



# VAOL-5GSBY4 LED 5mm Blue



## Feature

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

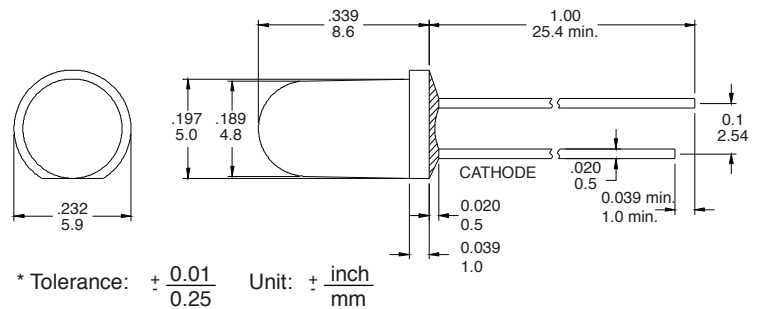
## Applications

- 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 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%

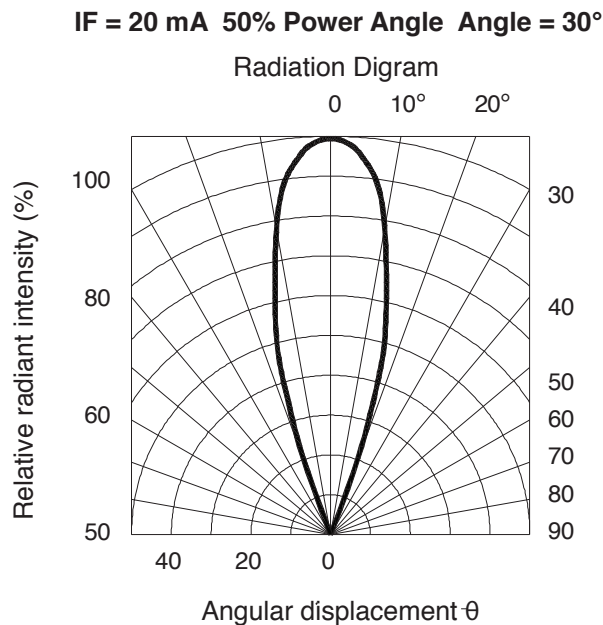
Vf: Tolerance of minimum and maximum = ±0.05v

**NOTE:**

1. Static electricity and surge 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)**

