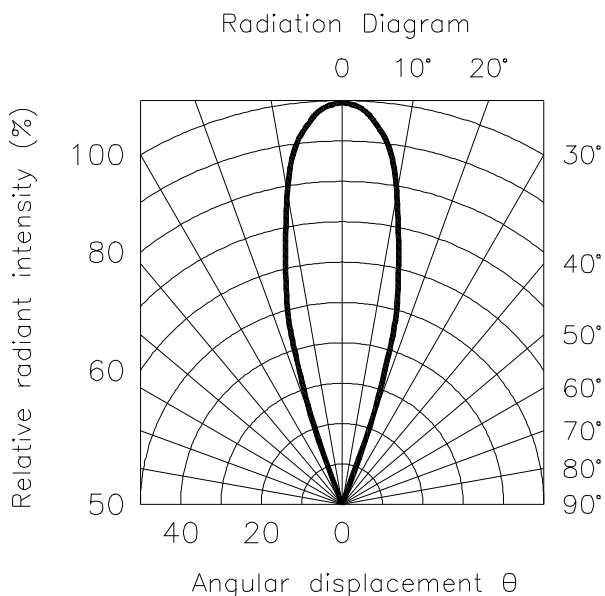
Vf: Tolerance of minimum and maximum = ± 0.05v

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

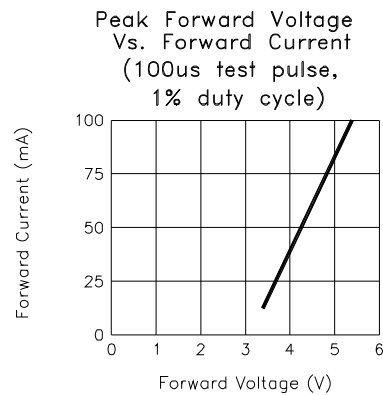
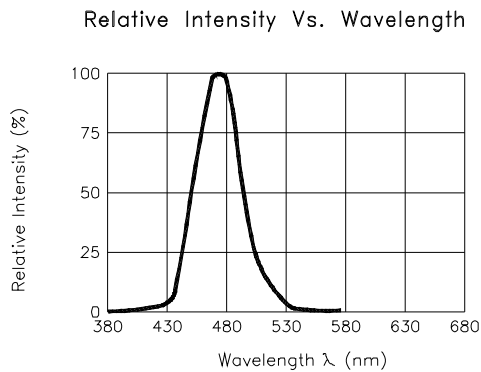
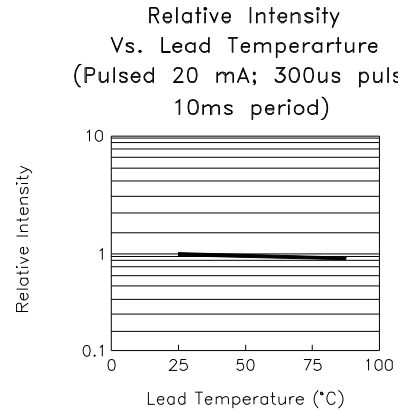
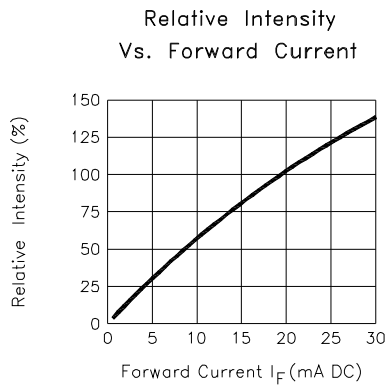
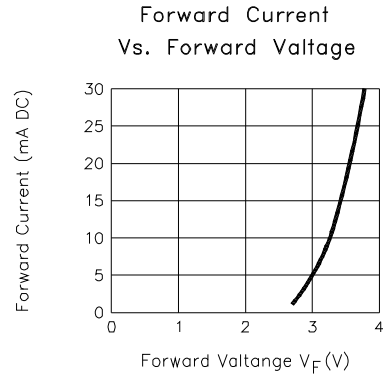
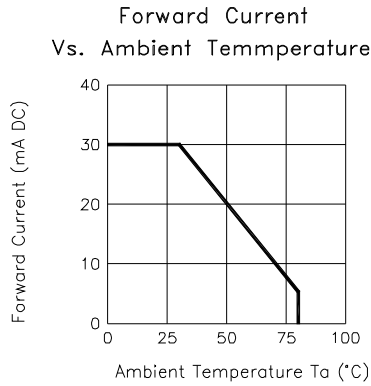
### Radiation Diagram

**IF=20 mA 50% Power Angle Angle =30°**



# BLUE

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



# Mouser Electronics

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