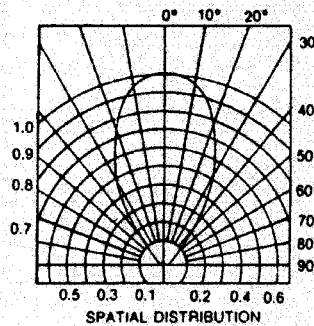
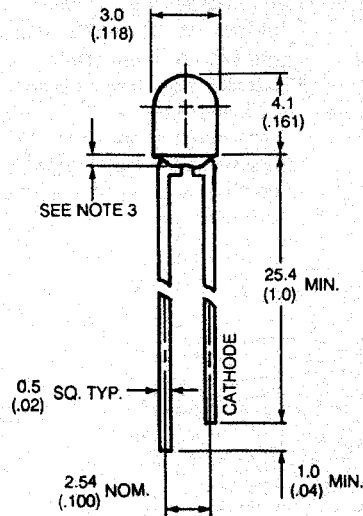


# L-304XX series ... 3mm Dia FLANGLESS LED LAMP

## MAIN FEATURES :

- ⊙ 3mm DIA FLANGLESS LED LAMP
- ⊙ STANDARD 1" LEAD
- ⊙ I.C. COMPATIBLE
- ⊙ LOW POWER CONSUMPTION

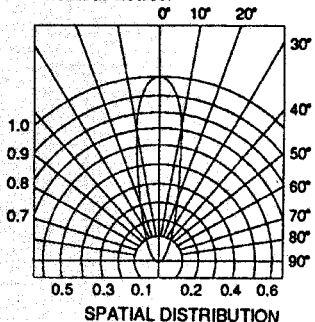
## ◆ PACKAGE DIMENSIONS



L-304XD

## Notes:

1. All Dimension are in millimeter.
2. Tolerance is  $\pm 0.25\text{mm}(0.010")$  unless otherwise specified.
3. Protruded resin under flange is 1.5mm(0.59") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specification are subject to change without notice.



L-304XC&XT

## ◆ SELECTION GUIDE AND APPLICATION INFORMATION ( RATINGS AT 25°C AMBIENT )

| Part No.  | Chip         |               |                    | Wave Length<br>$\lambda$ p(nm) | Absolute Maximum Ratings |       |       |           | Electro-Optical Characteristics |      |      |             |      |      | View Angle<br>Angle (deg) |
|-----------|--------------|---------------|--------------------|--------------------------------|--------------------------|-------|-------|-----------|---------------------------------|------|------|-------------|------|------|---------------------------|
|           | Raw Material | Emitted Color | Lens Color         |                                | $\Delta\lambda$ nm       | Pd mW | If mA | If (Peak) | Vf(V)                           |      |      | If Iv (mcd) |      |      |                           |
|           |              |               |                    |                                |                          |       |       |           | Min.                            | Typ. | Max. | (Rec)       | Min. | Typ. |                           |
| L-304RD   | GaAsP        | Red           | Red Diffused       | 655                            | 40                       | 110   | 40    | 200       | 1.5                             | 1.7  | 2.0  | 10~20       | 0.5  | 3.0  | 60                        |
| L-304HD   | GaP          | Bright Red    | Red Diffused       | 700                            | 90                       | 45    | 15    | 50        | 1.7                             | 2.1  | 2.8  | 5~10        | 0.8  | 5.0  | 60                        |
| L-304ED   | GaAsP/GaP    | Hi.effi Red   | Red Diffused       | 635                            | 45                       | 100   | 30    | 160       | 1.7                             | 2.0  | 2.8  | 10~20       | 3.0  | 20.0 | 60                        |
| L-304ED-E | GaAsP/GaP    | Orange        | Orange Diffused    | 635                            | 45                       | 100   | 30    | 160       | 1.7                             | 2.0  | 2.8  | 10~20       | 3.0  | 20.0 | 60                        |
| L-304GD   | GaP          | Green         | Green Diffused     | 565                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 2.5  | 12.5 | 60                        |
| L-304YD   | GaAsP/GaP    | Yellow        | Yellow Diffused    | 585                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 2.5  | 12.5 | 60                        |
| L-304AD   | GaAsP/GaP    | Amber         | Amber Diffused     | 585                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 2.5  | 12.5 | 60                        |
| L-304I D  | GaAlAs       | Hi.effi Red   | Red Diffused       | 625                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 20.0 | 50.0 | 60                        |
| L-304SRD  | GaAlAs       | Super Red     | Red Diffused       | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 50.0 | 100  | 60                        |
| L-304LRD  | GaAlAs       | Super Red     | Red Diffused       | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 100  | 200  | 60                        |
| L-304URD  | GaAlAs       | Super Red     | Red Diffused       | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 200  | 300  | 60                        |
| L-304HT   | GaP          | Bright Red    | Red Transparent    | 700                            | 90                       | 45    | 15    | 50        | 1.7                             | 2.1  | 2.8  | 5~10        | 5.0  | 10.0 | 30                        |
| L-304ET   | GaAsP/GaP    | Hi.effi Red   | Red Transparent    | 635                            | 45                       | 100   | 30    | 160       | 1.7                             | 2.0  | 2.8  | 10~20       | 12.0 | 40.0 | 30                        |
| L-304ET-E | GaAsP/GaP    | Orange        | Orange Transparent | 635                            | 45                       | 100   | 30    | 160       | 1.7                             | 2.0  | 2.8  | 10~20       | 12.0 | 40.0 | 30                        |
| L-304GT   | GaP          | Green         | Green Transparent  | 565                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 8.0  | 20.0 | 30                        |
| L-304YT   | GaAsP/GaP    | Yellow        | Yellow Transparent | 585                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 8.0  | 20.0 | 30                        |
| L-304AT   | GaAsP/GaP    | Amber         | Amber Transparent  | 585                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 8.0  | 20.0 | 30                        |
| L-304I T  | GaAlAs       | Hi.effi Red   | Red Transparent    | 625                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 40.0 | 100  | 30                        |
| L-304SRT  | GaAlAs       | Super Red     | Red Transparent    | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 100  | 200  | 30                        |
| L-304LRT  | GaAlAs       | Super Red     | Red Transparent    | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 200  | 350  | 30                        |
| L-304URT  | GaAlAs       | Super Red     | Red Transparent    | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 350  | 500  | 30                        |
| L-304HC   | GaP          | Bright Red    | Water Clear        | 700                            | 90                       | 45    | 15    | 50        | 1.7                             | 2.1  | 2.8  | 5~10        | 5.0  | 15.0 | 30                        |
| L-304EC   | GaAsP/GaP    | Hi.effi Red   | Water Clear        | 635                            | 45                       | 100   | 30    | 160       | 1.7                             | 2.0  | 2.8  | 10~20       | 12.0 | 50.0 | 30                        |
| L-304GC   | GaP          | Green         | Water Clear        | 565                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 8.0  | 30.0 | 30                        |
| L-304YC   | GaAsP/GaP    | Yellow        | Water Clear        | 585                            | 30                       | 100   | 30    | 160       | 1.7                             | 2.1  | 2.8  | 10~20       | 8.0  | 30.0 | 30                        |
| L-304I C  | GaAlAs       | Hi.effi Red   | Water Clear        | 625                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 50.0 | 150  | 30                        |
| L-304SRC  | GaAlAs       | Super Red     | Water Clear        | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 150  | 500  | 30                        |
| L-304LRC  | GaAlAs       | Super Red     | Water Clear        | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 500  | 700  | 30                        |
| L-304URC  | GaAlAs       | Super Red     | Water Clear        | 660                            | 20                       | 60    | 20    | 160       | 1.6                             | 1.8  | 2.1  | 10~20       | 700  | 1000 | 30                        |