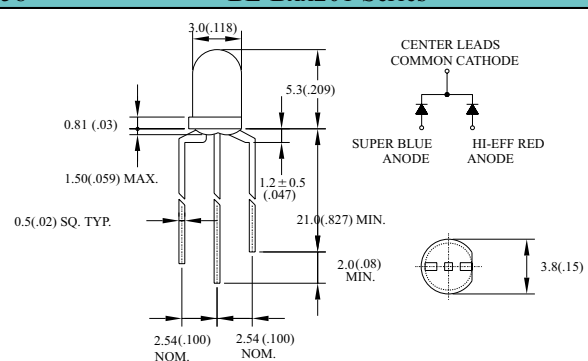
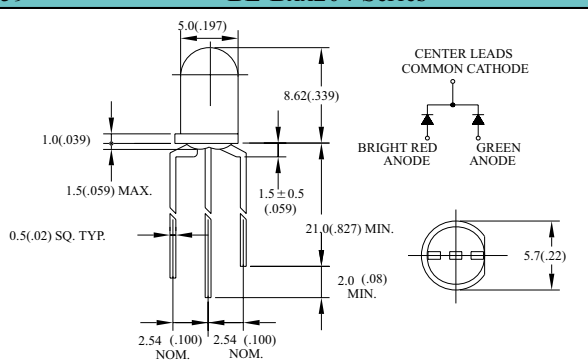
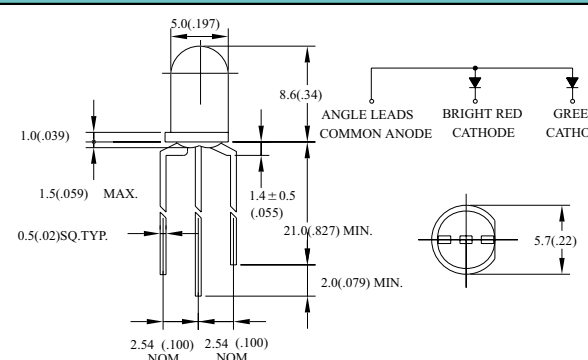
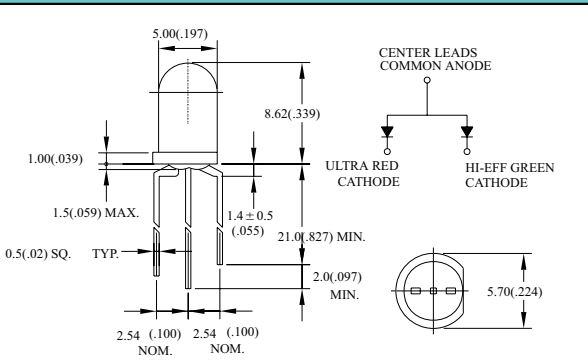


# DUAL-CHIP & TRI-STATE LED LAMPS(ROUND TYPES)

| Package                                       | Part No.    | Chip                    |                                      | Lens Appearance | Absolute Maximum Ratings |         |         |           | Electro-optical Data(At 20mA) |     |          | Viewing Angle<br>2 $\theta$ 1/2 (deg) | Drawing No. |
|-----------------------------------------------|-------------|-------------------------|--------------------------------------|-----------------|--------------------------|---------|---------|-----------|-------------------------------|-----|----------|---------------------------------------|-------------|
|                                               |             | Material/ Emitted Color | Peak Wave Length<br>$\lambda_p$ (nm) |                 | $\Delta \lambda$ (nm)    | Pd (mw) | If (mA) | Peak (mA) | Vf (V)                        |     | Iv (mcd) |                                       |             |
|                                               |             |                         |                                      |                 |                          |         |         |           | Typ                           | Max | Typ.     |                                       |             |
| T-1<br>Standard<br>1.0" Lead<br>3 $\phi$      | BL-BHG201   | GaP/GaP /Bright Red     | 700                                  | White Diffused  | 90                       | 40      | 15      | 50        | 2.2                           | 2.6 | 7.0      | 40                                    | L-158       |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 35.0     |                                       |             |
|                                               | BL-BEG201   | GaAsP/GaP/Hi-Eff Red    | 635                                  | White Diffused  | 45                       | 80      | 30      | 150       | 2.0                           | 2.6 | 35.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 35.0     |                                       |             |
|                                               | BL-BYG201   | GaAsP/GaP Yellow        | 585                                  | White Diffused  | 35                       | 80      | 30      | 150       | 2.1                           | 2.6 | 30.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 35.0     |                                       |             |
| T-13/4<br>Standard<br>1.0" Lead<br>5 $\phi$   | BL-BHG204   | GaP/GaP /Bright Red     | 700                                  | White Diffused  | 90                       | 40      | 15      | 50        | 2.2                           | 2.6 | 8.0      | 50                                    | L-159       |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 45.0     |                                       |             |
|                                               | BL-BEG204   | GaAsP/GaP/Hi-Eff Red    | 635                                  | White Diffused  | 45                       | 80      | 30      | 150       | 2.0                           | 2.6 | 45.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 45.0     |                                       |             |
|                                               | BL-BYG204   | GaAsP/GaP Yellow        | 585                                  | White Diffused  | 35                       | 80      | 30      | 150       | 2.1                           | 2.6 | 40.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 45.0     |                                       |             |
| T-13/4<br>Standard<br>1.0" Lead<br>5 $\phi$   | BL-BHG204-A | GaP/GaP /Bright Red     | 700                                  | White Diffused  | 90                       | 40      | 15      | 50        | 2.2                           | 2.6 | 3.5      | 50                                    | L-160       |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |
|                                               | BL-BEG204-A | GaAsP/GaP/Hi-Eff Red    | 635                                  | White Diffused  | 45                       | 80      | 30      | 150       | 2.0                           | 2.6 | 20.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |
|                                               | BL-BYG204-A | GaAsP/GaP Yellow        | 585                                  | White Diffused  | 35                       | 80      | 30      | 150       | 2.1                           | 2.6 | 18.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |
| T-1 3/4-<br>Standard<br>1.0" Lead<br>5 $\phi$ | BL-BHG204-B | GaP/GaP /Bright Red     | 700                                  | White Diffused  | 90                       | 40      | 15      | 50        | 2.2                           | 2.6 | 3.5      | 50                                    | L-161       |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |
|                                               | BL-BEG204-B | GaAsP/GaP/Hi-Eff Red    | 635                                  | White Diffused  | 45                       | 80      | 30      | 150       | 2.0                           | 2.6 | 20.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |
|                                               | BL-BYG204-B | GaAsP/GaP/ Yellow       | 585                                  | White Diffused  | 35                       | 80      | 30      | 150       | 2.1                           | 2.6 | 18.0     |                                       |             |
|                                               |             | GaP/GaP /Yellow Green   | 568                                  |                 | 30                       | 80      | 30      | 150       | 2.2                           | 2.6 | 20.0     |                                       |             |

Remark : 1.Hi-Eff Red / High-Efficiency Red .  
2. Trans / Transparent .  
3. 2  $\theta$  1/2 The off-axis angle at which the luminous intensity is half the axial luminous intensity .

|                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>L-158 BL-Bxx201 Series</b></p>  <p>Dimensions: 3.0(.118), 5.3(.209), 0.81(.03), 1.50(.059) MAX., 0.5(.02) SQ. TYP., 1.2 <math>\pm</math> 0.5 (.047), 21.0(.827) MIN., 2.0(.08) MIN., 2.54(.100) NOM., 3.8(.15).</p> <p>Pinout: CENTER LEADS COMMON CATHODE, SUPER BLUE ANODE, HI-EFF RED ANODE.</p> | <p><b>L-159 BL-Bxx204 Series</b></p>  <p>Dimensions: 5.0(.197), 8.62(.339), 1.0(.039), 1.5(.059) MAX., 0.5(.02) SQ. TYP., 1.5 <math>\pm</math> 0.5 (.059), 21.0(.827) MIN., 2.0(.08) MIN., 2.54(.100) NOM., 5.7(.22).</p> <p>Pinout: CENTER LEADS COMMON CATHODE, BRIGHT RED ANODE, GREEN ANODE.</p>              |
| <p><b>L-160 BL-Bxx204-A Series</b></p>  <p>Dimensions: 5.0(.197), 8.6(.34), 1.0(.039), 1.5(.059) MAX., 0.5(.02) SQ. TYP., 1.4 <math>\pm</math> 0.5 (.055), 21.0(.827) MIN., 2.0(.079) MIN., 2.54(.100) NOM., 5.7(.22).</p> <p>Pinout: ANGLE LEADS COMMON ANODE, BRIGHT RED CATHODE, GREEN CATHODE.</p>    | <p><b>L-161 BL-Bxx204-B Series</b></p>  <p>Dimensions: 5.0(.197), 8.62(.339), 1.0(.039), 1.5(.059) MAX., 0.5(.02) SQ. TYP., 1.4 <math>\pm</math> 0.5 (.055), 21.0(.827) MIN., 2.0(.097) MIN., 2.54(.100) NOM., 5.70(.224).</p> <p>Pinout: CENTER LEADS COMMON ANODE, ULTRA RED CATHODE, HI-EFF GREEN CATHODE.</p> |

Notes: 1.All Dimensions are millimeters (inches).  
2.Tolerance is  $\pm$  0.25mm (.010").