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# VAOL-3MWY4 3mm (T-1) Through-hole Round White LED

VAOL Series consists of T-1 (3mm) through-hole LEDs with high intensity light output

# Application

- Electronic Signs and Signals
- Small Area Illuminations
- Front Panel Indicator
- Electrical Panels

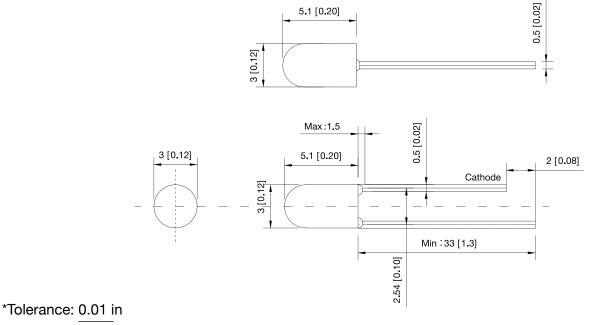
- Back Lighting
- Appliances

# Key Features

- High luminous LED
- 3mm round standard directivity
- Superior weather-resistance
- UV resistant epoxy
- High intensity LEDs are based on InGaN/Sapphire material technology
- Emitted color: neutral white
- Water transparent lens
- RoHS and REACH Compliant



All dimensions in mm [inch]



0.25 mm

## **Product Specifications**

#### Absolute Maximum Ratings at Ta= 25°C

Symbol	Parameter	Мах	Unit					
PD	Power Dissipation	100	mW					
VR	Reverse Voltage	10	V					
IF	Forward Current	30	mA					
IPF	Peak Forward Current*	100	mA					
Topr	Operating Temperature Range	-30 to +8	°C					
Tstg	Storage Temperature Range	-40 to +100	°C					
Lead Solder	ring Temperature [1.6mm ( 0.063inch) From Body] 260°C F	For 5 Seconds.						

\* Pulse width Max 0.1msec Duty ratio max 1/10



### **Product Specifications**

#### Electrical / Optical Characteristics and Curves at Ta= 25°C

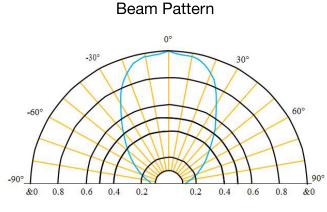
Symbol	Parameter	Test Condition	Min	Тур.	Max	Unit		
VF Forward Voltage IF=20mA 3.0 - 3.4 V								
IR	Reverse Current	VR=5V	-	_	10	μA		
Δθ	Half Intensity Angle	IF= 20mA		60	-	Deg		
IV	Luminous Intensity	IF= 20mA	2500	-	-	mcd.		
ССТ	Color Temperature	IF= 20mA	3750	-	5500	К		

#### 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.

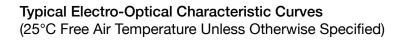
#### **Radiation Diagram**

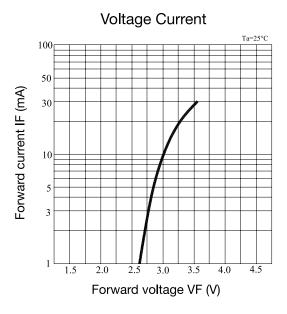
IF=20 mA 50% Power Angle Angle =60°



Relative Intensity (LOP@MAX=1)







1000 Ta=25°C 500 Relative luminous intensity 300 100

10

Forward current IF (mA)

30

50

100

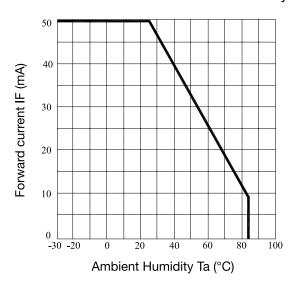
50

30

10

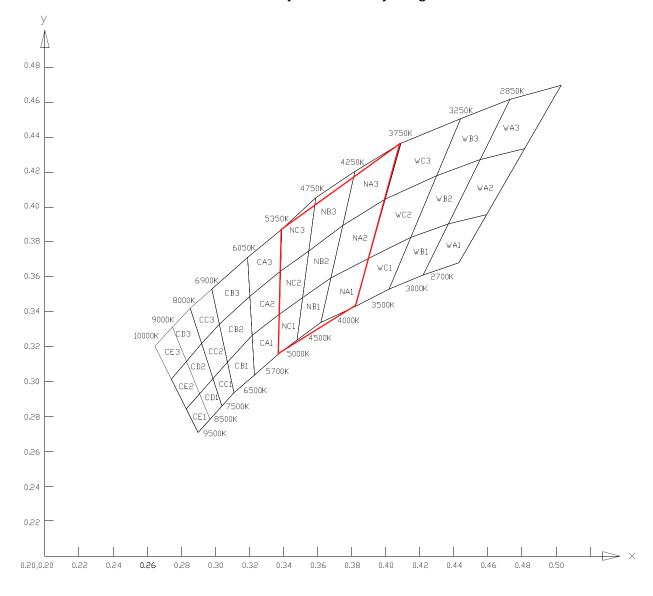
#### Luminous Intensity - Forward Current

Forward Current - Ambient Humidity



### **Product Specifications**

#### Typical Photo-Electricity Characteristic Curve Chart



CIE 1931 xy Chromaticity Diagram

## **Compliances and Approvals**



