

# T-1 (f3mm) DUAL COLOR INDICATOR LAMP

查询"MVL-302B1"供应商

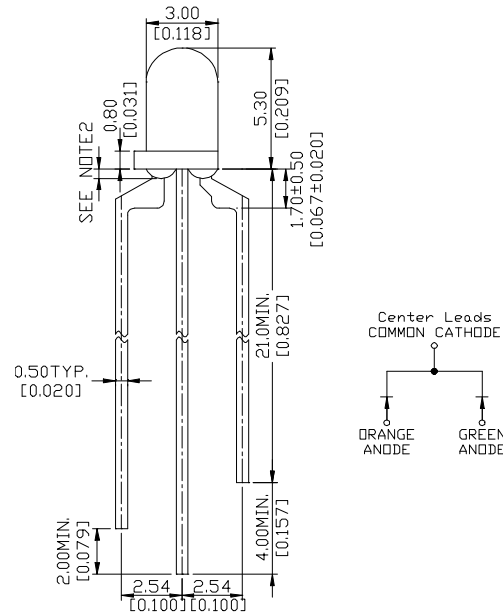
## MVL-302B1

### Description

The MVL-302B1 is a white diffused, wide viewing angle, dual chips, utilizing Gallium Phosphide on Gallium Phosphide green light emitting diode and Gallium Arsenide Phosphide on Gallium Phosphide orange light emitting diode. The green and orange operating independently of each other with a common cathode.

### Package Dimensions

Unit: mm (inches)



Notes :

1. Tolerance is  $\pm 0.25$  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.

### Features

- Green And orange Chips Are Matched For Uniform Light Output.
- Long Life-Solid State Reliability.
- Low Power Consumption / I.C. Compatible

### Absolute Maximum Ratings

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

| Parameter  | Symbol    | Maximum Rating  |        | Unit  |
|--|-----------|-----------------|--------|-------|
|  |           | GREEN           | ORANGE |       |
| Power Dissipation  | $P_{ad}$  | 100             | 100    | mW    |
| Peak Forward Current (1/10 Duty Cycle 0.1ms pulse width)             | $I_{pf}$  | 120             | 120    | mA    |
| Continuous Forward Current   | $I_{af}$  | 30              | 30     | mA    |
| Derating Linear From 25°C  |           | 0.4             | 0.5    | mA/°C |
| Reverse Voltage  | $V_R$     | 5               | 5      | V     |
| Operating Temperature Range  | $T_{opr}$ | -55°C to +100°C |        |       |
| Storage Temperature Range  | $T_{stg}$ | -55°C to +100°C |        |       |
| Lead Soldering Temperature (1.6 mm from body) for 3 seconds at 260°C |           |                 |        |       |

Unity Opto Technology Co., Ltd.

03/01/2002

Optical-Electrical Characteristics

@ T<sub>A</sub>=25°C

| Parameter                | Test Conditions      | Symbol            |              | Min .   | Typ .   | Max .   | Unit . |
|--------------------------|----------------------|-------------------|--------------|---------|---------|---------|--------|
| Luminous Intensity       | I <sub>F</sub> =20mA | I <sub>V</sub>    | GREEN/ORANGE | 5.0/4.0 | 18/12   | -       | mcd    |
| Forward Voltage          | I <sub>F</sub> =20mA | V <sub>F</sub>    | GREEN/ORANGE | -       | 2.1/2.0 | 2.8/2.8 | V      |
| Reverse Current          | V <sub>R</sub> =5V   | I <sub>R</sub>    | GREEN/ORANGE | -       | -       | 100     | μA     |
| Peak Emission Wavelength | I <sub>F</sub> =20mA | λ <sub>p</sub>    | GREEN/ORANGE | -       | 565/640 | -       | nm     |
| Spectral Line Half Width | I <sub>F</sub> =20mA | Δλ                | GREEN/ORANGE | -       | 30/40   | -       | nm     |
| Viewing Angle            | I <sub>F</sub> =20mA | 2θ <sub>1/2</sub> | GREEN/ORANGE | -       | 40      | -       | deg.   |

Typical Optical-Electrical Characteristic Curves

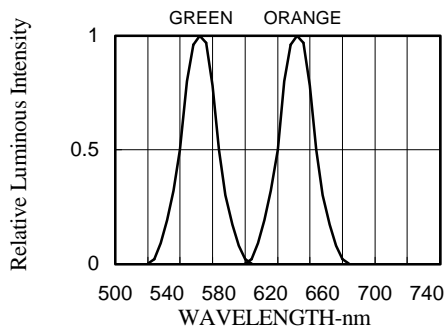


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

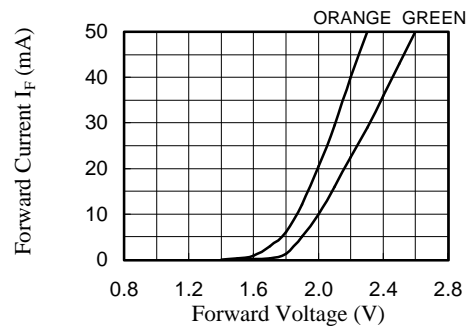


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

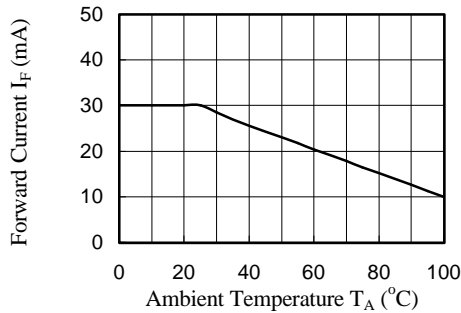


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

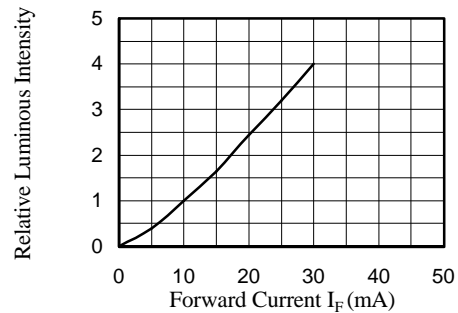


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

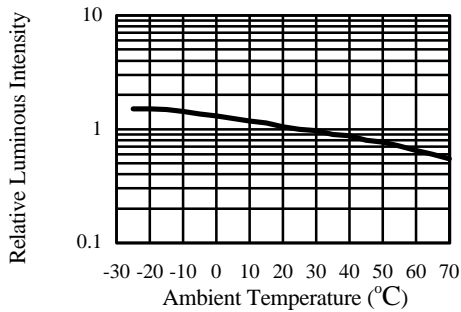


Fig 5. RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

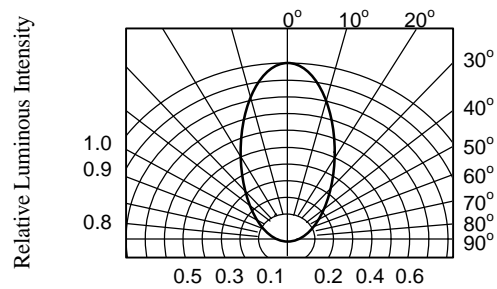


FIG.6 RADIATION DIAGRAM