

## Feature

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

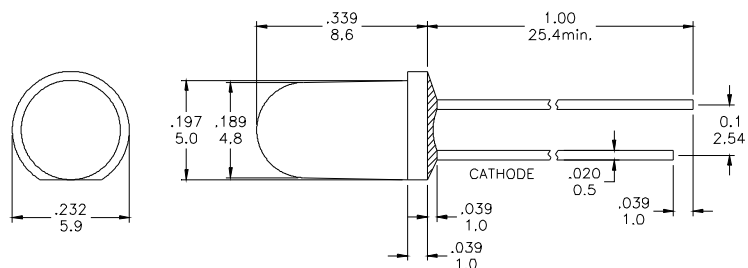
## Applications

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

## Description

- § These High Intensity LEDs are Based on InGaN/Sapphire Material Technology
- § Emitted color:Blue
- § Blue Diffusion 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               | 20           | 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  | μ A  |
| $\triangle \theta$ | Half Intensity Angle | IF= 20 mA      |      | 60   |      | Deg. |
| IV                 | Luminous Intensity   | IF= 20 mA      |      | 1500 |      | 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                  |         |
|           | Grade              | Range     | Grade           | Range   | Grade               | Range   |
|           | BIN 16             | 950~1300  | P1              | 3.0~3.2 | B5                  | 460~465 |
|           | BIN 17             | 1300~1800 | P2              | 3.2~3.4 | B6                  | 465~470 |
|           |                    |           | P3              | 3.4~3.6 | B7                  | 470~475 |
|           |                    |           | P4              | 3.6~3.8 |                     |         |
|           |                    |           | P5              | 3.8~4.0 |                     |         |
|           |                    |           |                 |         |                     |         |

Intensity: Tolerance of minimum and maximum = ± 15%

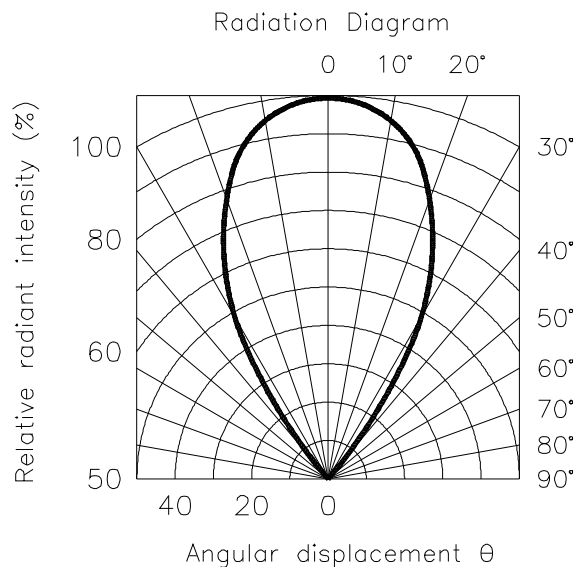
V<sub>F</sub>: Tolerance of minimum and maximum = ± 0.05v

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°**



## BLUE

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

