

T-1 3/4 ($\phi 5\text{mm}$) PACKAGE SOLID STATE LAMP

MVL-534BG

Description

The MVL-534BG, a blue source color device, is made with InGaN (on SiC substrate) LED die.

The package is T-1 3/4 ($\phi 5\text{mm}$) water clear plastic type.

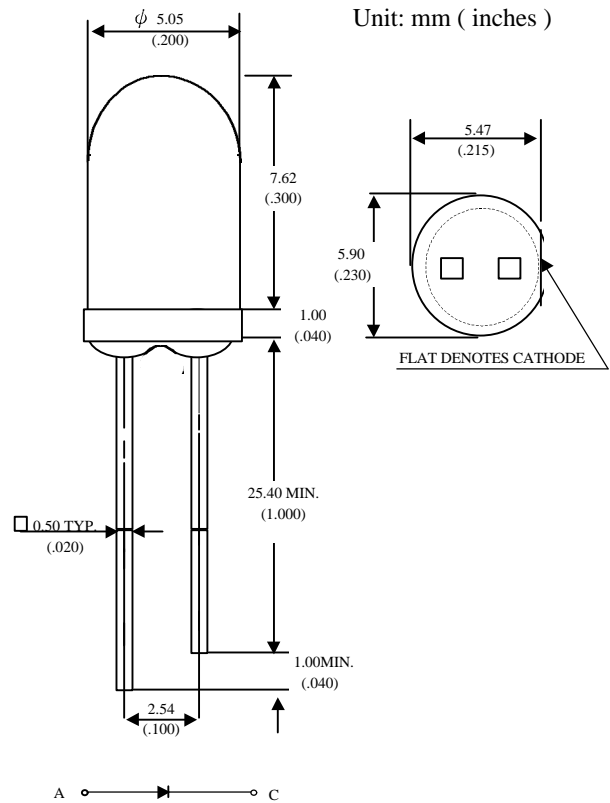
Applications

- 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

Package Dimensions



A \rightarrow \leftarrow C

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(HBM)	E_{ot}	1000	V

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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	700	1300	-	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}	-	20	-	deg.

Typical Optical-Electrical Characteristic Curves

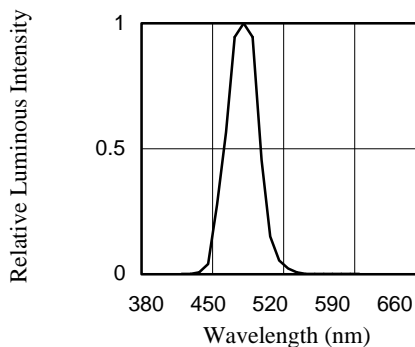


FIG.1 RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

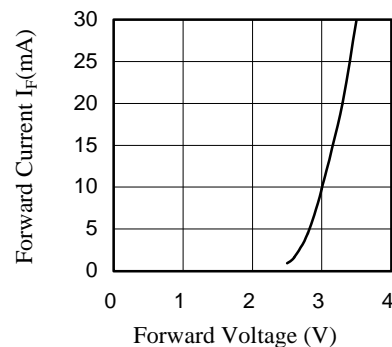


FIG.2 FORWARD CURRENT I_F(mA) VS. FORWARD VOLTAGE

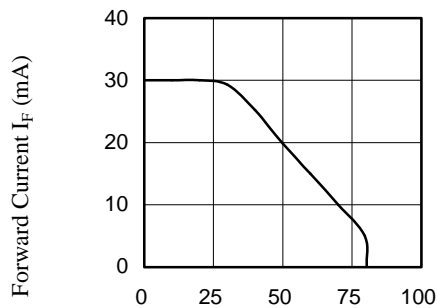


FIG.3 FORWARD CURRENT I_F (mA) VS. AMBIENT TEMPERATURE

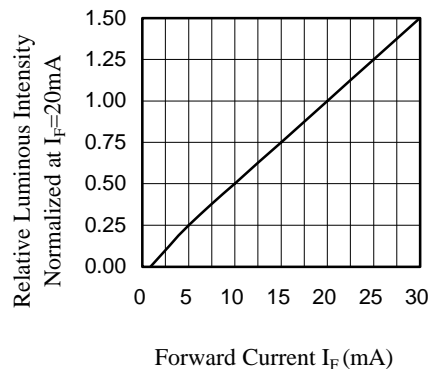


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

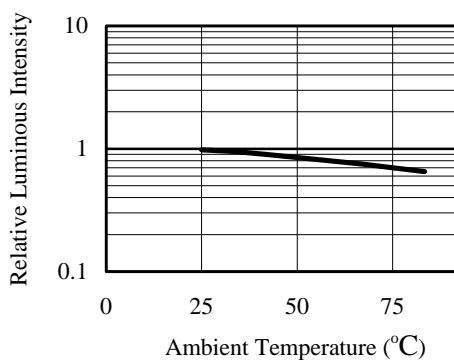


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

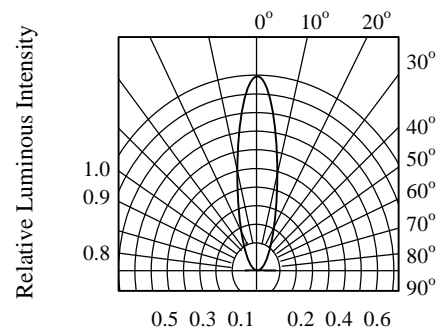


FIG.6 RADIATION DIAGRAM