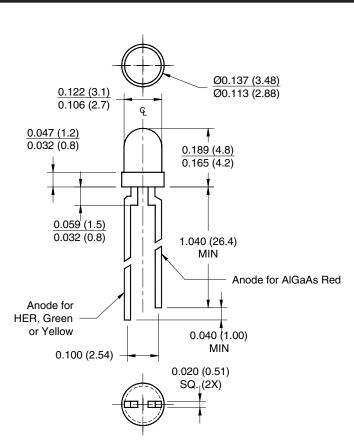
# BICOLOR T-100 (3 mm) SOLID STATE LED LAMPS

### PACKAGE DIMENSIONS



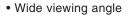
NOTES:

- 1. Dimensions for all drawings are in inches (mm).
- 2. Tolerance is  $\pm 0.12$ " unless otherwise specified.

HER / AIGaAs RED MV6661A GREEN / AIGaAs RED MV6461A YELLOW / AIGaAs RED MV6361A

### **FEATURES**





· Solid state reliability



#### **DESCRIPTION**

The MV6X61A series is a bicolor, bipolar LED lamp with a wide viewing angle of 100°. In particular, MV6461A offers 4 states - green, red, orange (when AC driven) and off.

| ABSOLUTE MAXIMUM RATINGS (T <sub>A</sub> = 25°C unless otherwise specified) |            |     |       |        |       |  |  |
|---|------------|-----|-------|--------|-------|--|--|
| Parameter   | AlGaAs Red | HER | Green | Yellow | Units |  |  |
| Continuous Forward Current - I <sub>F</sub>                                 | 30         | 30  | 30    | 25     | mA    |  |  |
| Peak Forward Current - I <sub>F</sub>                                       | 90         | 90  | 90    | 60     | mA    |  |  |
| (f = 1.0 KHz, Duty Factor = 1/10)   |            |     |       |        |       |  |  |
| Reverse Voltage - V <sub>R</sub> (I <sub>R</sub> = 10 μA)                   | 5          | 5   | 5     | 5      | V     |  |  |
| Power Dissipation - P <sub>D</sub>  | 135        | 135 | 135   | 95     | mW    |  |  |
| Operating Temperature - T <sub>OPR</sub>                                    |            | °C  |       |        |       |  |  |
| Storage Temperature - T <sub>STG</sub>                                      |            | °C  |       |        |       |  |  |
| Lead Soldering Time - T <sub>SOL</sub>                                      |            | °C  |       |        |       |  |  |



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HER / AIGaAs RED GREEN / AIGaAs RED YELLOW / AIGaAs RED MV6661A MV6461A MV6361A

| ELECTRICAL / OPTICAL CHARACTERISTICS (TA =25°C) |                             |                               |                                |                        |  |  |  |
|---|-----------------------------|-------------------------------|--------------------------------|------------------------|--|--|--|
| Part Number                                     | MV6661A<br>HER / AlGaAs Red | MV6461A<br>Green / AlGaAs Red | MV6361A<br>Yellow / AlGaAs Red | Condition              |  |  |  |
| Luminous Intensity (mcd)                        |                             |                               |                                | I <sub>F</sub> = 20 mA |  |  |  |
| Minimum   | 2.5/2.5                     | 2.5/2.5                       | 2.5/2.5                        |                        |  |  |  |
| Typical   | 10/10                       | 10/10                         | 10/10                          |                        |  |  |  |
| Forward Voltage (V)                             |                             |                               |                                | I <sub>F</sub> = 20 mA |  |  |  |
| Maximum   | 3.0/2.4                     | 3.0/2.4                       | 3.0/2.4                        |                        |  |  |  |
| Typical   | 2.1/1.7                     | 2.1/1.7                       | 2.1/1.7                        |                        |  |  |  |
| Peak Wavelength (nm)                            | 635/660                     | 565/660                       | 585/660                        | I <sub>F</sub> = 20 mA |  |  |  |
| Spectral Line Half Width (nm)                   | 45/20                       | 30/20                         | 35/20                          | $I_F = 20 \text{ mA}$  |  |  |  |
| Viewing Angle (°)                               | 100°                        | 100°                          | 100°                           | $I_F = 20 \text{ mA}$  |  |  |  |

### **TYPICAL PERFORMANCE CURVES**

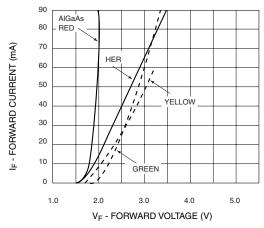


Fig. 1 Forward Current vs. Forward Voltage

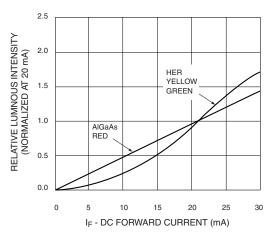


Fig. 2 Relative Luminous Intensity vs. DC Forward Current



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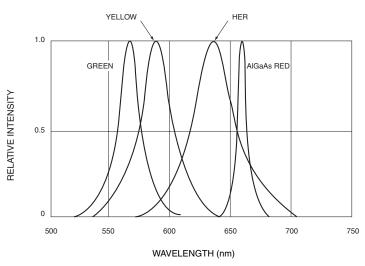
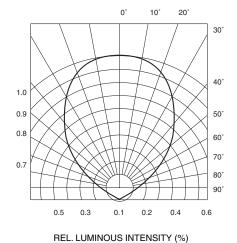


Fig. 3 Relative Intensity vs. Peak Wavelength



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Fig. 4 Radiation Diagram

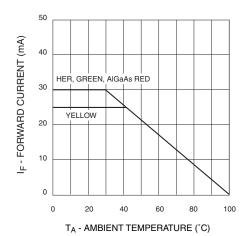


Fig. 5 Current Derating Curve



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