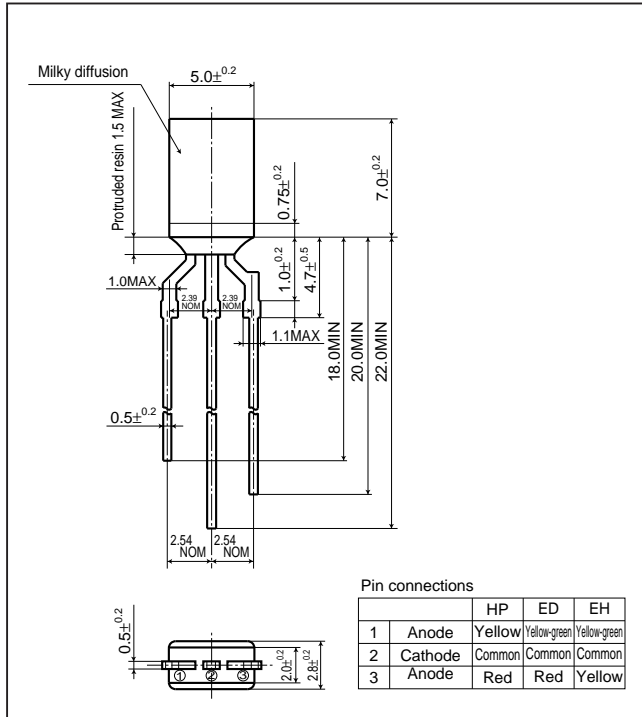


GL9□□2 series

2.0X5.0mm, Rectangle Type, Milky Diffusion, Dichromatic LED Lamps for Indicator

Outline Dimensions

(Unit : mm)



Absolute Maximum Ratings

(T_a=25°C)

| Model No. | Radiation color | Radiation material | Power dissipation P ^{*1} (mW) | Forward current I _F (mA) | Peak forward current I _{FM} ^{*2} (mA) | Derating factor (mA/°C) | | Reverse voltage V _R (V) | Operating temperature T _{opr} (°C) | Storage temperature T _{stg} (°C) | Soldering temperature T _{sol} ^{*3} (°C) |
|-----------|-----------------|--------------------|--|-------------------------------------|---|-------------------------|-------|------------------------------------|---|---|---|
| | | | | | | DC | Pulse | | | | |
| GL9ED2 | Yellow-green | GaP | 84 | 30 | 50 | 0.40 | 0.67 | 5 | -25 to +85 | -25 to +100 | 260 |
| | Red | GaAsP on GaP | 84 | 30 | 50 | 0.40 | 0.67 | 5 | | | |
| GL9EH2 | Yellow-green | GaP | 84 | 30 | 50 | 0.40 | 0.67 | 5 | -25 to +85 | -25 to +100 | 260 |
| | Yellow | GaAsP on GaP | 50 | 20 | 30 | 0.27 | 0.67 | 5 | | | |
| GL9HP2 | Yellow | GaAsP on GaP | 50 | 20 | 50 | 0.27 | 0.20 | 5 | -25 to +85 | -25 to +100 | 260 |
| | Red | GaAsP on GaP | 38 | 15 | 50 | 0.67 | 0.67 | 5 | | | |

*1 The value is specified under the condition that either color is lightened separately. When the both diodes are lightened simultaneously, the power dissipation of each diode should be less than the half of the value specified in this table.

*2 Duty ratio=1/10, Pulse width=0.1ms

*3 5s or less(At the position of 1.6mm or more from the bottom face of resin package)

Electro-optical Characteristics

(T_a=25°C)

| Lens type | Model No. | Radiation color | Forward voltage V _F (V) | | Peak emission wavelength λ _p (nm) | | Luminous intensity I _v (mcd) | | Spectrum radiation bandwidth Δλ(nm) | | Reverse current I _R (μA) | | Terminal capacitance C _t (pF) | | Page for characteristics diagrams |
|-----------------|-----------|-----------------|------------------------------------|-----|--|---------------------|---|---------------------|-------------------------------------|---------------------|-------------------------------------|--------------------|--|-------|-----------------------------------|
| | | | TYP | MAX | TYP | I _F (mA) | TYP | I _F (mA) | TYP | I _F (mA) | MAX | V _R (V) | TYP | (MHz) | |
| | | | | | | | | | | | | | | | |
| Milky diffusion | GL9ED2 | Yellow-green | 2.1 | 2.8 | 565 | 20 | 8.0 | 20 | 30 | 20 | 10 | 4 | 35 | 1 | → |
| | | Red | 2.0 | 2.8 | 635 | 20 | 3.0 | 20 | 30 | 20 | 10 | 4 | 20 | 1 | → |
| | GL9EH2 | Yellow-green | 2.0 | 2.8 | 565 | 20 | 6.0 | 20 | 30 | 20 | 10 | 4 | 35 | 1 | → |
| | | Yellow | 1.9 | 2.5 | 585 | 10 | 2.0 | 10 | 30 | 10 | 10 | 4 | 35 | 1 | → |
| | GL9HP2 | Yellow | 1.9 | 2.5 | 585 | 10 | 1.0 | 10 | 25 | 10 | 10 | 4 | 35 | 1 | → |
| | | Red | 1.9 | 2.5 | 695 | 10 | 0.8 | 10 | 100 | 10 | 10 | 4 | 55 | 1 | → |

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

(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

LED Lamp Characteristics Diagrams

PR series



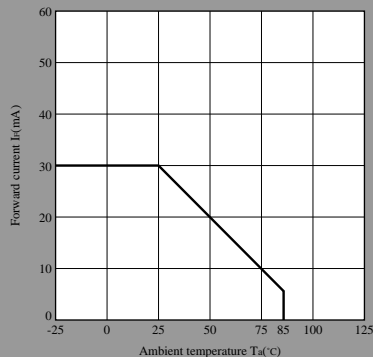
HD series



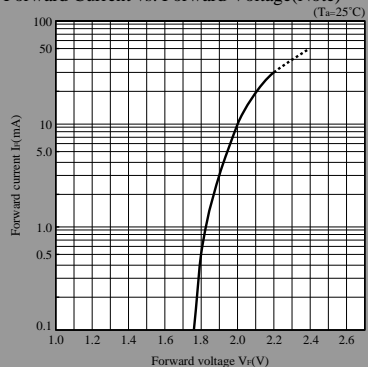
Note) Characteristics shown in diagrams are typical values. (not assurance value)

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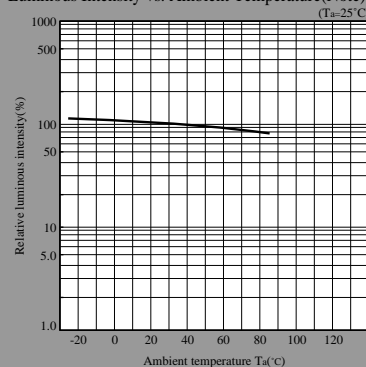
Forward Current Derating Curve



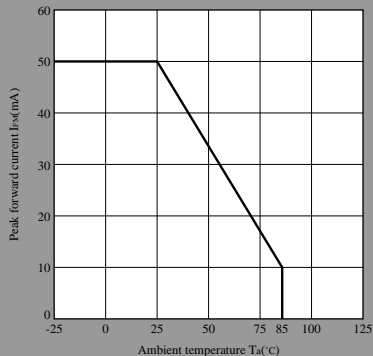
Forward Current vs. Forward Voltage(Note)



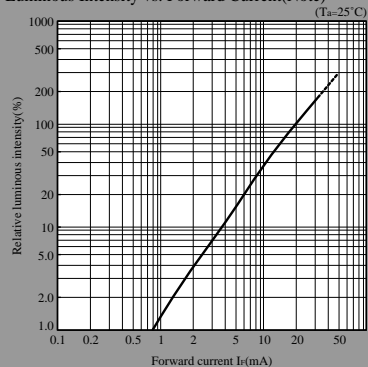
Luminous Intensity vs. Ambient Temperature(Note)



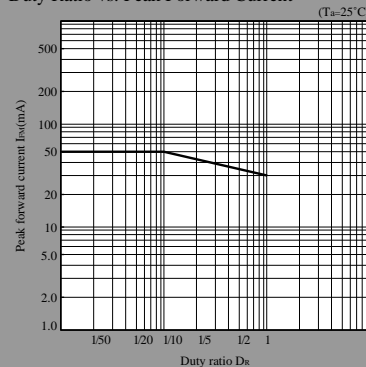
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



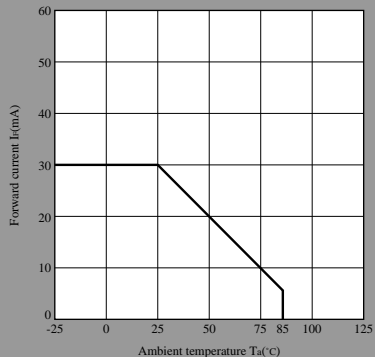
Duty Ratio vs. Peak Forward Current



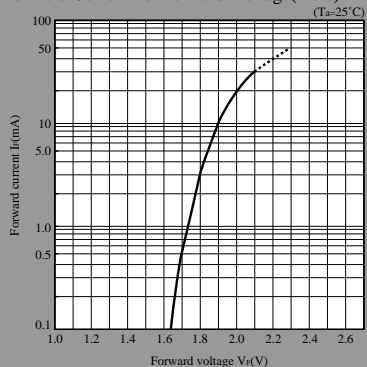
Note) Characteristics shown in diagrams are typical values. (not assurance value)

HY series

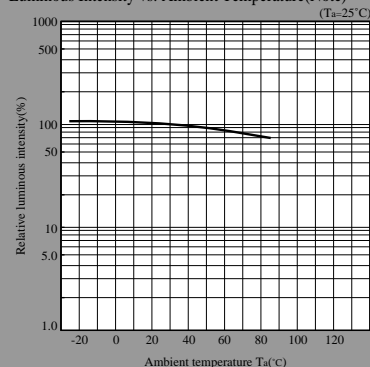
Forward Current Derating Curve



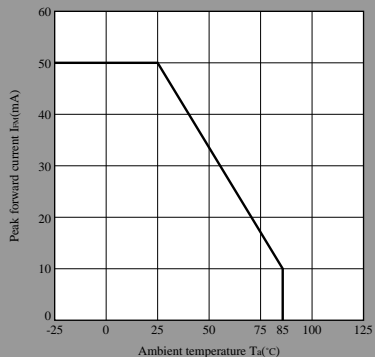
Forward Current vs. Forward Voltage(Note)



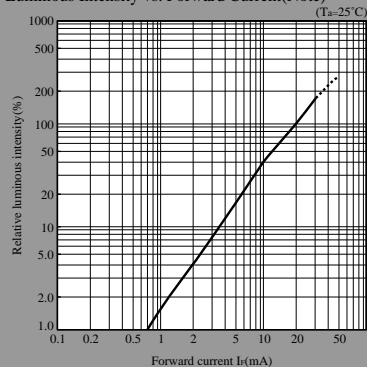
Luminous Intensity vs. Ambient Temperature(Note)



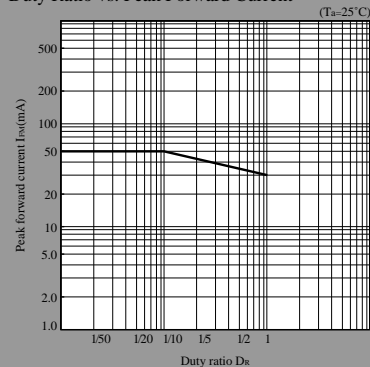
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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