

VAOL-3MWY4

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

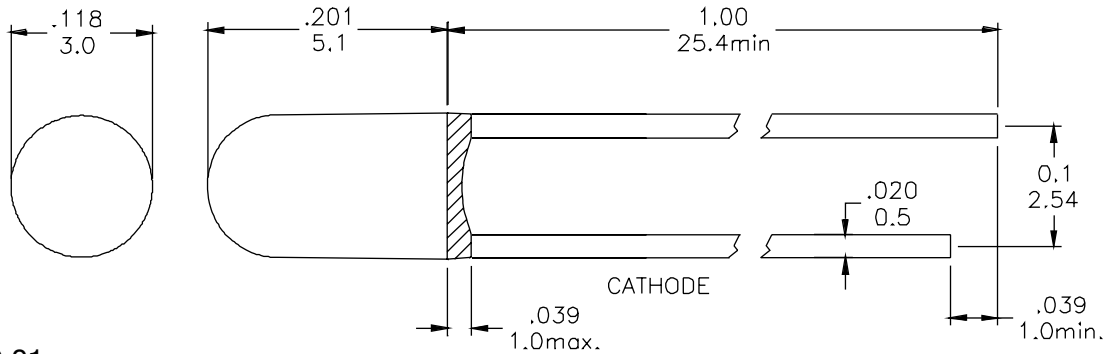
- Commercial Outdoor Sign Board
- LED Bulb
- Front Panel Indicator
- Electrical Panels
- Dot-Matrix Module
- Appliances

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
- 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.

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 | | |

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 | |
| 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 = ± 15%

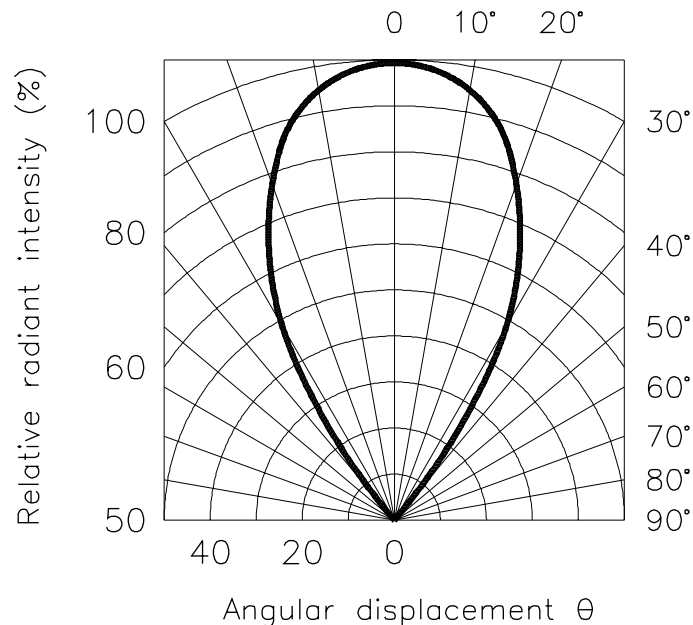
V_f: Tolerance of minimum and maximum = ± 0.05v

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

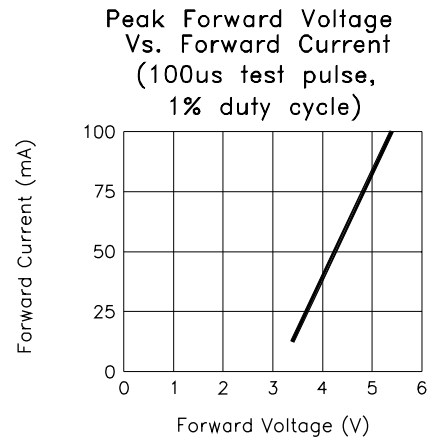
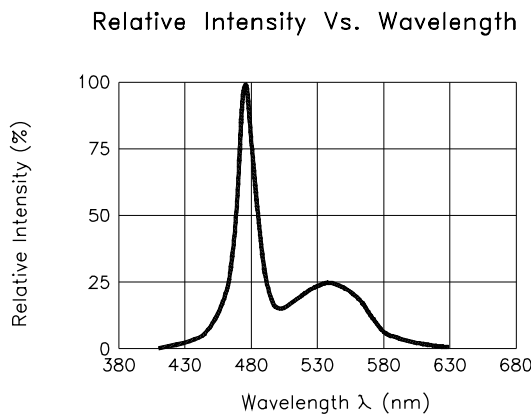
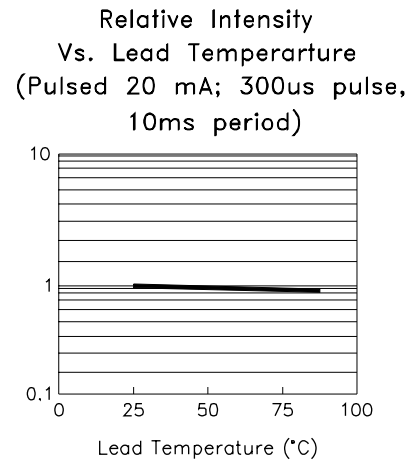
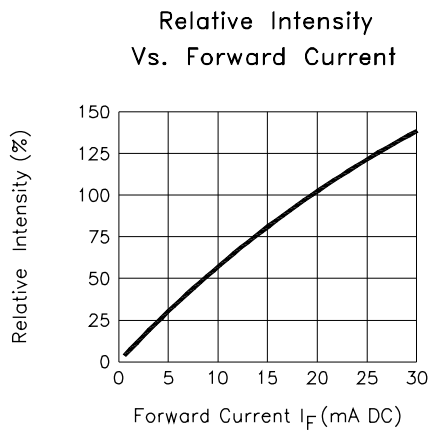
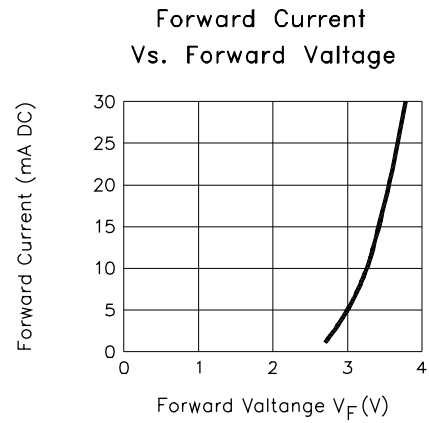
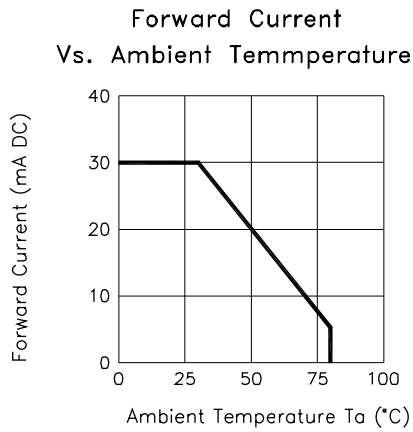
Radiation Diagram

IF=20 mA 50% Power Angle Angle =60



Product Specifications

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



Compliances and Approvals

