

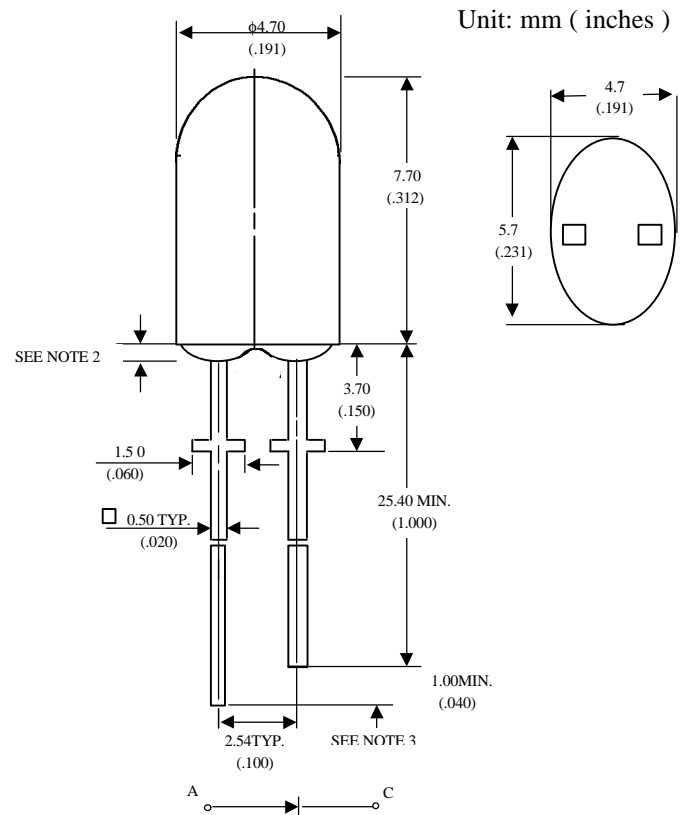
ELLIPSE (4.7 X5.7) High Performance AlInGaP LED Lamps

MVL-663TUYLK-S

Description

The MVL-663TUYLK-S, utilizes the latest transparent 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 ellipse transparent yellow color plastic type.

Package Dimensions



Features

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

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 width) | I_{pf} | 100 | 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 +101 $^\circ\text{C}$ | |
| Lead Soldering Temperature 1.6 mm from body for 5 seconds at 260 $^\circ\text{C}$ | | | |

UNI

Unity Opto Technology Co., Ltd.

12/16/2000

Optical-Electrical Characteristics

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

| Parameter | Test Conditions | Symbol | Min. | Typ . | Max. | Unit |
|------------------------------|-------------------|-----------------------|------|---------|------|---------------|
| Luminous Intensity | $I_F=20\text{mA}$ | I_V | - | 400 | - | mcd |
| Forward Voltage | $I_F=20\text{mA}$ | V_F | - | 2.3 | 2.7 | V |
| Reverse Current | $V_R=5\text{V}$ | I_R | - | - | 100 | μA |
| Peak/Dominant Wavelength | $I_F=20\text{mA}$ | λ_p/λ_d | - | 592/590 | - | nm |
| Spectral Radiation Bandwidth | $I_F=20\text{mA}$ | $\Delta\lambda$ | - | 20 | - | nm |
| Viewing Angle | $I_F=20\text{mA}$ | $2\theta_{1/2}$ | - | 30/70 | - | deg. |

Typical Optical-Electrical Characteristic Curves

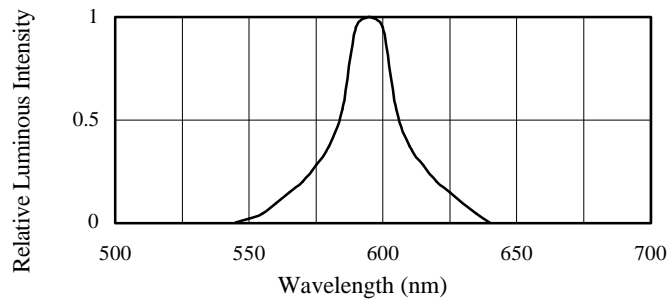


FIG.1 SPECTRAL DISTRIBUTION

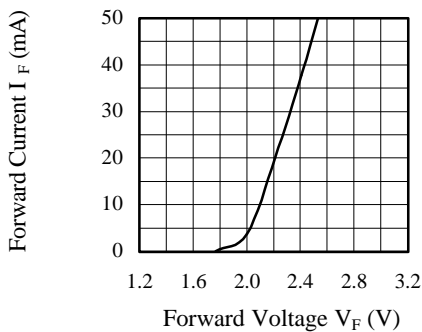


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

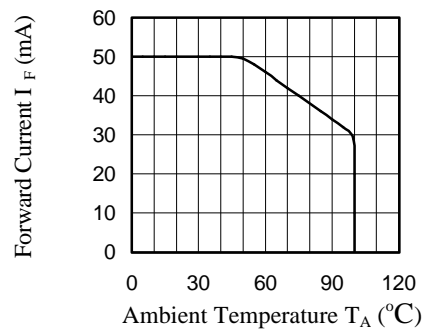


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

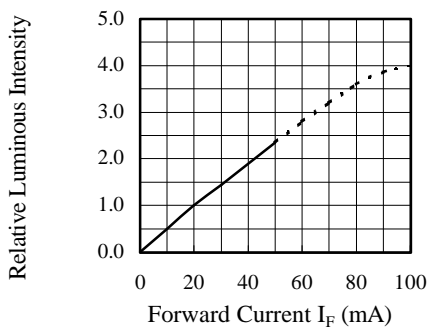


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

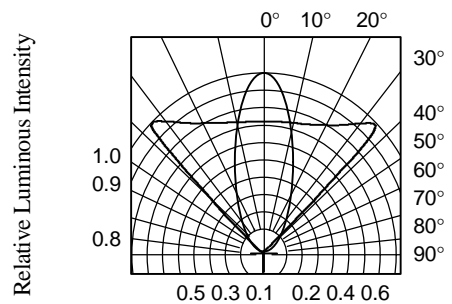


FIG.5 RADIATION DIAGRAM