VAOL-5701SBY4
T-1 3/4 (5mm) through-hole LED with high intensity light output

Blue T-1 3/4 (5mm) LED with water transparent lens

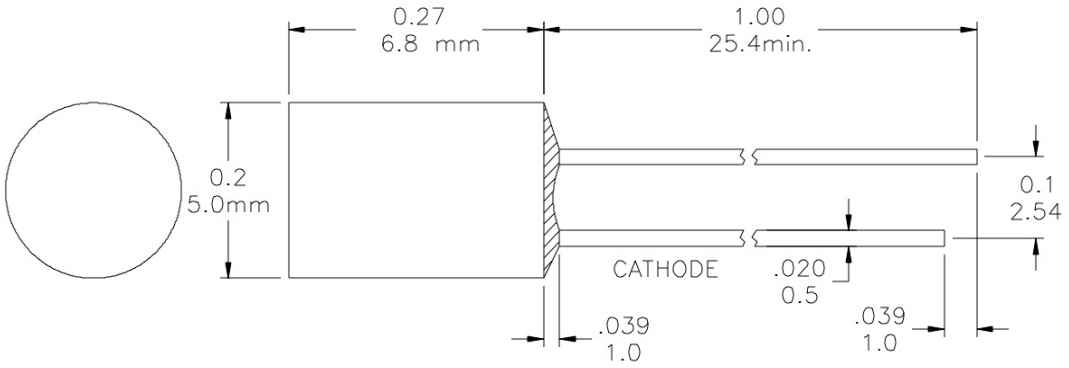
Application

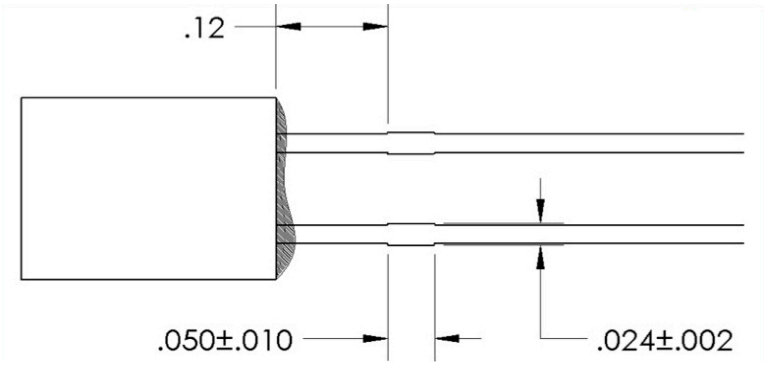
- Automotive
- Front Panel Indicator
- Residential and Landscape Lighting
- Railway
- Commercial Outdoor Sign Board
- Indoor and Outdoor Indicationg
- Electronic Devices
- Storage Servers
- Dot-Matrix Module

Key Features

- Color: Blue
- LED Size 5mm T-1 3/4
- Through-hole technology
- Available in clear and diffused lens
- InGaN/Sapphire material technology
- Water Transparent Lens
- Viewing Angle: 100˚
- RoHS and REACH Compliant

Product Dimensions





Notes:
1. All dimensions are in inches [millimeters]
2. Tolerance is ±0.01" [0.25mm] unless otherwise noted
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Specifications

Absolute Maximum Ratings (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 +80	˚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	µA
Δθ	Half Intensity Angle	IF= 20 mA		100		Deg.
IV	Luminous Intensity	IF= 20 mA		1000		mcd.
λd	Dominant Wavelength	IF= 20 mA		470		nm

Product Specifications

Electrical Characteristics at (Ta=25°C)

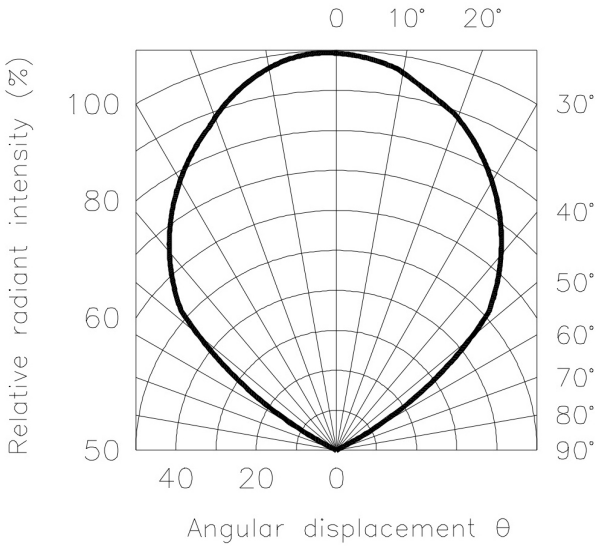
Symbol	Iv		V_F		λD	
Parameter	Luminous Intensity		Forward Voltage		Dominant Wavelength	
Condition	IF=20mA		IF=20mA		IF=20mA	
Unit	mcd		V		nm	
	Grade	Range	Grade	Range	Grade	Range
	BIN15	680~950	P0	2.8~3.0	B5	460~465
	BIN16	950~1300	P1	3.0~3.2	B6	465~470
			P2	3.2~3.4	B7	470~475
			P3	3.4~3.6		
			P4	3.6~3.8		
			P5	3.8~4.0		

Intensity: Tolerance of minimum and maximum = ± 15%
Vf: Tolerance of minimum and maximum = ± 0.05v

Notes:
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 – Contact VCC

Radiation Diagram

IF=20 mA 50% Power Angle Angle =100°

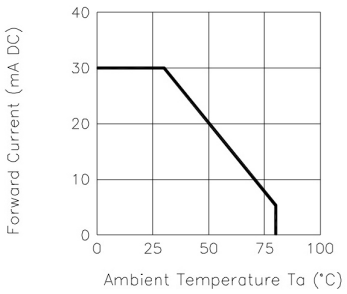


Product Specifications

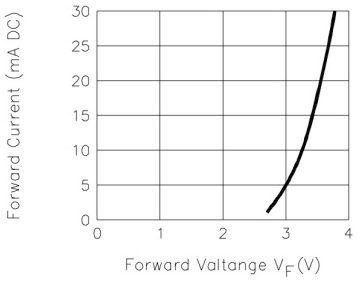
Typical Electro-optical Characteristics Curves (25°C Free Air Temperature Unless Otherwise Specified)

BLUE

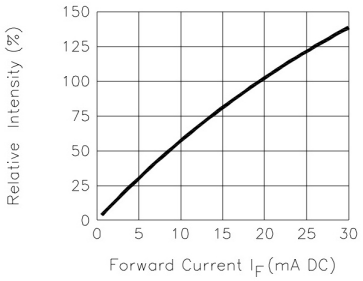
Forward Current
Vs. Ambient Temmperature



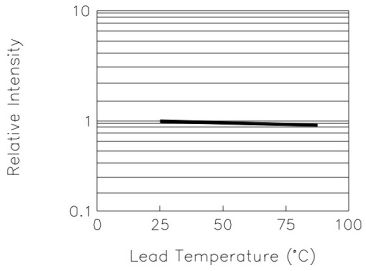
Forward Current
Vs. Forward Valtage



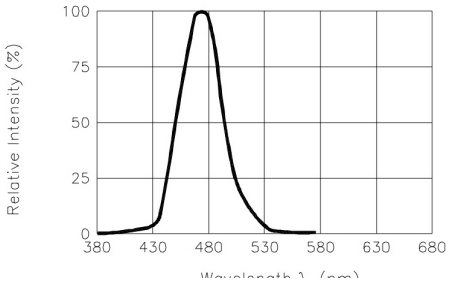
Relative Intensity
Vs. Forward Current



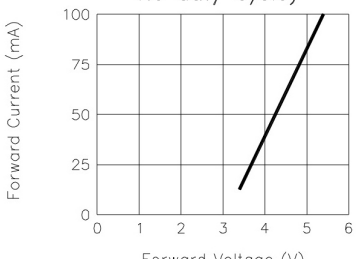
Relative Intensity
Vs. Lead Temperarture
(Pulsed 20 mA; 300us pulse,
10ms period)



Relative Intensity Vs. Wavelength



Peak Forward Voltage
Vs. Forward Current
(100us test pulse,
1% duty cycle)



Compliances and Approvals