



| Package                                      | Part No.   | Chip       |               |                                      | Lens Appearance | Absolute Maximum Ratings |            |            |              | Electro-optical Data(At 20mA) |     |             | Viewing Angle<br>2 $\theta$ 1/2<br>(deg) | Drawing No. |
|----------------------------------------------|------------|------------|---------------|--------------------------------------|-----------------|--------------------------|------------|------------|--------------|-------------------------------|-----|-------------|------------------------------------------|-------------|
|                                              |            | Material   | Emitted Color | Peak Wave Length<br>$\lambda_p$ (nm) |                 | $\Delta \lambda$<br>(nm) | Pd<br>(mw) | If<br>(mA) | Peak<br>(mA) | Vf<br>(V)                     |     | Iv<br>(mcd) |                                          |             |
|                                              |            |            |               |                                      |                 |                          |            |            |              | Typ                           | Max |             |                                          |             |
| T-1<br>Standard<br>1.0" Lead<br>3 $\phi$     | BL-BB03N1  | GaN/ SiC   | Super Blue    | 430                                  | Water Clear     | 65                       | 150        | 25         | 70           | 4.0                           | 4.5 | 60          | 30                                       | L-009       |
|                                              | BL-BB13N1  | InGaN/ SiC |               | 470                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |
|                                              | BL-BB23N1  | InGaN/ SiC |               | 450                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |
|                                              | BL-BB04N1  | GaN/ SiC   |               | 430                                  | Blue Trans      | 65                       | 150        | 30         | 100          | 4.5                           | 5.5 | 60          |                                          |             |
|                                              | BL-BB14N1  | InGaN /SiC |               | 470                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |
|                                              | BL-BB24N1  | InGaN/ SiC |               | 450                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |
| T-1 3/4<br>Standard<br>1.0" Lead<br>5 $\phi$ | BL-BB03R4G | GaN/ SiC   | Super Blue    | 430                                  | Water Clear     | 65                       | 150        | 25         | 70           | 4.0                           | 4.5 | 130         | 15                                       | L-010       |
|                                              | BL-BB13R4G | InGaN/ SiC |               | 470                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 500         |                                          |             |
|                                              | BL-BB23R4G | InGaN/ SiC |               | 450                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 500         |                                          |             |
|                                              | BL-BB04R4G | GaN/ SiC   |               | 430                                  | Blue Trans      | 65                       | 150        | 30         | 100          | 4.5                           | 5.5 | 60          |                                          |             |
|                                              | BL-BB14R4G | InGaN/ SiC |               | 470                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |
|                                              | BL-BB24R4G | InGaN/ SiC |               | 450                                  |                 | 30                       | 120        | 30         | 100          | 3.6                           | 4.0 | 300         |                                          |             |

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.

| L-009 | BL-BBxxN1 Series | L-010 | BL-BBxxR4G Series |
|-------|------------------|-------|-------------------|
|       |                  |       |                   |

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