

T-1 3/4 (f 5mm) PACKAGE HIGH POWER AlInGaP LED LAMPS

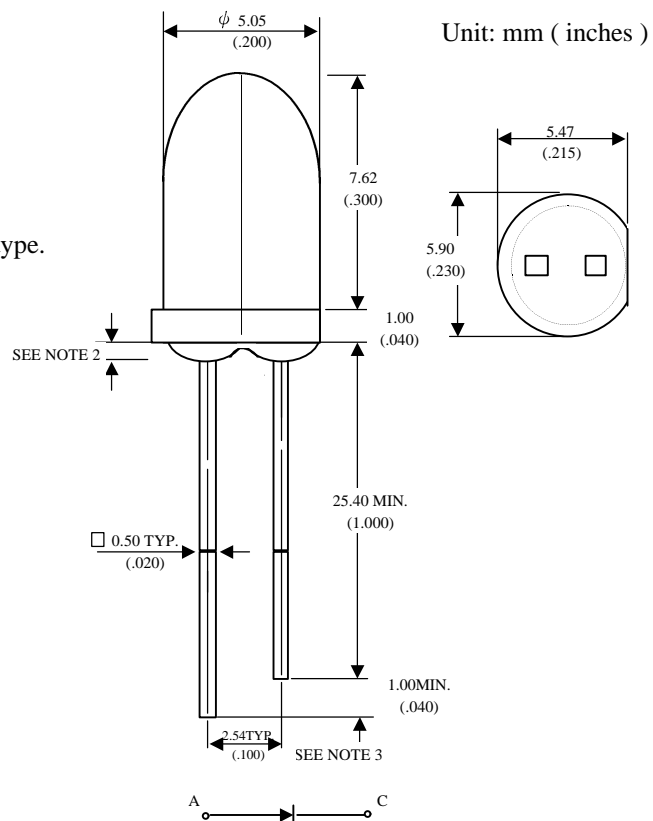
MVL-5A4UOL

Description

The MVL-5A4UOL , utilizes the latest absorbing substrate Aluminum Indium Gallium Phosphide (AlInGaP) LED technology. This LED material has outstanding light output efficiency over a wide range of drive current.

The package is T-1 3/4(5mm) water clear standard type.

Package Dimensions



Features

- Ultra - brightness
- Low power consumption
- TTL compatible
- Reliable

Notes :

1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ $T_A=25^\circ\text{C}$

| Parameter | Maximum Rating | Unit |
|---|--|------|
| Power Dissipation | 125 | mW |
| Peak Forward Current(1/10 Duty Cycle 100 μ s pulse width) | 100 | mA |
| Continuous Forward Current | 50 | mA |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -40 $^\circ\text{C}$ to + 100 $^\circ\text{C}$ | |
| Storage Temperature Range | -40 $^\circ\text{C}$ to + 100 $^\circ\text{C}$ | |
| Lead Soldering Temperature 1.6 mm from body for 5 seconds at 260 $^\circ\text{C}$ | | |

UNI

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Optical-Electrical Characteristics

| Parameter | Test Conditions | Symbol | Min . | Typ . | Max . | Unit . |
|--------------------------|-------------------|-----------------|-------|-------|-------|---------------|
| Luminous Intensity | $I_F=20\text{mA}$ | I_V | 1700 | 3500 | - | mcd |
| Forward Voltage | $I_F=20\text{mA}$ | V_F | - | 2.0 | 2.6 | V |
| Reverse Current | $V_R=5\text{V}$ | I_R | - | - | 100 | μA |
| Dominant Wavelength | $I_F=20\text{mA}$ | λ_d | - | 625 | - | nm |
| Spectral Line Half Width | $I_F=20\text{mA}$ | $\Delta\lambda$ | - | 20 | - | nm |
| Viewing Angle | $I_F=20\text{mA}$ | $2\theta_{1/2}$ | - | 8 | - | deg. |

Typical Optical-Electrical Characteristic Curves

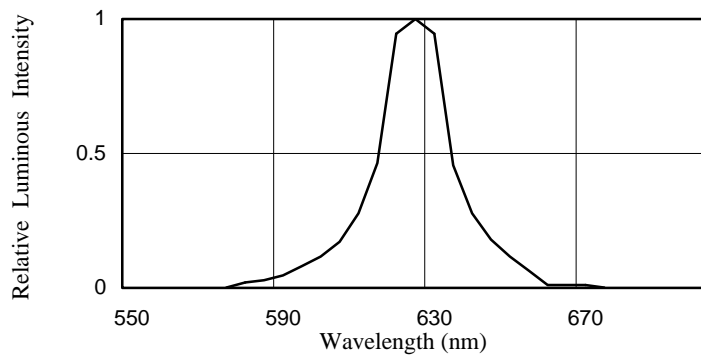


FIG.1 SPECTRAL DISTRIBUTION

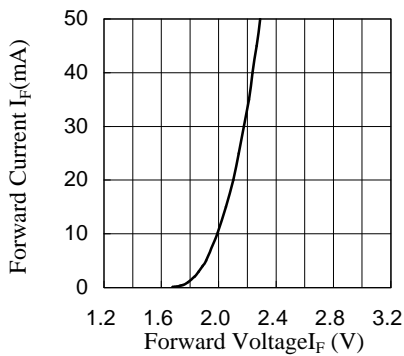


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

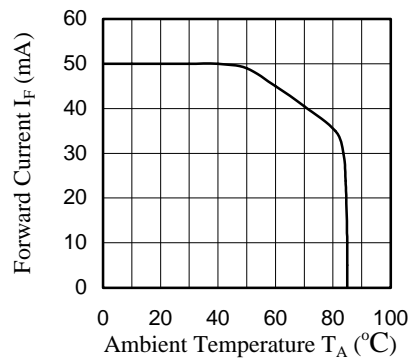


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

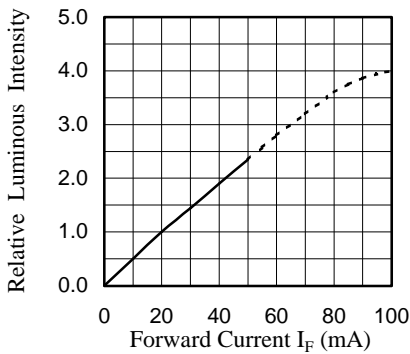


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

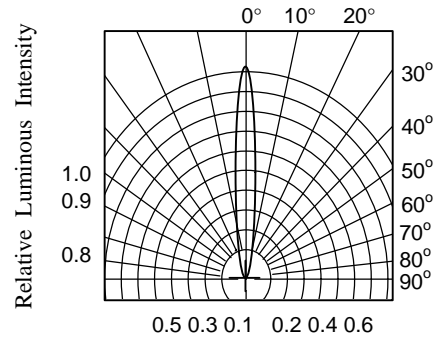


FIG.5 RADIATION DIAGRAM