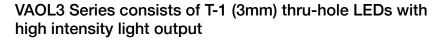


VAOL-3MWY4 3mm (T-1) Thru-hole LED Superbright LED Lamp





Application

- Commercial Outdoor Sign Board
- LED Bulb
- · Front Panel Indicator
- · Electrical Panels

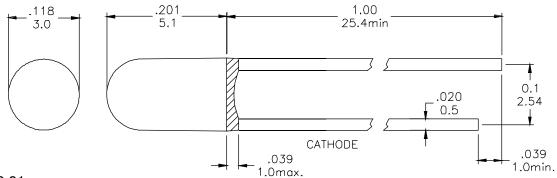
- · Dot-Matrix Module
- Appliances

Key Features

- Low Power Consumption
- High Intensity LEDs are Based on InGaN/Sapphire Material Technology
- · Emitted color: White
- Water Transparent Lens
- · Available with clear and diffused lens, flanged and flangeless, multiple viewing angles
- · Conflict Mineral Free
- · Compliant with RoHS and REACH requirements

Package Dimension

All dimensions in inches/mm



*Tolerance: 0.01 0.25

Product Specifications

Absolute Maximum Ratings at Ta= 25°C

Symbol	Parameter	Max	Unit		
			· · · · · · · · · · · · · · · · · · ·		
PD	Power Dissipation	120	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	-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		Тур.	Max	Unit
\/F	Famous Mathaus	JE 00 A		0.5	4.0	
VF	Forward Voltage	IF=20mA		3.5	4.0	V
IR	Reverse Current	VR=5V			50	μΑ
Δθ	Half Intensity Angle	IF= 20mA		60		Deg
IV	Luminous Intensity	IF= 20mA		2500		mcd.
Х	Chromaticity	IF= 20mA		0.31		
Υ	Coordination	IF= 20mA		0.31		

Product Specifications

Electrical Characteristics at Ta= 25°C

Symbol	lv		V _F		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
	BIN18	1800~2500	P1	3.0~3.2	WA	Bluish White
	BIN19	2500~3500	P2	3.2~3.4	WB	Pure White
	BIN20	3500~4900	P3	3.4~3.6	WC	White
	BIN21	4900~6900	P4	3.6~3.8	WD	Yellowish White
	BIN22	6900~9700	P5	3.8~4.0		

Intensity: Tolerance of minimum and maximum = \pm 15%

Vf: Tolerance of minimum and maximum = $\pm 0.05v$

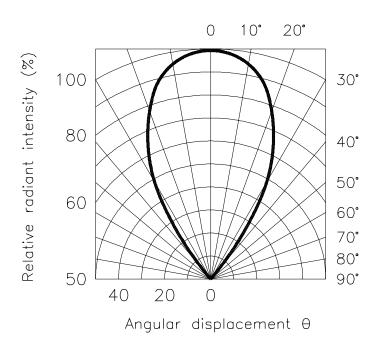
Note:

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.

2. Specific binning requirements- please contact our home office

Radiation Diagram

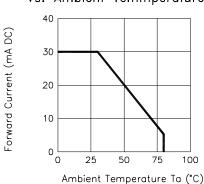
IF=20 mA 50% Power Angle Angle =60



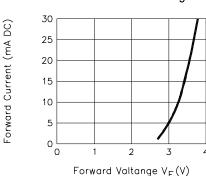
Product Specifications

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

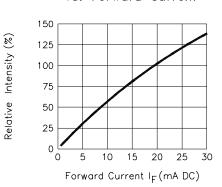
Forward Current
Vs. Ambient Temmperature



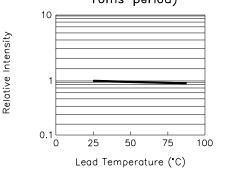
Forward Current Vs. Forward Valtage



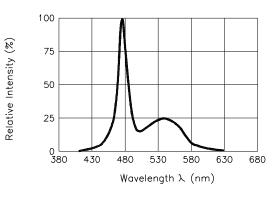
Relative Intensity
Vs. Forward Current



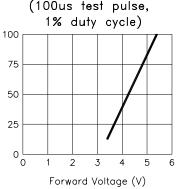
Relative Intensity
Vs. Lead Temperarture
(Pulsed 20 mA; 300us pulse,
10ms period)



Relative Intensity Vs. Wavelength



Peak Forward Voltage Vs. Forward Current (100us test pulse,



Forward Current (mA)

Compliances and Approvals



