

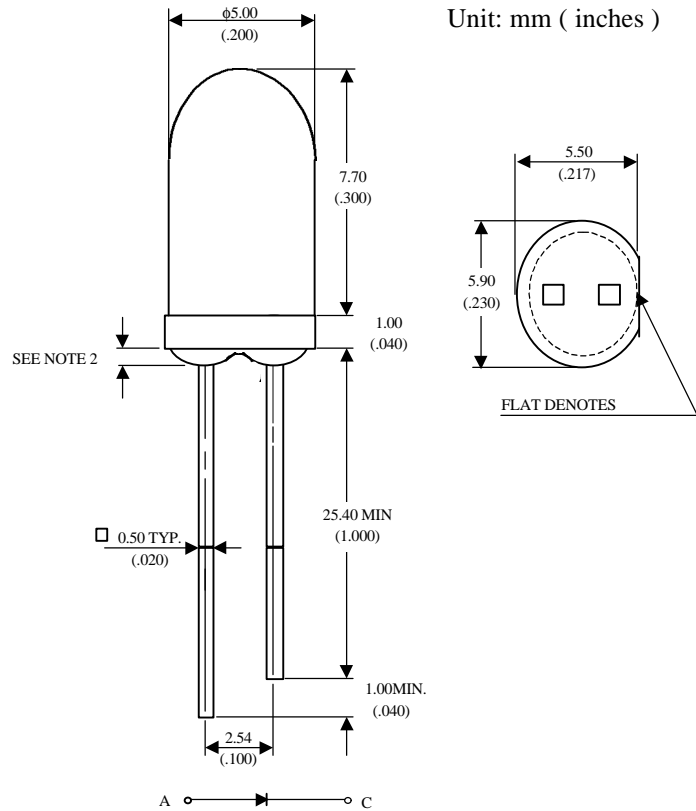
T-1 3/4 (f5mm) InGaN LED LAMPs

MVL-564BG

Description

The MVL-564BG, a blue source color device, is made with InGaN (on SiC substrate) LED die.
The package is T-1 3/4 (φ5mm) water clear plastic lens package.

Package Dimensions



Applications

- Full color displays & moving message signs
- Solid state incandescent replacement bulbs
- High ambient panel indicators
- Color printers & scanners
- Medical & Analytical instruments

Features

- High performance - 2.5mW (490nm)
- Superior SiC substrate technology
- Excellent chip to chip consistency
- High reliability
- Stopper

Notes :

1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 0.8 mm (.031") 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 |
|---|-----------|-----------------|------|
| Peak Forward Current(1/10 Duty Cycle@1KHz) | I_{pf} | 100 | mA |
| Continuous Forward Current | I_{af} | 30 | mA |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature Range | T_{opr} | -20°C to +80°C | |
| Storage Temperature Range | T_{stg} | -30°C to +100°C | |
| Electrostatic Discharge Threshold | E_{ot} | 1000 | V |

UNI

Unity Opto Technology Co., Ltd.

09/11/2000

Optical-Electrical Characteristics

@ T_A=25°C

| Parameter | Test Conditions | Symbol | Min . | Typ . | Max . | Unit . |
|---------------------|----------------------|-------------------|-------|-------|-------|--------|
| Luminous Intensity | I _F =20mA | I _V | 400 | 900 | - | mcd |
| Forward Voltage | I _F =20mA | V _F | - | 3.5 | 4.0 | V |
| Reverse Current | V _R =5V | I _R | - | - | 10 | μA |
| Dominant Wavelength | I _F =20mA | λ _d | - | 490 | - | nm |
| Viewing Angle | I _F =20mA | 2θ _{1/2} | - | 30 | - | deg. |

Typical Optical-Electrical Characteristic Curves

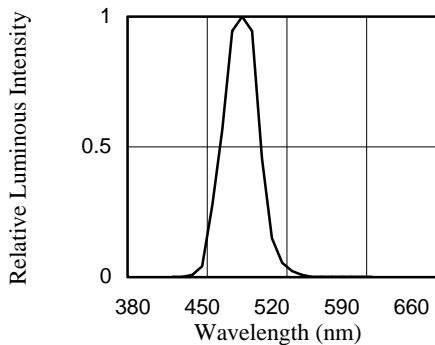


FIG.1 RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

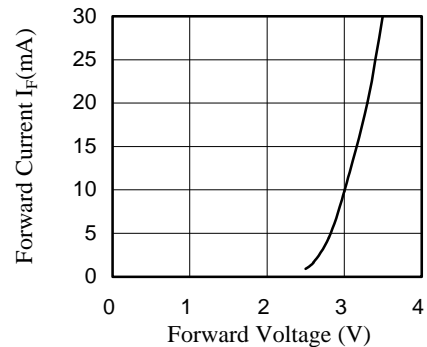


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

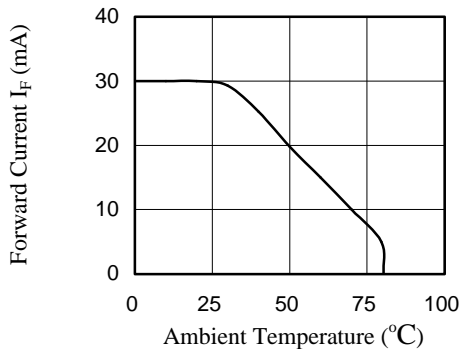


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

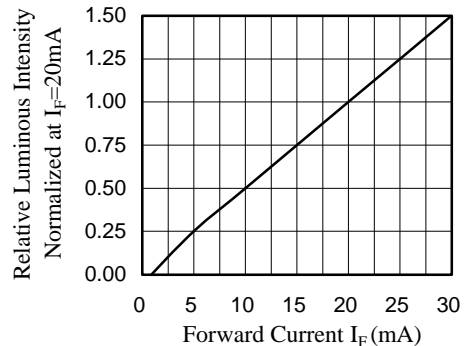


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

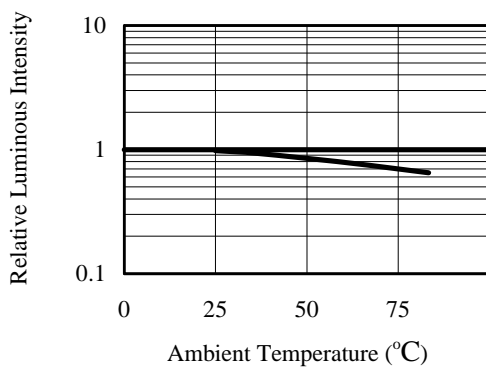


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

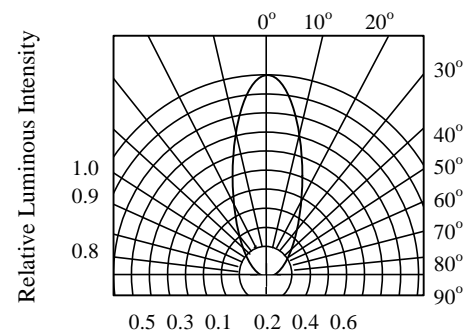


FIG.6 RADIATION DIAGRAM