

T-1 (f3mm) HIGH POWER AlInGaP LED LAMPS

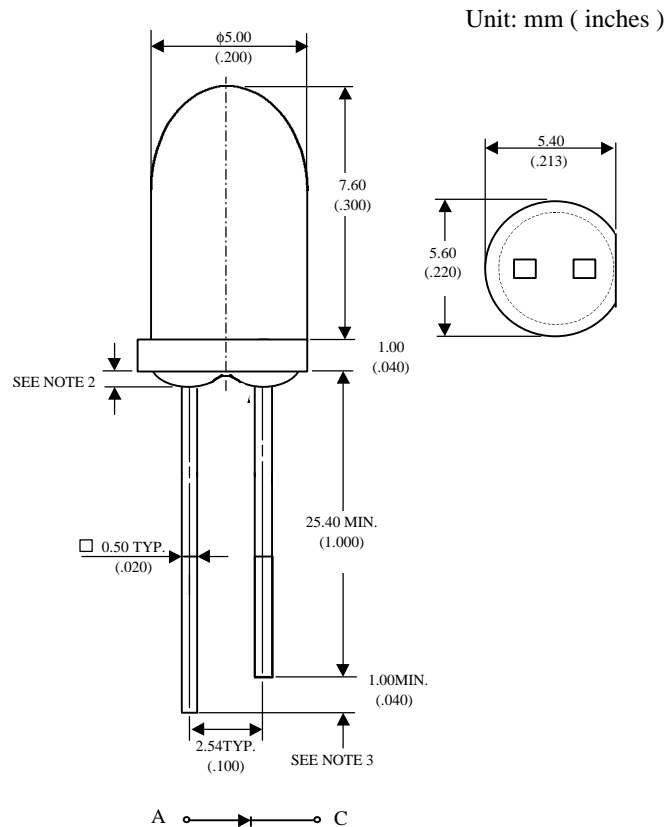
MVL-5C4UOL

Description

The MVL-5C4UOL , 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 | Symbol | Maximum Rating | Unit |
|---|-----------|---|------|
| Power Dissipation | P_{ad} | 125 | mW |
| Peak Forward Current (1/10 Duty Cycle 100 μ s pulse) | I_{pf} | 200 | mA |
| Continuous Forward Current | I_{af} | 50 | mA |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature Range | T_{opr} | -40 $^\circ\text{C}$ to +100 $^\circ\text{C}$ | |
| Storage Temperature Range | T_{stg} | -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

Unity Opto Technology Co., Ltd.

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Optical-Electrical Characteristics

@ T_A=25°C

| Parameter | Test Conditions | Symbol | Min. | Typ . | Max. | Unit |
|--------------------------|----------------------|--------------------------------|------|---------|------|-------|
| Luminous Intensity | I _F =20mA | I _V | - | 1600 | - | mcd |
| Forward Voltage | I _F =20mA | V _F | - | 2.0 | 2.5 | V |
| Reverse Current | V _R =5V | I _R | - | - | 100 | μA |
| Wavelength | I _F =20mA | λ _p /λ _d | - | 630/625 | - | nm |
| Spectral Line Half Width | I _F =20mA | Δλ _{1/2} | - | 20 | - | nm |
| Viewing Angle | I _F =20mA | 2θ _{1/2} | - | 23 | - | deg . |

Typical Optical-Electrical Characteristic Curves

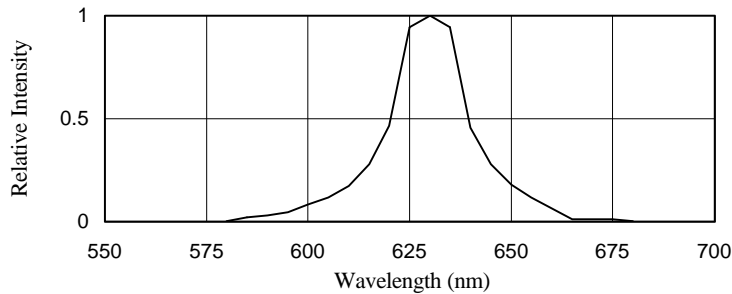


FIG.1 SPECTRAL DISTRIBUTION

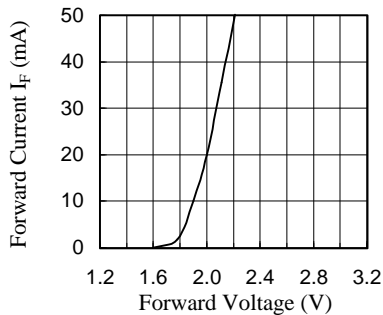


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

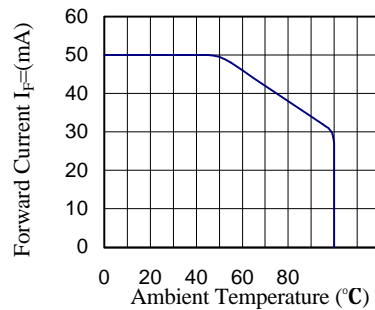


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

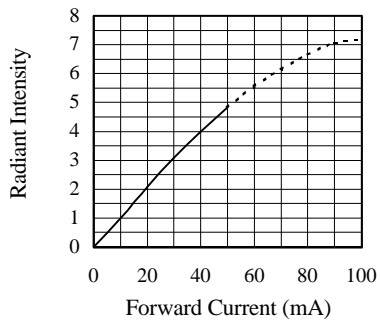


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

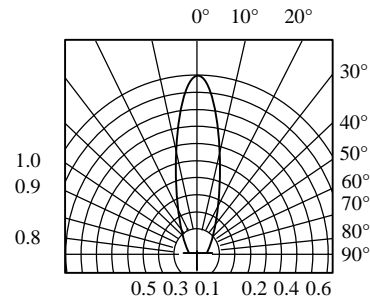


FIG.5 RADIATION DIAGRAM