

VAOL-3LWY4

3mm (T-1) Thru-hole LED

Superbright LED Lamp



VAOL3 Series consists of T-1 (3mm) thru-hole LEDs with high intensity light output

Application

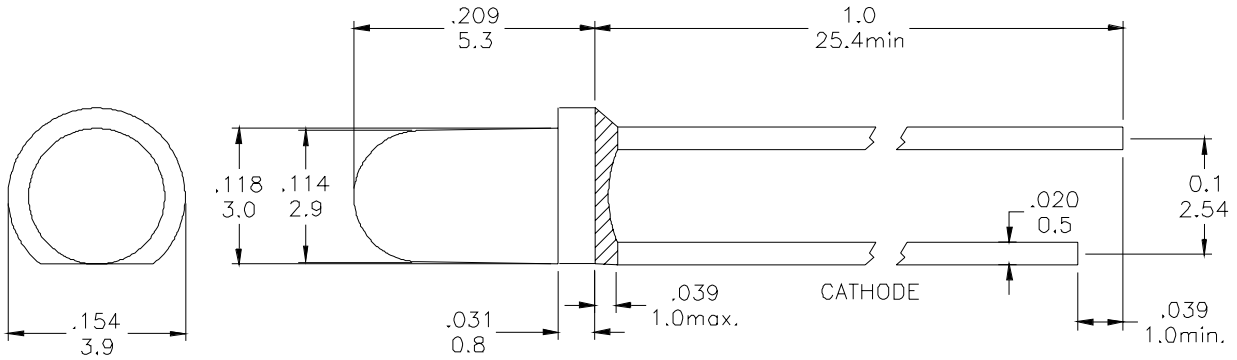
- Commercial Outdoor Sign Board
- LED Bulb
- Front Panel Indicator
- Electrical Panels
- Dot-Matrix Module
- Appliances

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
- Typical lifetime hours for LEDs is 50,000 hours
- Compliant with RoHS and REACH requirements

Package Dimension

All dimensions in inches/mm



*Tolerance: $\frac{0.01}{0.25}$

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.

Product Specifications

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

Symbol	Parameter	Test Condition	Min	Typ.	Max	Unit
VF	Forward Voltage	IF=20mA		3.5	4.0	V
IR	Reverse Current	VR=5V			50	μA
Δθ	Half Intensity Angle	IF= 20mA		60		Deg
IV	Luminous Intensity	IF= 20mA		2500		mcd.
X	Chromaticity	IF= 20mA		0.31		
Y	Coordination	IF= 20mA		0.31		

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

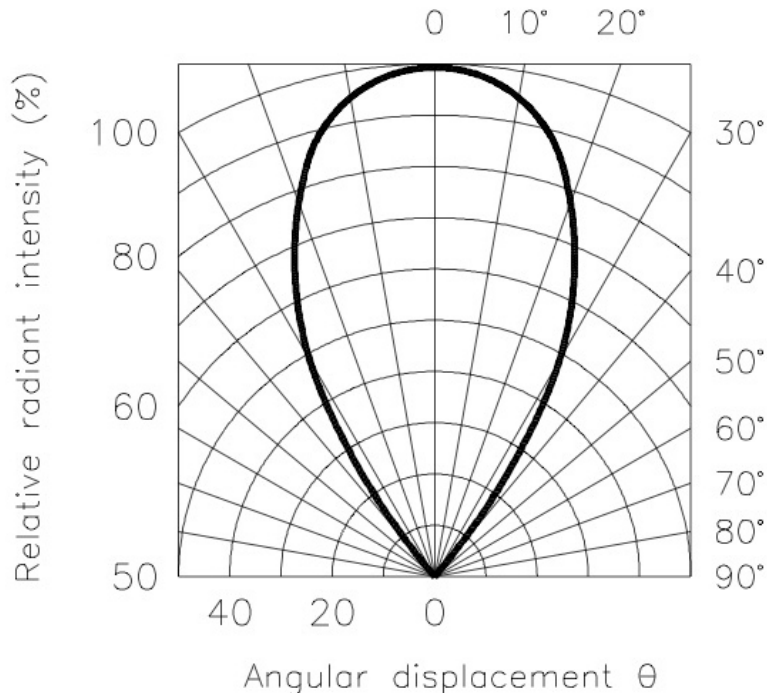
Vf: Tolerance of minimum and maximum = $\pm 0.05v$

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

Electrical Characteristics at (Ta=25°C)

Symbol	I _v		V _F		λ _D	
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
	-	-	P3	3.4~3.6	WC	White
			P4	3.6~3.8	WD	Yellowish White
			P5	3.8~4.0		

Intensity: Tolerance of minimum and maximum = ± 15%

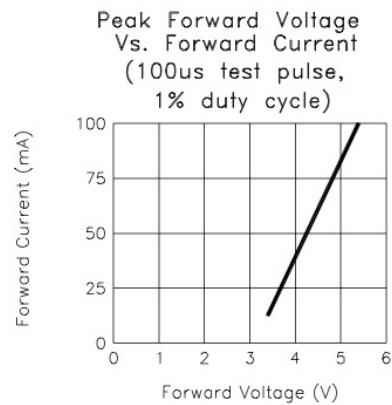
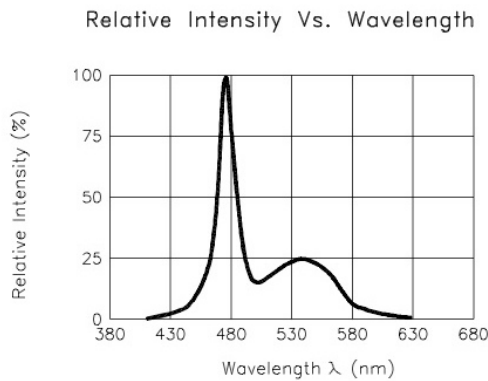
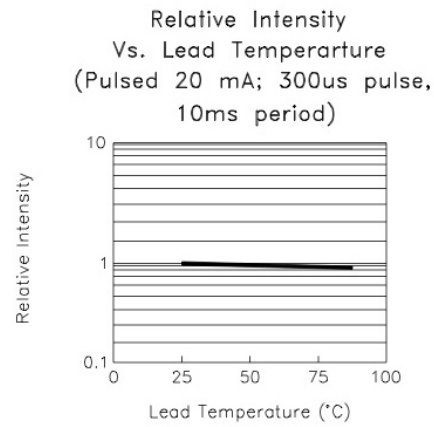
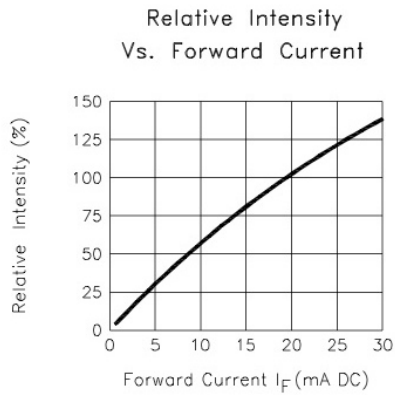
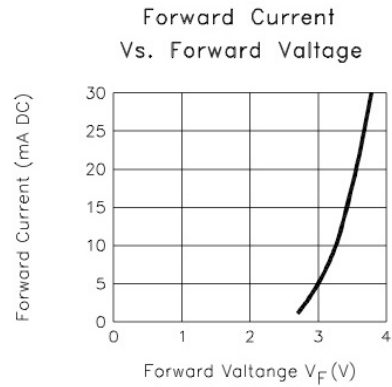
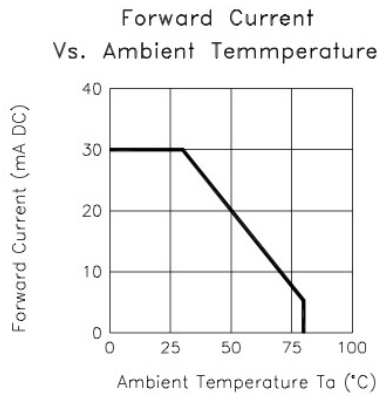
V_f: Tolerance of minimum and maximum = ± 0.05v

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Product Specifications

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



Compliances and Approvals

