

**Feature**

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

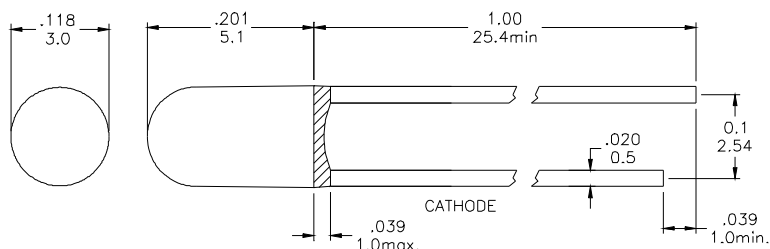
**Applications**

- 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:Blue
- 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      |      | 2500 |      | mcd. |
| $\lambda d$     | Dominant Wavelength  | IF= 20 mA      |      | 470  |      | nm   |



### Electrical Characteristics at Ta=25°C

| Symbol    | I <sub>v</sub>     |           | V <sub>F</sub>  |         | 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 | P1              | 3.0~3.2 | B5                  | 460~465 |
|           | BIN 18             | 1800~2500 | P2              | 3.2~3.4 | B6                  | 465~470 |
|           | BIN 19             | 2500~3500 | P3              | 3.4~3.6 | B7                  | 470~475 |
|           |                    |           | P4              | 3.6~3.8 |                     |         |
|           |                    |           | P5              | 3.8~4.0 |                     |         |
|           |                    |           |                 |         |                     |         |

Intensit : Tolerance of minimum and maximum = ± 15%

Vf: Tolerance of minimum and maximum = ± 0.05v

NOTE:

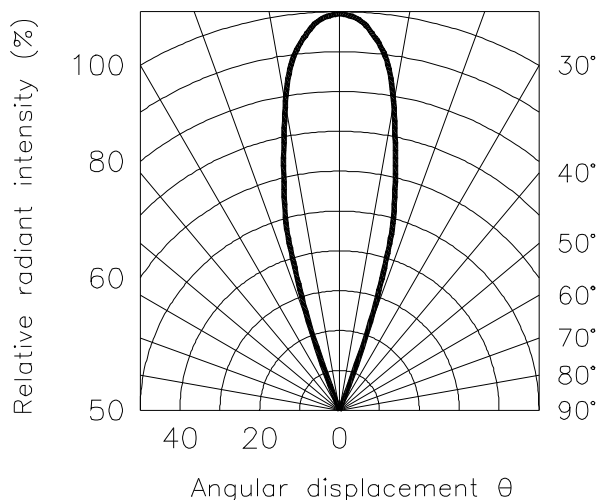
1. Static electricity and surge damages the LED. It is recommend to use a anti-static wrist band or anti-electrostatic glove when handing the LEDs. All devices, equipment and machinery must be properly grounded.
2. Specific binning requirements- please contact our home office

### Radiation Diagram

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

Radiation Diagram

0 10° 20°



## BLUE

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

