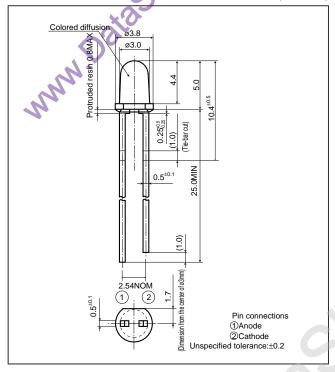
**LED Lamp** GL3□□8 series

# GL3 18 series

# ø3mm(T-1), Cylinder Type, Colored Diffusion **LED Lamps for Indicator**

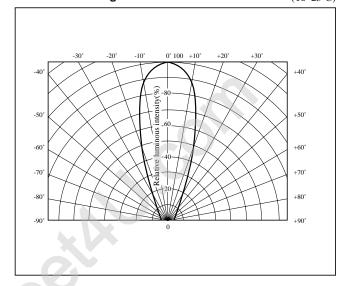
#### ■ Outline Dimensions

(Unit: mm)



#### ■ Radiation Diagram

(Ta=25°C)



## ■ Absolute Maximum Ratings

(T.-25°C)

| Model No. | Radiation color | Radiation material | Power dissipation Forward current P IF |      | Peak forward current  IFM*1 | Derating factor (mA/°C) |       | Reverse voltage V <sub>R</sub> | Topr       | Storage temperature $T_{\rm stg}$ | Soldering temperature $Tsol^{*2}$ |
|-----------|-----------------|--------------------|--|------|-----------------------------|-------------------------|-------|--------------------------------|------------|-----------------------------------|-----------------------------------|
|           |                 |                    | (mW)                                   | (mA) | (mA)                        | DC                      | Pulse | (V)                            | (°C)       | (°C)                              | (°C)                              |
| GL3PR8    | Red             | GaP                | 23                                     | 10   | 50                          | 0.13                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |
| GL3HD8    | Red             | GaAsP on GaP       | 84                                     | 30   | 50                          | 0.40                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |
| GL3HS8    | Sunset orange   | GaAsP on GaP       | 84                                     | 30   | 50                          | 0.40                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |
| GL3HY8    | Yellow          | GaAsP on GaP       | 84                                     | 30   | 50                          | 0.40                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |
| GL3EG8    | Yellow-green    | GaP                | 84                                     | 30   | 50                          | 0.40                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |
| GL3KG8    | Green           | GaP                | 84                                     | 30   | 50                          | 0.40                    | 0.67  | 5                              | -25 to +85 | -25 to +100                       | 260                               |

<sup>\*1</sup> Duty ratio=1/10, Pulse width=0.1ms

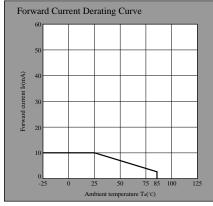
### **■** Electro-optical Characteristics

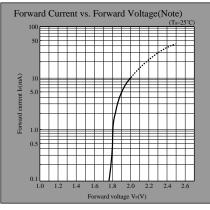
|           | Model No. | Forward voltage V <sub>F</sub> (V) |     | Peak emission wavelength           |      | Luminous intensity |      | Spectrum radiation bandwidth |      | Reverse current |      | Terminal capacitance |                 | Page for      |
|-----------|-----------|------------------------------------|-----|------------------------------------|------|--------------------|------|------------------------------|------|-----------------|------|----------------------|-----------------|---------------|
| Lens type |           |                                    |     | λ <sub>p</sub> (nm) I <sub>F</sub> |      | Iv(mcd) IF         |      | Δλ(nm) If                    |      | Ir(µA) Vr       |      | C <sub>t</sub> (pF)  | characteristics |               |
|           |           | TYP                                | MAX | TYP                                | (mA) | TYP                | (mA) | TYP (                        | (mA) | MAX             | C(V) | TYP                  | (MHz)           | diagrams      |
| Colorea   | GL3PR8    | 1.9                                | 2.3 | 695                                | 5    | 8.0                | 5    | 100                          | 5    | 10              | 4    | 55                   | 1               | $\rightarrow$ |
|           | GL3HD8    | 2.0                                | 2.8 | 635                                | 20   | 40                 | 20   | 35                           | 20   | 10              | 4    | 20                   | 1               | $\rightarrow$ |
|           | GL3HS8    | 2.0                                | 2.8 | 610                                | 20   | 60                 | 20   | 35                           | 20   | 10              | 4    | 15                   | 1               | $\rightarrow$ |
|           | GL3HY8    | 2.0                                | 2.8 | 585                                | 20   | 55                 | 20   | 30                           | 20   | 10              | 4    | 35                   | 1               | $\rightarrow$ |
|           | GL3EG8    | 2.1                                | 2.8 | 565                                | 20   | 60                 | 20   | 30                           | 20   | 10              | 4    | 35                   | 1               | $\rightarrow$ |
|           | GL3KG8    | 2.1                                | 2.8 | 555                                | 20   | 30                 | 20   | 25                           | 20   | 10              | 4    | 40                   | 1               | $\rightarrow$ |

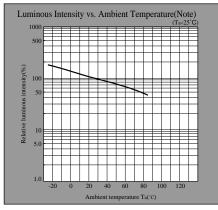
<sup>•</sup> In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP (Notice) devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

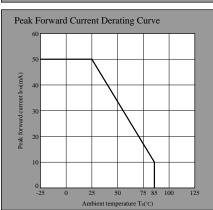
<sup>\*2 5</sup>s or less(At the position of 1.6mm or more from the bottom face of resin package)

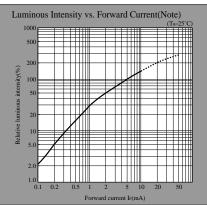
#### PR series

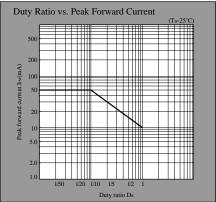




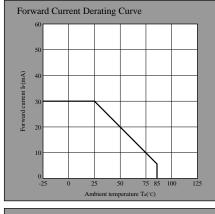


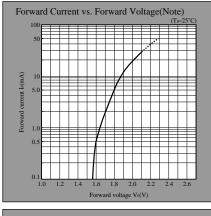


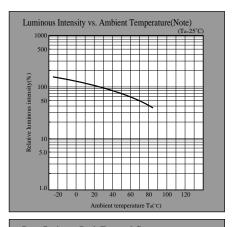


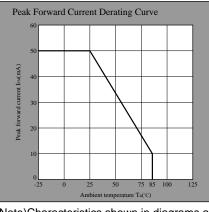


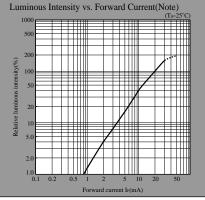
# HD series

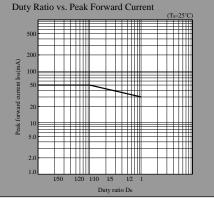








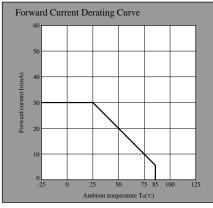


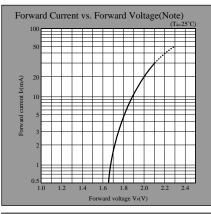


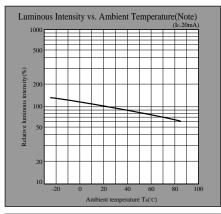
Note) Characteristics shown in diagrams are typical values. (not assurance value)

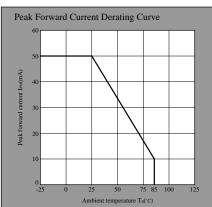
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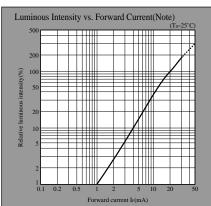
#### HS series

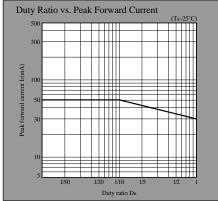




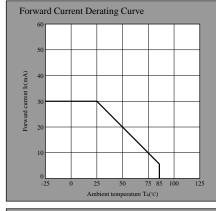


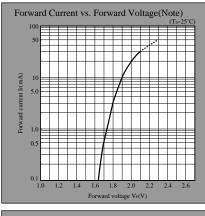


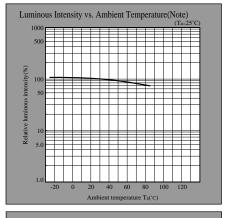


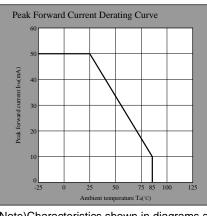


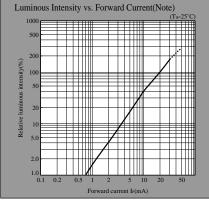
#### HY series

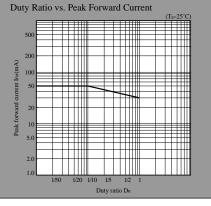








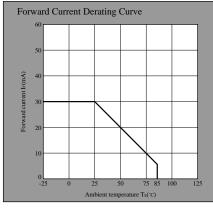


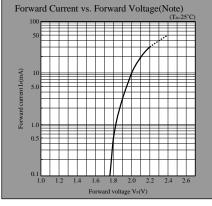


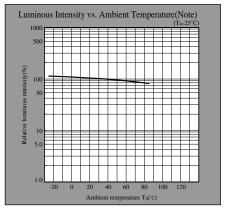
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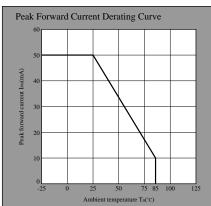
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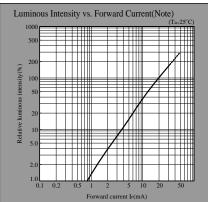
#### EG series

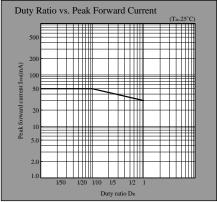




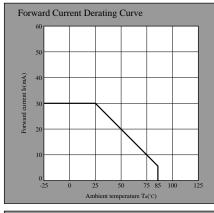


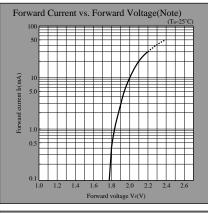


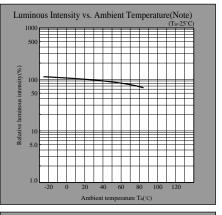


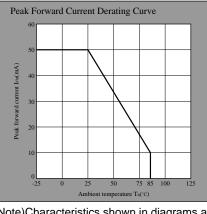


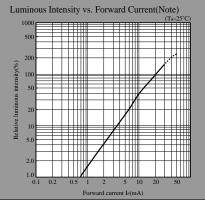
# KG series

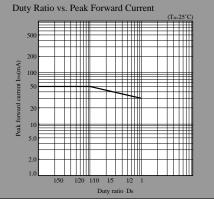












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