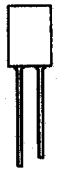







# LED LAMP

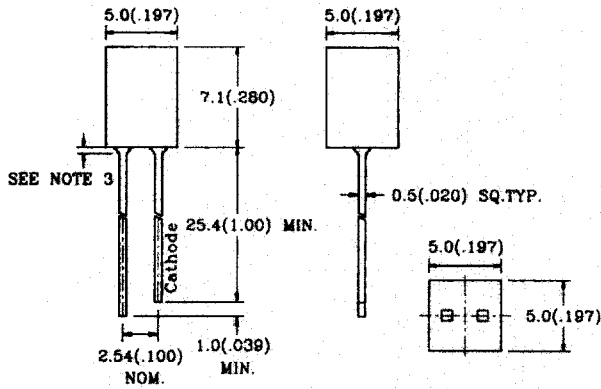
## STANDARD LED LAMPS ( RECTANGULAR TYPES )

| Package  | Part No.   | Chip          |                                   | Lens Appearance | Absolute Maximum Ratings |         |        |             | Electro-optical Data(At 20mA) |               |      | Viewing Angle $2\theta_{1/2}$ (deg) | Drawing No. |
|--|------------|---------------|-----------------------------------|-----------------|--------------------------|---------|--------|-------------|-------------------------------|---------------|------|-------------------------------------|-------------|
|  |            | Emitted Color | Peak Wave Length $\lambda_p$ (nm) |                 | $\Delta\lambda$ (nm)     | Pd (mW) | If(mA) | Peak If(mA) | Vf(V) Typ. Max.               | Iv Typ. (mcd) |      |                                     |             |
|  5.0x5.0x7.1mm<br>1.0°Lead<br>Flangeless<br>Rectangular | BL-R1130N  | Red           | 655                               | Red Diffused    | 40                       | 110     | 40     | 200         | 1.7                           | 2.0           | 0.6  | 150                                 | L-23        |
|  | BL-R5130N  | Bright Red    | 700                               | Red Diffused    | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 1.0  | 150                                 |             |
|  | BL-R4530N  | Hi-Eff Red    | 635                               | Red Diffused    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 6.0  | 150                                 |             |
|  | BL-R2130N  | Green         | 568                               | Green Diffused  | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 7.0  | 150                                 |             |
|  | BL-R3130N  | Yellow        | 585                               | Yellow Diffused | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 5.0  | 150                                 |             |
|  | BL-R4130N  | Orange        | 635                               | Orange Diffused | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 6.0  | 150                                 |             |
|  3.6x6.3x6.8mm<br>1.0°Lead<br>Rectangular               | BL-R113P   | Red           | 655                               | Red Diffused    | 40                       | 110     | 40     | 200         | 1.7                           | 2.0           | 1.2  | 100                                 | L-24        |
|  | BL-R513P   | Bright Red    | 700                               | Red Diffused    | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 2.0  | 100                                 |             |
|  | BL-R453P   | Hi-Eff Red    | 635                               | Red Diffused    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 8.0  | 100                                 |             |
|  | BL-R213P   | Green         | 568                               | Green Diffused  | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 9.0  | 100                                 |             |
|  | BL-R313P   | Yellow        | 585                               | Yellow Diffused | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 7.0  | 100                                 |             |
|  | BL-R413P   | Orange        | 635                               | Orange Diffused | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 8.0  | 100                                 |             |
|  2.5x6.5x7.6mm<br>1.0°Lead<br>Rectangular             | BL-R513Q-T | Bright Red    | 700                               | Red Diffused    | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 2.0  | 130                                 | L-25        |
|  | BL-R453Q-T | Hi-Eff Red    | 635                               | Red Diffused    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 7.0  | 130                                 |             |
|  | BL-R213Q-T | Green         | 568                               | Green Diffused  | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 7.0  | 130                                 |             |
|  | BL-R313Q-T | Yellow        | 585                               | Yellow Diffused | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 6.0  | 130                                 |             |
|  | BL-R413Q-T | Orange        | 635                               | Orange Diffused | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 7.0  | 130                                 |             |
|  | BL-R813Q-T | Amber         | 610                               | Amber Diffused  | 35                       | 80      | 30     | 150         | 2.1                           | 2.6           | 8.0  | 130                                 |             |
|  3.8x3.8x7.2mm<br>1.0°Lead<br>Rectangular             | BL-R113T   | Red           | 655                               | Red Diffused    | 40                       | 110     | 40     | 200         | 1.7                           | 2.0           | 0.6  | 120                                 | L-26        |
|  | BL-R513T   | Bright Red    | 700                               | Red Diffused    | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 1.0  | 120                                 |             |
|  | BL-R453T   | Hi-Eff Red    | 635                               | Red Diffused    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 5.0  | 120                                 |             |
|  | BL-R213T   | Green         | 568                               | Green Diffused  | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 6.0  | 120                                 |             |
|  | BL-R313T   | Yellow        | 585                               | Yellow Diffused | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 4.0  | 120                                 |             |
|  | BL-R413T   | Orange        | 635                               | Orange Diffused | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 5.0  | 120                                 |             |
|  1.75x4.7x4.8mm<br>1.0°Lead<br>Rectangular            | BL-R543Y   | Bright Red    | 700                               | Red Trans       | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 8.0  | 120                                 | L-27        |
|  | BL-R463Y   | Hi-Eff Red    | 635                               | Red Trans       | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 25.0 | 120                                 |             |
|  | BL-R243Y   | Green         | 568                               | Green Trans     | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 30.0 | 120                                 |             |
|  | BL-R343Y   | Yellow        | 585                               | Yellow Trans    | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 20.0 | 120                                 |             |
|  | BL-R443Y   | Orange        | 635                               | Orange Trans    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 25.0 | 120                                 |             |
|  3.0x5.0x8.4mm<br>1.0°Lead<br>Rectangular             | BL-R113W   | Red           | 655                               | Red Diffused    | 40                       | 110     | 40     | 200         | 1.7                           | 2.0           | 0.6  | 120                                 | L-28        |
|  | BL-R513W   | Bright Red    | 700                               | Red Diffused    | 90                       | 50      | 15     | 50          | 2.2                           | 2.6           | 1.0  | 120                                 |             |
|  | BL-R453W   | Hi-Eff Red    | 635                               | Red Diffused    | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 6.0  | 120                                 |             |
|  | BL-R213W   | Green         | 568                               | Green Diffused  | 30                       | 100     | 30     | 150         | 2.2                           | 2.6           | 7.0  | 120                                 |             |
|  | BL-R313W   | Yellow        | 585                               | Yellow Diffused | 35                       | 100     | 30     | 150         | 2.1                           | 2.6           | 5.0  | 120                                 |             |
|  | BL-R413W   | Orange        | 635                               | Orange Diffused | 45                       | 100     | 30     | 150         | 2.0                           | 2.6           | 6.0  | 120                                 |             |

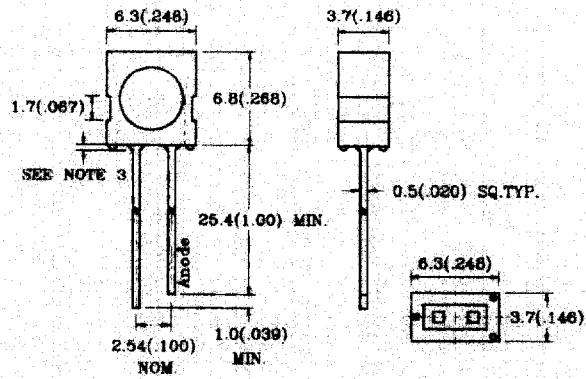
Remark: • Hi-Eff Red — High-Efficiency Red  
 • Trans — Transparent  
 •  $2\theta_{1/2}$  The off-axis angle at which the luminous intensity is half the axial luminous intensity

# LED LAMP

L-23 BL-Rxx30N Series



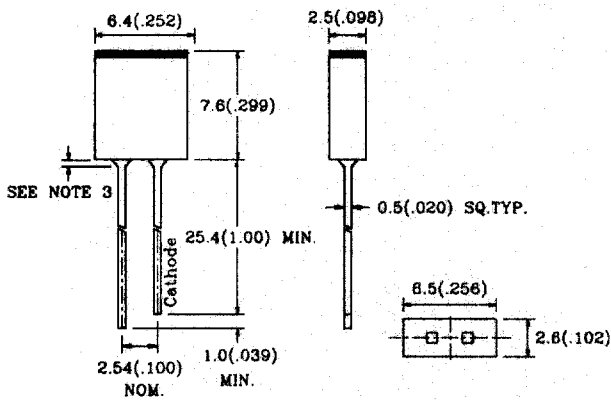
L-24 BL-Rxx30P Series



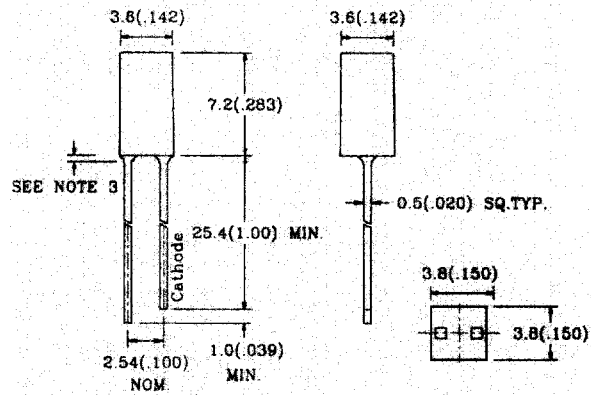
PACKAGE DIMENSIONS

- NOTES:
1. All Dimensions are in millimeters (inches)
  2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise specified.
  3. Protruded resin under flange is 1.5mm (.059")
  4. Lead spacing is measured where the leads emerge from the package.
  5. Specifications are subject to change without notice.

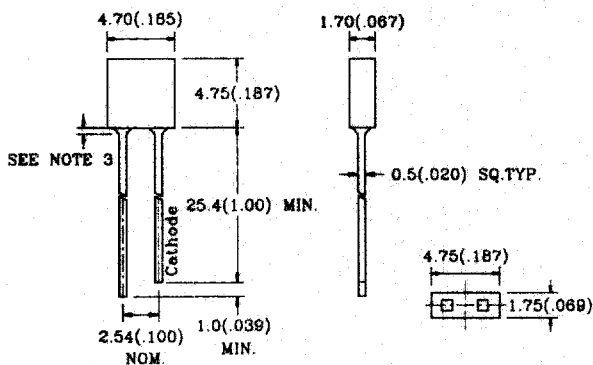
L-25 BL-Rxx30T Series



L-26 BL-Rxx30T Series



L-27 BL-Rxx30Y Series



L-28 BL-Rxx30W Series

