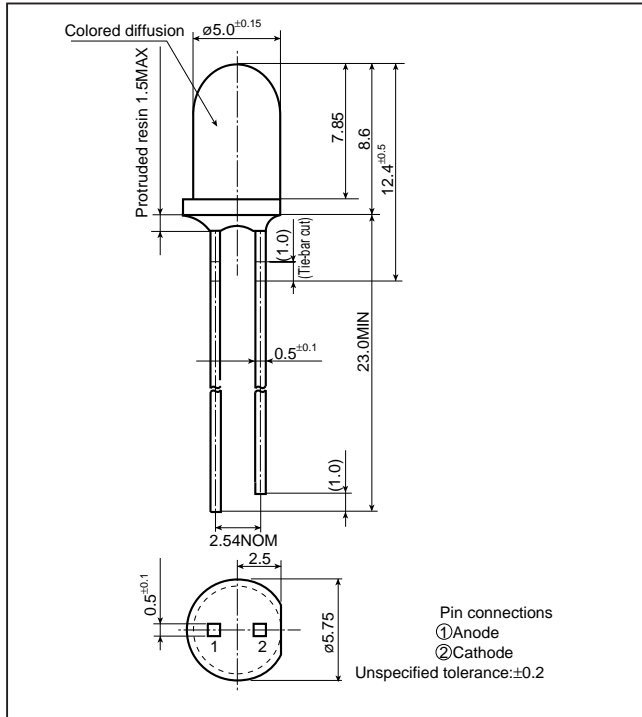


GL5□□8 series

ø5mm(T-1 3/4), Cylinder Type, Colored Diffusion, High-luminosity LED Lamps for Outdoor Use

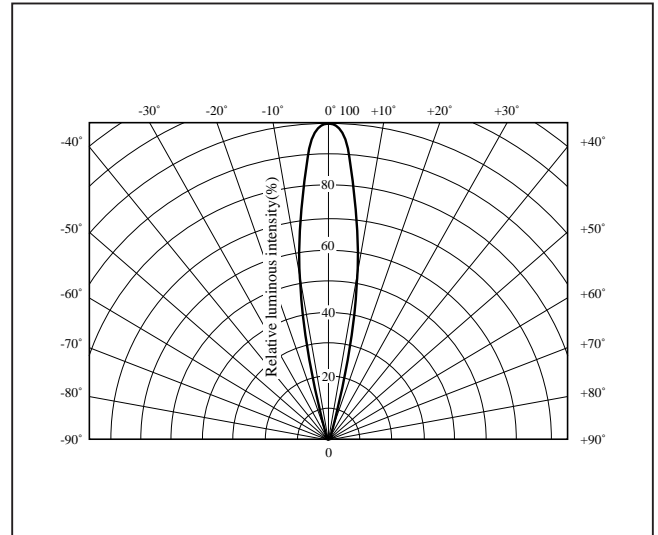
■ Outline Dimensions

(Unit : mm)



■ Radiation Diagram

(Ta=25°C)



■ Absolute Maximum Ratings

(Ta=25°C)

| Model No. | Radiation color | Radiation material | Power dissipation P (mW) | Forward current IF (mA) | Peak forward current IFM (mA) | Derating factor (mA/°C) | | Reverse voltage VR (V) | Operating temperature Topr (°C) | Storage temperature Tstg (°C) | Soldering temperature Tsol*3 (°C) |
|-----------|--------------------------|--------------------|--------------------------|-------------------------|-------------------------------|-------------------------|-------|------------------------|---------------------------------|-------------------------------|-----------------------------------|
| | | | | | | DC | Pulse | | | | |
| GL5UR8 | Red(Super-luminosity) | GaAlAs on GaAlAs | 75 | 30 | 50*1 | 0.40 | 0.67 | 4 | -25 to +85 | -25 to +100 | 260 |
| GL5TR8 | Red(High-luminosity) | GaAlAs on GaAs | 110 | 50 | 300*2 | 0.67 | 4.00 | 5 | -25 to +85 | -25 to +100 | 260 |
| GL5HJ8 | Orange(Super-luminosity) | AlGaInP | 130 | 50 | 100*1 | 0.67 | 1.33 | 4.1 | -25 to +85 | -25 to +100 | 260 |
| GL5HV8 | Yellow(Super-luminosity) | AlGaInP | 130 | 50 | 100*1 | 0.67 | 1.33 | 4.1 | -25 to +85 | -25 to +100 | 260 |

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

*2 Duty ratio=1/16, Pulse width≤1ms

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

■ Electro-optical Characteristics

(Ta=25°C)

| Lens type | Model No. | Forward voltage VF(V) | | Peak emission wavelength λp(nm) | | Luminous intensity Iv(mcd) | | Spectrum radiation bandwidth Δλ(nm) | | Reverse current IR(μA) | | Terminal capacitance Ct(pF) | | Page for characteristics diagrams |
|-------------------|-----------|-----------------------|-----|---------------------------------|---------|----------------------------|---------|-------------------------------------|---------|------------------------|--------|-----------------------------|-------|-----------------------------------|
| | | TYP | MAX | TYP | IF (mA) | TYP | IF (mA) | TYP | IF (mA) | MAX | VR (V) | TYP | (MHz) | |
| | | | | | | | | | | | | | | |
| Colored diffusion | GL5UR8 | 1.85 | 2.5 | 660 | 20 | 400 | 20 | 20 | 20 | 100 | 3 | 25 | 1 | → |
| | GL5TR8 | 1.75 | 2.2 | 660 | 20 | 80 | 20 | 20 | 20 | 10 | 4 | 30 | 1 | → |
| | GL5HJ8 | 1.9 | 2.6 | 620 | 20 | 850 | 20 | 18 | 20 | 100 | 4 | 26 | 1 | → |
| | GL5HV8 | 1.9 | 2.6 | 590 | 20 | 550 | 20 | 13 | 20 | 100 | 4 | 24 | 1 | → |

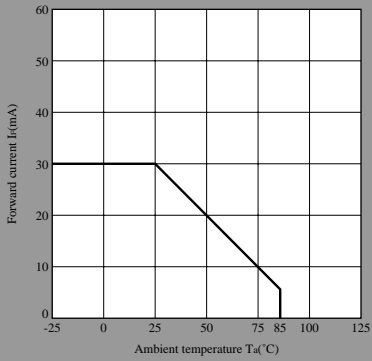
(Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP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

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

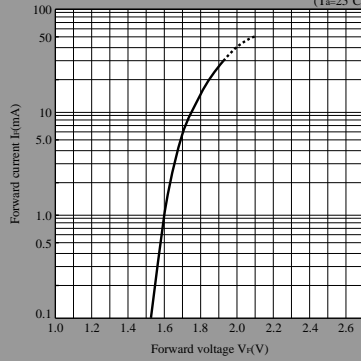
LED Lamp Characteristics Diagrams

UR series

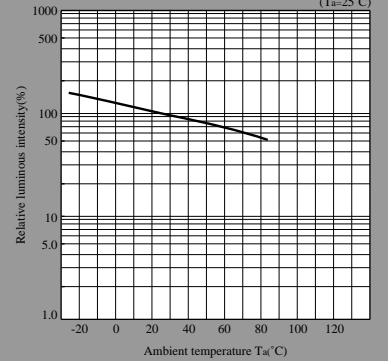
Forward Current Derating Curve



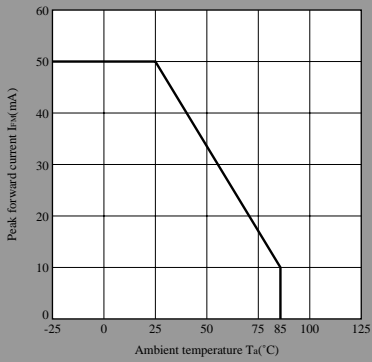
Forward Current vs. Forward Voltage(Note)



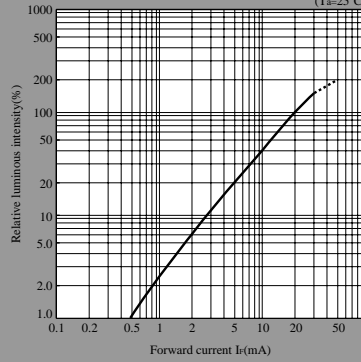
Luminous Intensity vs. Ambient Temperature(Note)



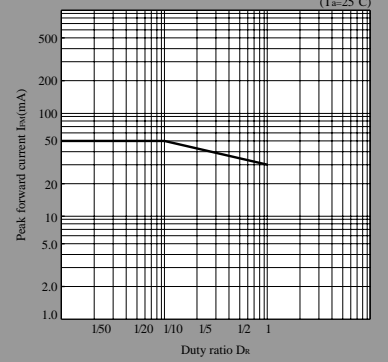
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

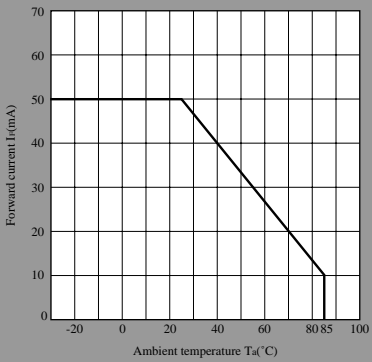


Duty Ratio vs. Peak Forward Current

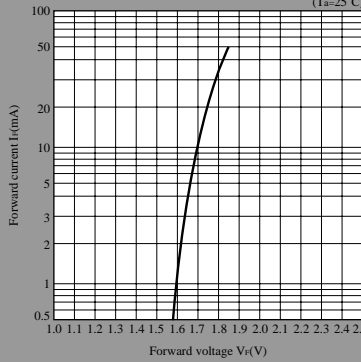


TR series

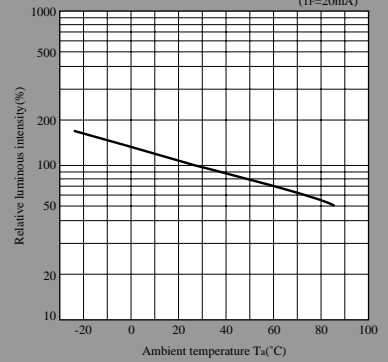
Forward Current Derating Curve



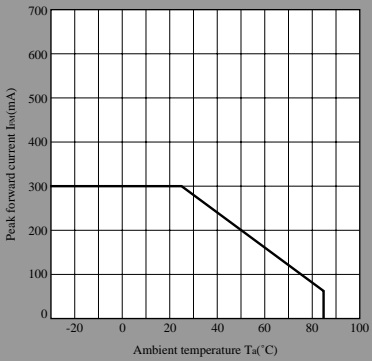
Forward Current vs. Forward Voltage(Note)



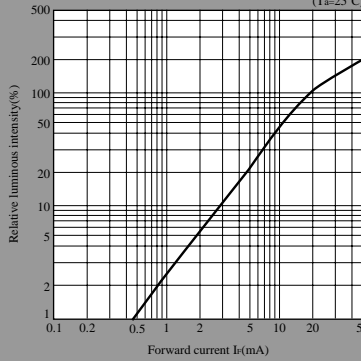
Luminous Intensity vs. Ambient Temperature(Note)



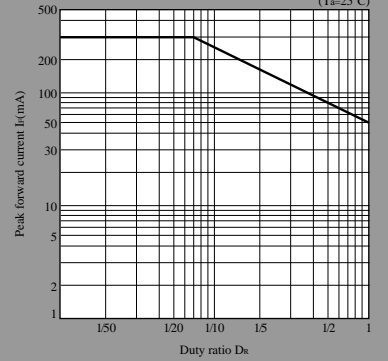
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current

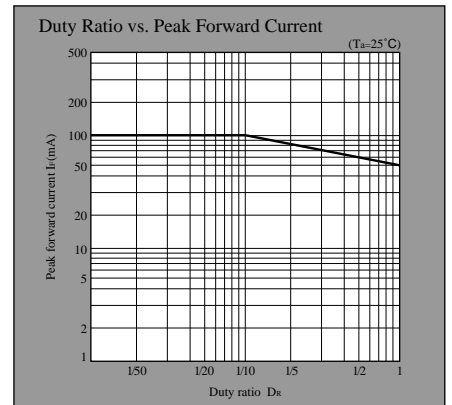
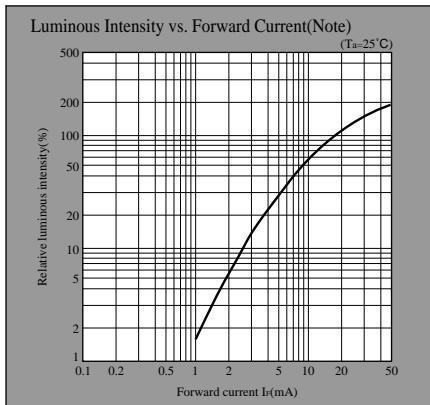
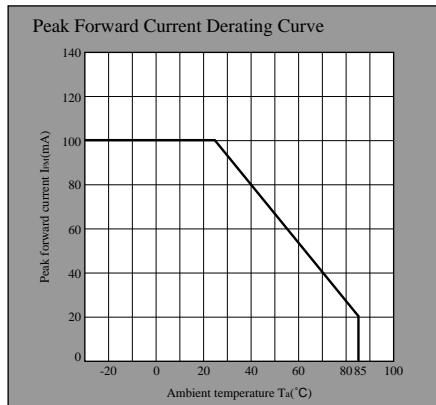
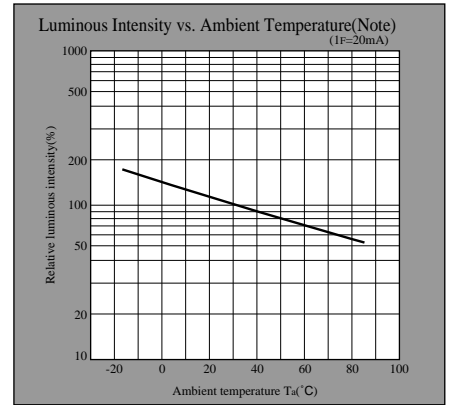
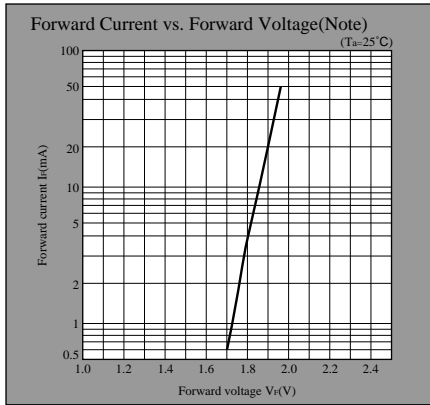
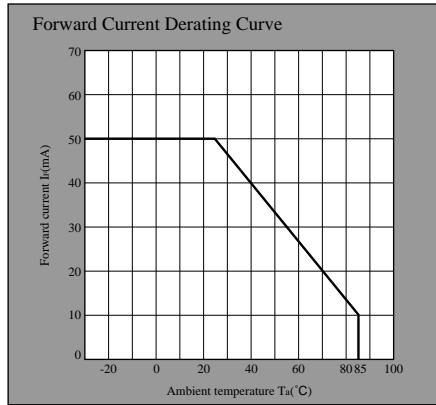


Note) Characteristics shown in diagrams are typical values. (not assurance value)

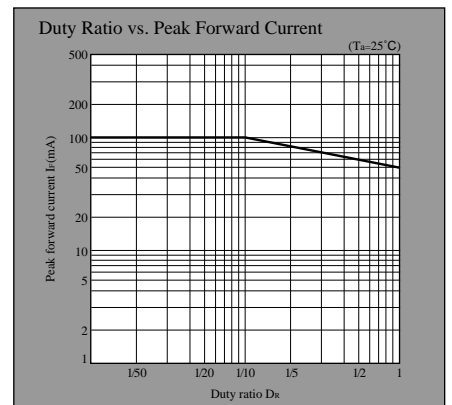
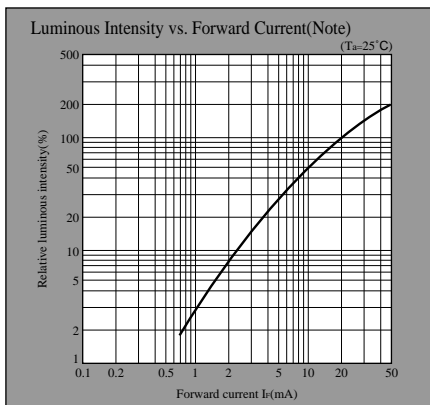
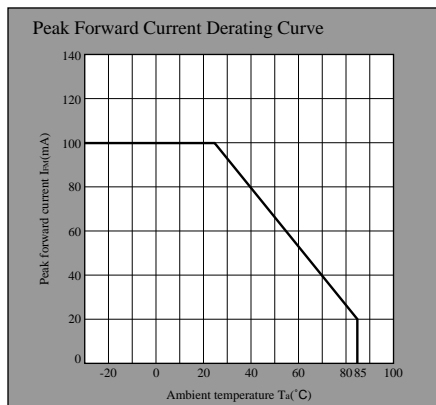
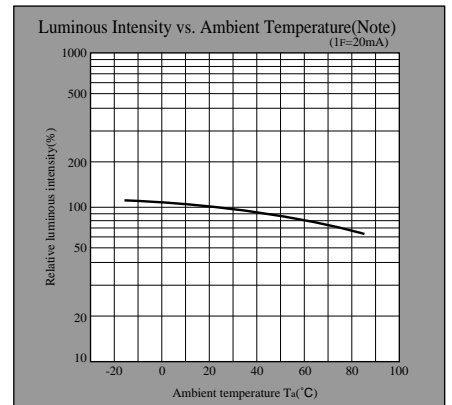
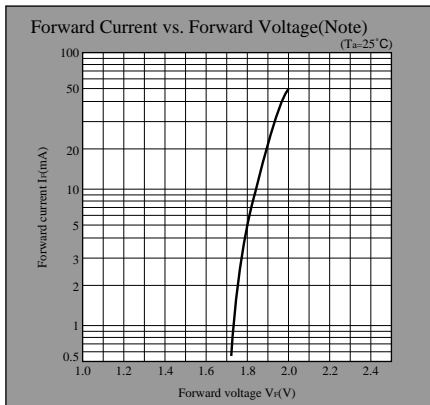
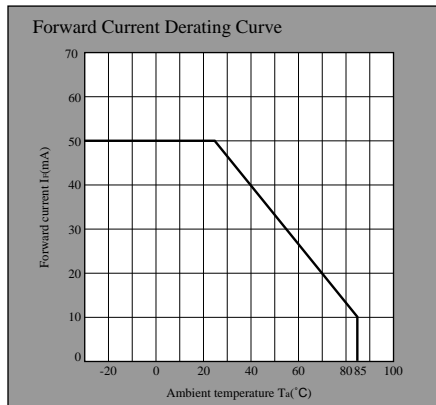
- (Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.
 (Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

LED Lamp Characteristics Diagrams

HV series



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