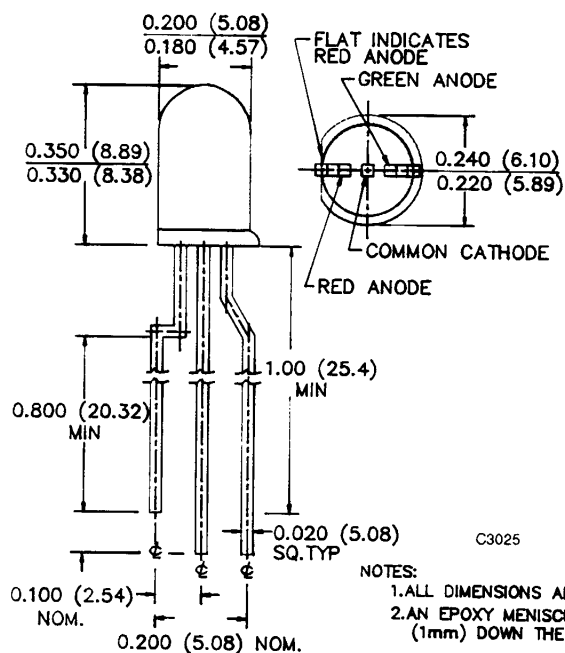




## 3 LEADS BICOLOR T-1 $\frac{3}{4}$ SOLID STATE LAMPS

### HIGH EFFICIENCY GREEN/HIGH EFFICIENCY RED MV5437

#### PACKAGE DIMENSIONS



#### DESCRIPTION

The MV5437 T-1 $\frac{3}{4}$  lamp is a three leaded bicolor light source with a central common cathode lead.

#### FEATURES

- Excellent uniformity and visual appeal
- Very wide viewing angle for perfect direct view
- Increased reliability
- Radically improved die-off-center characteristics
- Improved solder heat durability
- 4-state; Green, Red, Amber, OFF.
- TTL compatible

| <b>ELECTRO-OPTICAL CHARACTERISTICS</b> (25°C Unless Otherwise Specified) |      |                 |     |       |        |                         |
|--------------------------------------------------------------------------|------|-----------------|-----|-------|--------|-------------------------|
| PARAMETER                                                                |      | SYMBOL          | RED | GREEN | UNITS  | TEST CONDITIONS         |
| Luminous intensity                                                       | min. | $I_v$           | 2.0 | 2.0   | mcd    | $I_F = 20 \text{ mA}$   |
|                                                                          | typ. |                 | 6.0 | 6.0   | mcd    | $I_F = 20 \text{ mA}$   |
| Forward voltage                                                          | max. | $V_F$           | 3.0 | 3.0   | V      | $I_F = 20 \text{ mA}$   |
|                                                                          | typ. |                 | 2.1 | 2.1   | V      | $I_F = 20 \text{ mA}$   |
| Dominant wavelength                                                      | typ. | $\lambda_d$     | 630 | 567   | nm     | $I_F = 20 \text{ mA}$   |
| Reverse breakdown                                                        | min. | $V_{BR}$        | 5.0 | 5.0   | V      | $I_R = 100 \mu\text{A}$ |
| Total viewing angle between half<br>Luminous intensity points            |      | $2\theta_{1/2}$ | 100 | 100   | degree | $I_F = 20 \text{ mA}$   |

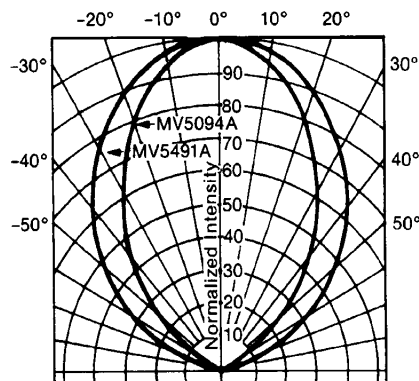
| <b>ABSOLUTE MAXIMUM RATINGS</b> ( $T_A = 25^\circ\text{C}$ Unless Otherwise Specified) |                                             |         |       |
|----------------------------------------------------------------------------------------|---------------------------------------------|---------|-------|
| PARAMETERS                                                                             | RATING                                      | UNITS   | NOTES |
| Power dissipation                                                                      | 135                                         | mW      | 1     |
| Peak current                                                                           | 90                                          | mA      |       |
| Average current                                                                        | 25                                          | mA      | 2     |
| Lead soldering time                                                                    | 5                                           | seconds |       |
| Storage and operating temperatures                                                     | $-55^\circ\text{C}$ TO $+100^\circ\text{C}$ |         | 3     |

### NOTES

1. Derate power linearly from  $25^\circ\text{C}$  at  $1.8 \text{ mW}/^\circ\text{C}$
2. Derate current linearly from  $50^\circ\text{C}$  at  $0.5 \text{ mA}/^\circ\text{C}$
3. To a point minimum  $1/16$  inch (1.6 mm) from the bottom lamp.

### TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

( $T_A = 25^\circ\text{C}$  Unless Otherwise Specified)



6C1827

Fig. 1. Spatial Distribution