



VAOL-5GSBY4 LED 5mm Blue



Feature

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

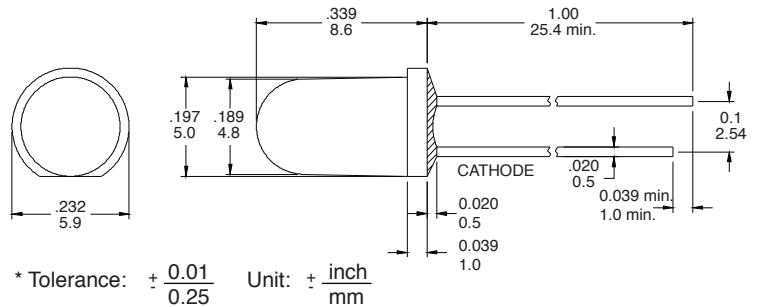
Applications

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

Description

- These High Intensity LEDs are Based on InGaN/(ITO)Sapphire Material Technology
- Emitted color: Blue
- Water Transparent Lens

Package Dimension



Absolute Maximum Rating at Ta = 25°C

| Symbol | Parameter | Max. | Unit |
|--------|---|-------------|-------|
| PD | Power Dissipation | 120 | 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 | | | 50 | μA |
| Δθ | Half Intensity Angle | IF = 20 mA | | 30 | | Deg. |
| IV | Luminous Intensity | IF = 20 mA | | 7000 | | mcd. |
| λd | Dominant Wavelength | IF = 20 mA | | 470 | | nm |

Electrical Characteristics at Ta = 25°C

| Symbol | Iv | | VF | | λD | |
|-----------|--------------------|-----------|-----------------|---------|---------------------|---------|
| Condition | Luminous Intensity | | Forward Voltage | | Dominant Wavelength | |
| Symbol | IF = 20 mA | | IF = 20 mA | | IF = 20 mA | |
| Unit | mcd | | V | | nm | |
| Binning | Grade | Range | Grade | Range | Grade | Range |
| | BIN 21 | 4900~6900 | P1 | 3.0~3.2 | B6 | 465~470 |
| | BIN 21 | 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%

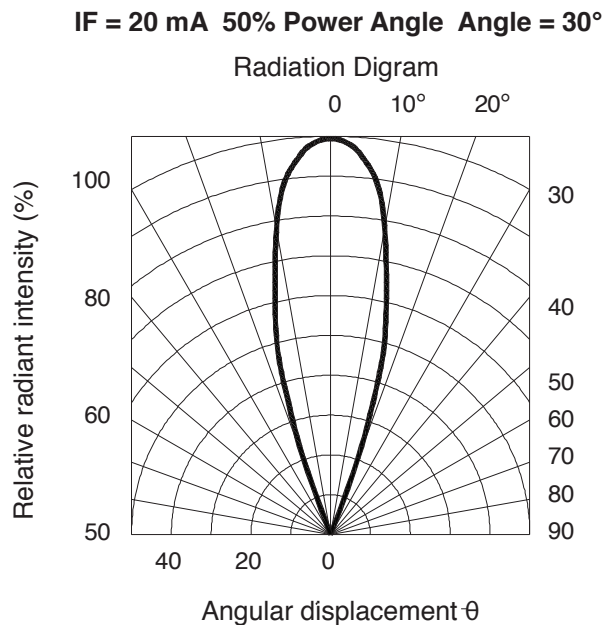
Vf: Tolerance of minimum and maximum = ±0.05v

NOTE:

1. Static electricity and surge damage the LED. It is recommend to use anti 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 VCC

Radiation Diagram



BLUE

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

