



# SINGLE COLOR LED

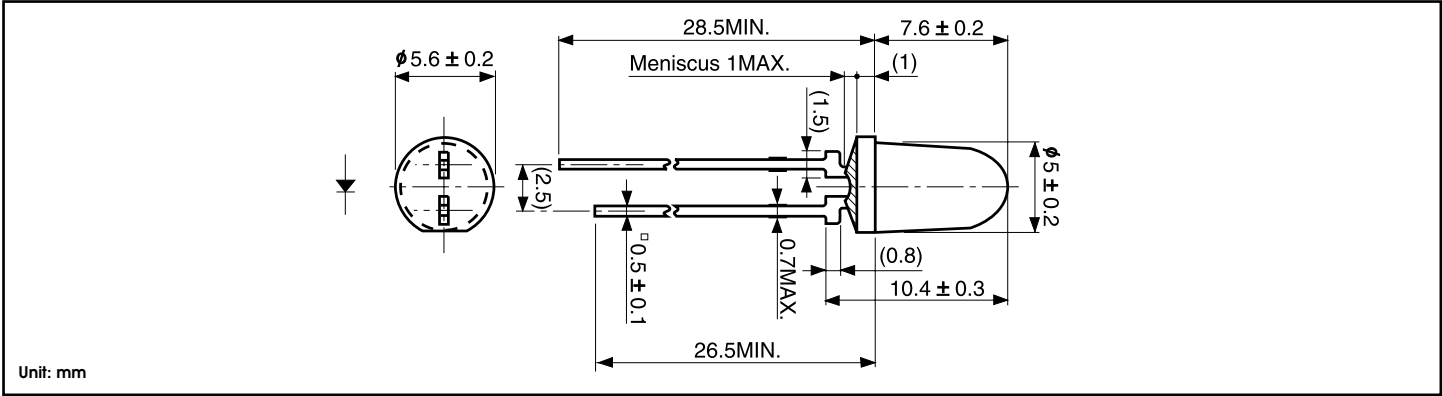
5mm Round Shape



## H-1000L / H-2000L / H-3000L

HIGH BRIGHTNESS COLOR

### Outline Dimensions



### Absolute Maximum Ratings

(Ta=25°C)

| Item                  | Symbol | Red         | Units |
|-----------------------|--------|-------------|-------|
|                       |        | H (KR)      |       |
| Power Dissipation     | Pd     | 125         | mW    |
| Forward Current       | If     | 50          | mA    |
| Peak Forward Current  | IFM    | 300         | mA    |
| Reverse Voltage       | VR     | 4           | V     |
| Operating Temperature | Topr   | -30 to +85  | °C    |
| Storage Temperature   | Tstg   | -30 to +100 | °C    |
| Derating (DC)*        | IF     | 0.67        | mA/°C |

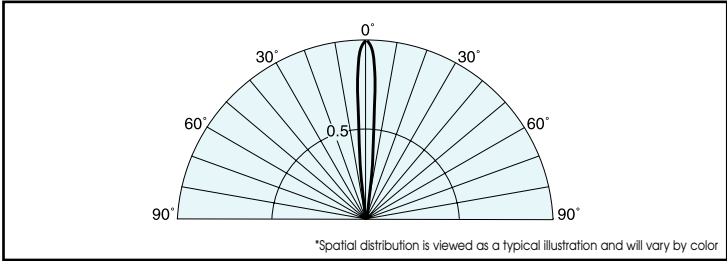
\* Ta=25°C, IFM applies for the pulse width 1msec. and duty cycle 1/20  
The current derating for operation applies when the temperature is above 25°C

### Electro-Optical Characteristics

\*The viewing angle is an average and will vary by color (Ta=25°C)

| Part No. | Material | Emitted Color | Lens Color  | Luminous Intensity I <sub>V</sub> |       |                | Wavelength     |                    |                                     |                | Forward Voltage V <sub>F</sub> |      |                | Reverse Current I <sub>R</sub> |                | Viewing Angle<br>(2 1/2) |
|----------|----------|---------------|-------------|-----------------------------------|-------|----------------|----------------|--------------------|-------------------------------------|----------------|--------------------------------|------|----------------|--------------------------------|----------------|--------------------------|
|          |          |               |             | MIN.                              | TYP.  | I <sub>F</sub> | Peak P<br>TYP. | Dominant d<br>TYP. | Spectral Line<br>Half Width<br>TYP. | I <sub>F</sub> | TYP.                           | MAX. | I <sub>F</sub> | MAX.                           | V <sub>R</sub> |                          |
| H-3000L  | GaAlAs   | Red           | Water Clear | 2,400                             | 3,000 | 20             | 660            | 647                | 25                                  | 20             | 1.8                            | 2.5  | 20             | 100                            | 4              | 10°                      |
| H-2000L  |          |               |             | 1,400                             | 2,000 | 20             | 660            | 647                | 25                                  | 20             | 1.8                            | 2.5  | 20             | 100                            | 4              |                          |
| H-1000L  |          |               |             | 700                               | 1,000 | 20             | 660            | 647                | 25                                  | 20             | 1.8                            | 2.5  | 20             | 100                            | 4              |                          |
| Units    |          |               |             | mcd                               |       | mA             | nm             |                    |                                     | mA             | V                              |      | mA             | μA                             | V              | Deg.                     |

### Spatial Distribution (x)



### Operation Current Derating Chart

