

# VAOL-5LDE2

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



### Green T-1 3/4 (5mm) LED Diffused Lens

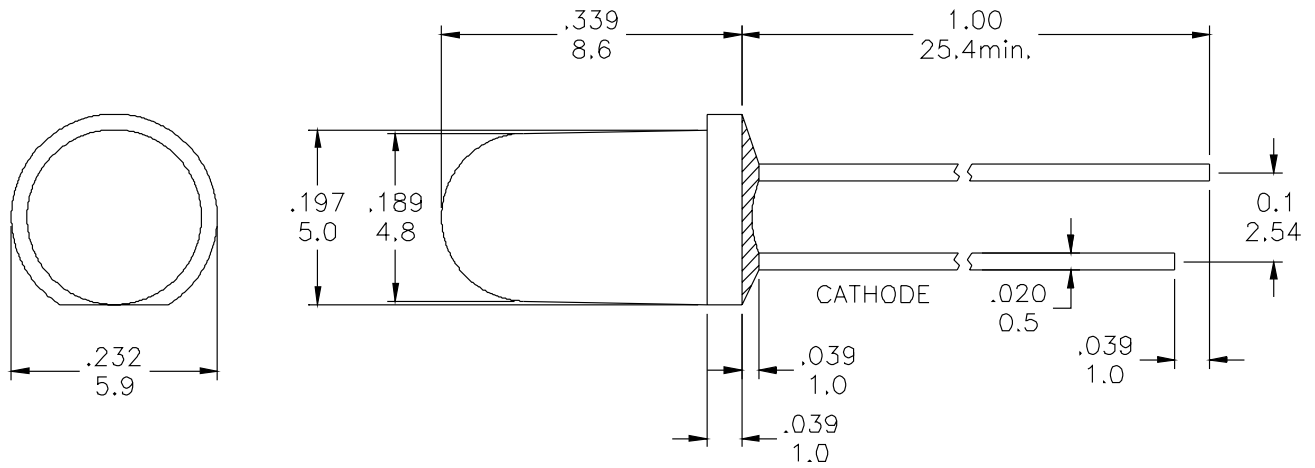
#### Application

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

#### Key Features

- Color: Green
- LED Size 5mm T-1 3/4
- UL94 with V-0
- Through-hole technology
- Low Power Consumption
- InGaN/Sapphire material technology
- Diffused Lens
- Viewing Angle: 50°
- RoHS and REACH Compliant

## Product Dimensions



### Notes:

1. All dimensions are in inches [millimeters]
2. Tolerance is  $\pm 0.01"$  [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	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	-20 to +80	°C
Tstg	Storage Temperature Range	-20 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		2.2	2.8	V
IR	Reverse Current	VR=5 V			100	µA
Δθ	Half Intensity Angle	IF= 20 mA		60		Deg.
IV	Luminous Intensity	IF= 20 mA		50		mcd.
λd	Dominant Wavelength	IF= 20 mA		570		nm

# Product Specifications

## Electrical Characteristics at (Ta=25°C)

Symbol	Iv		V <sub>F</sub>		λD	
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
	-	50	C	1.9~2.0	G9	569~571
	-	-	D	2.0~2.1	G10	571~573
	-	-	E	2.1~2.2	G11	573~575
			F	2.2~2.3		
			G	2.3~2.4		

Intensity: Tolerance of minimum and maximum = ± 15%

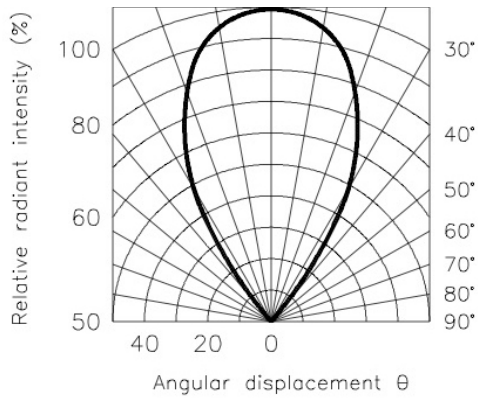
Vf: Tolerance of minimum and maximum = ± 0.05v

**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 =60°



# Product Specifications

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

### Green

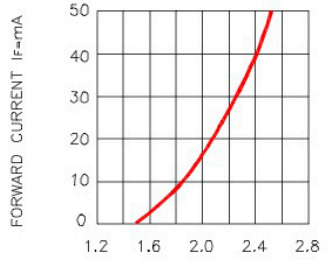


Fig.1 FORWARD CURRENT VS FORWARD VOLTAGE

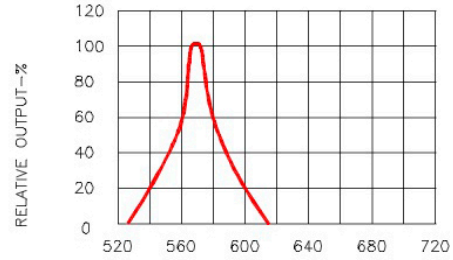


Fig.2 SPECTRAL RESPONSE

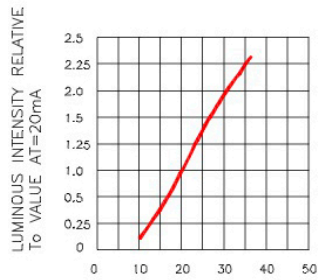


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

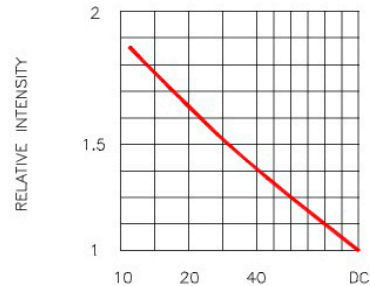


Fig.4 LUMINOUS INTENSITY VS.DUTY CYCLE

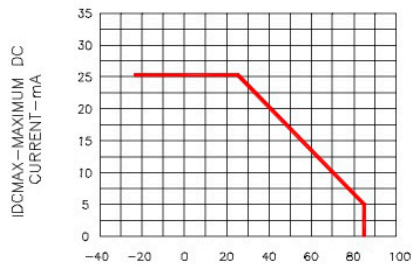
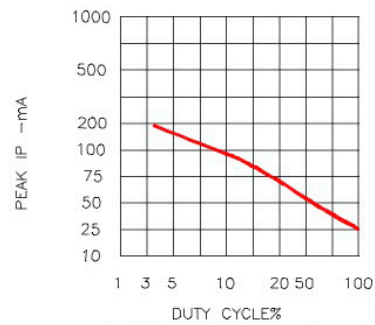


Fig .5 MAXIMUN ALLOWABLE DC



## Compliances and Approvals

