Bivar 3mm T1 Package 3-Lead Bi-Color is ideal for those applications where multiple signals need to be displayed at the same location such as standby-on indication for server or computer peripherals. When needed, the 3rd color signal could be created by powering up both chips together for on-off-standby applications that require three distinct signals. Bivar offers white diffused LED lens for uniform light output. The Flange LED is ideal for Panel Mount Clip & Ring assemblies. This 3-Lead Bi-color LED package comes in a common cathode Lead Frame configuration.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Material</th>
<th>Emitted Color</th>
<th>Peak. Wavelength ( \lambda_p(nm) ) TYP.</th>
<th>Lens Appearance</th>
<th>Viewing Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>3BC-3-F</td>
<td>GaAsP/GaP RED</td>
<td>625nm</td>
<td>White Diffused</td>
<td>40°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GaP/GaP   GREEN</td>
<td>568nm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part Number Designation**

- LED Body, mm
- Bi-Color
- Tri-Lead

3  B  C  -  3  -  X  X  -  X  X  -  F

- Flange Body Style
  - Common Anode, CA
  - Common Cathode, “ ”
  - Alternate Lead Configuration, B

- Emitted Colors, i.e. Y/G, “ ” for R/G
Outline Dimensions

3mm (T1) Package Discrete LED
RED/GREEN, Bi-Color

Recommended Mounting
Hole Size = Ø0.032" ±0.003

(3) Common Cathode
(1) Anode
(3) Anode

Red
Green

Outline Drawings Notes:
1. All dimensions are in inches [millimeters].
2. Standard tolerance: ±0.010" unless otherwise noted.
3. Tolerance of overall epoxy outline: ±0.020" unless otherwise noted.
4. Epoxy meniscus may extend to 0.060" max.

Bivar reserves the right to make changes at any time without notice.
Absolute Maximum Ratings
$T_A = 25^\circ C$ unless otherwise noted

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power Dissipation</strong></td>
<td>80 mW</td>
</tr>
<tr>
<td><strong>Forward Current (DC)</strong></td>
<td>30 mA</td>
</tr>
<tr>
<td><strong>Peak Forward Current $^1$</strong></td>
<td>150 mA</td>
</tr>
<tr>
<td><strong>Operating Temperature Range</strong></td>
<td>-25 ~ +85$^\circ$C</td>
</tr>
<tr>
<td><strong>Storage Temperature Range</strong></td>
<td>-30 ~ +100$^\circ$C</td>
</tr>
<tr>
<td><strong>Lead Soldering Temperature (3 mm from the base of the epoxy bulb) $^2$</strong></td>
<td>260$^\circ$C</td>
</tr>
</tbody>
</table>

Notes: 1. 10% Duty Cycle, Pulse Width $\leq 0.1$ msec. 2. Solder time less than 5 seconds at temperature extreme.

Electrical / Optical Characteristics
$T_A = 25^\circ$C & $I_F = 20$ mA unless otherwise noted

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Emitted Color</th>
<th>Forward Voltage (V)$^1$</th>
<th>Recommend Forward Current (mA)</th>
<th>Reverse Current (µA)</th>
<th>Dominant Wavelength (nm)$^2$</th>
<th>Luminous Intensity $I_v$ (mcd)</th>
<th>Viewing Angle $2 \Theta _{1/2}$ (deg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3BC-3-F</td>
<td>Red</td>
<td>/ 2.0 2.8</td>
<td>/ 20 /</td>
<td>100</td>
<td>/ / /</td>
<td>/ 30 /</td>
<td>/ 40 /</td>
</tr>
<tr>
<td></td>
<td>Green</td>
<td>/ 2.1 2.8</td>
<td>/</td>
<td>/</td>
<td>/ /</td>
<td>/ 30 /</td>
<td>/</td>
</tr>
</tbody>
</table>

Notes: 1. Tolerance of forward voltage : ±0.05V. 2. Tolerance of dominant wavelength : ±1.0nm.
Typical Electrical / Optical Characteristics - Red

$T_A = 25°C$ unless otherwise noted

**Fig. 1** Relative Luminous Intensity vs. Wavelength @ 20mA

**Fig. 2** Directivity Radiation Diagram

**Fig. 3** Relative Intensity (10mA) vs. Forward Voltage

**Fig. 4** Relative Luminous Intensity (%) vs. Forward Current

**Fig. 5** Forward Current vs. Temperature

**Fig. 6** Relative Intensity (%) vs. Temperature @ 20 mA
Typical Electrical / Optical Characteristics - Green

$T_A = 25^\circ C$ unless otherwise noted

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**Fig. 1** Relative Luminous Intensity vs. Wavelength @ 20mA

**Fig. 2** Directivity Radiation Diagram

**Fig. 3** Forward Current vs. Forward Voltage

**Fig. 4** Relative Luminous Intensity vs. Forward Current Normalize @ 20 mA

**Fig. 5** Forward Voltage vs. Temperature

**Fig. 6** Relative Luminous Intensity vs. Temperature
Recommended Soldering Conditions

Preheat Temperature: 100°C Max.
Preheat Time: 20 ~ 50 Seconds
Peak Temperature: 260°C Max.
Solder Time Above 217°C: 5 Seconds Max.

Note: Turn off top heater at preheat to prevent the lamp body directly exposed to the heat source.

Packaging and Labeling Plan

AntiStatic Poly Bag with Desiccant
(500 pcs Max. per Bag)