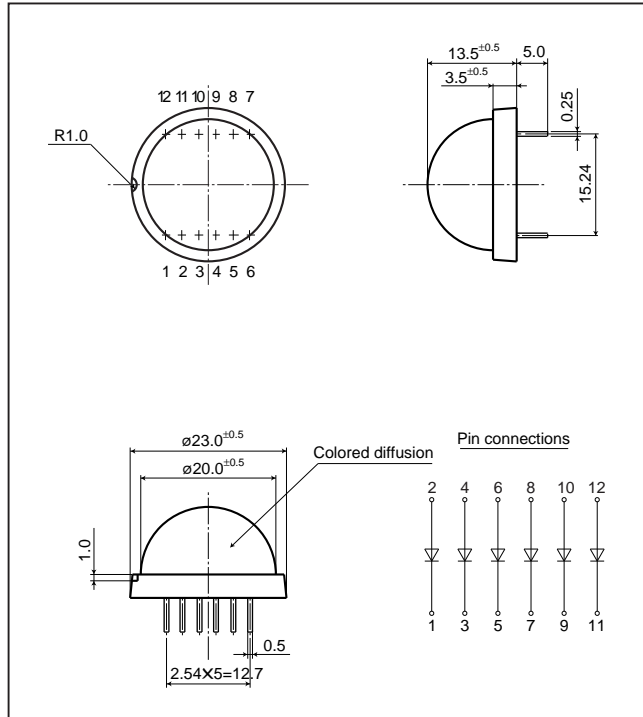


LT9525□ series

ø20mm, Dome Type, Colored Diffusion, Large LED Lamps for Indoor Use

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 ^{*2} (mA) | Peak forward current I _{FM} ^{*2*3} (mA) | Derating factor (mA/°C) ^{*2} | | Reverse voltage V _R ^{*2} (V) | Operating temperature T _{opr} (°C) | Storage temperature T _{stg} (°C) | Soldering temperature T _{sol} ^{*4} (°C) |
|-----------|-----------------|--------------------|--|---|---|--|-------|--|---|---|---|
| | | | | | | DC | Pulse | | | | |
| LT9525D | Red | GaAsP on GaP | 1 010 | 60 | 100 | 1.09 | 1.82 | 5 | -25 to +70 | -30 to +80 | 260 |
| LT9525S | Sunset orange | GaAsP on GaP | 1 008 | 60 | 100 | 1.09 | 1.82 | 5 | -25 to +70 | -30 to +80 | 260 |
| LT9525H | Yellow | GaAsP on GaP | 625 | 40 | 100 | 0.73 | 1.82 | 5 | -25 to +70 | -30 to +80 | 260 |
| LT9525E | Yellow-green | GaP | 1 010 | 60 | 100 | 1.09 | 1.82 | 5 | -25 to +70 | -30 to +80 | 260 |

*1 Per lamp(6 chips/lamp)

*2 Per chip

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

*4 5s or less(At the position of 1.6mm or more from the bottom face of resin package)

Electro-optical Characteristics^{*5}

(T_a=25°C)

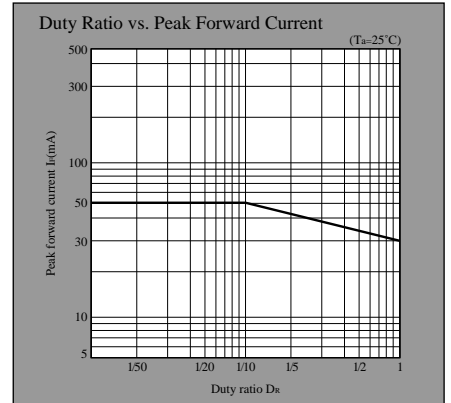
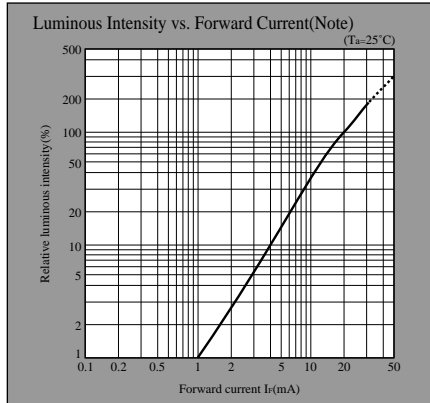
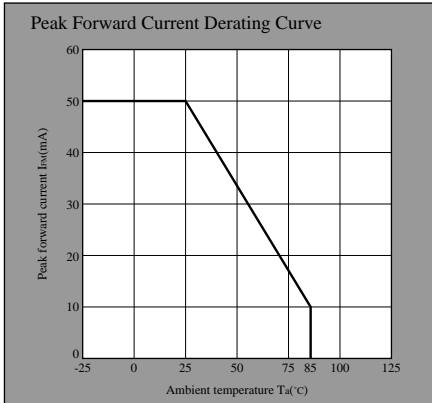
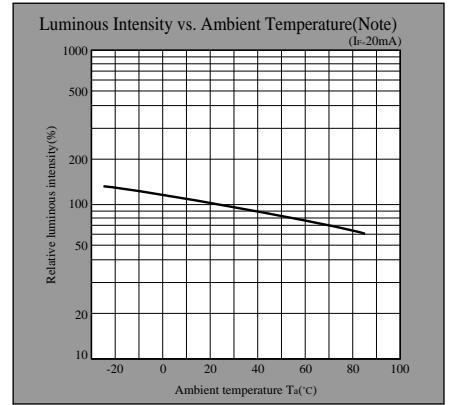
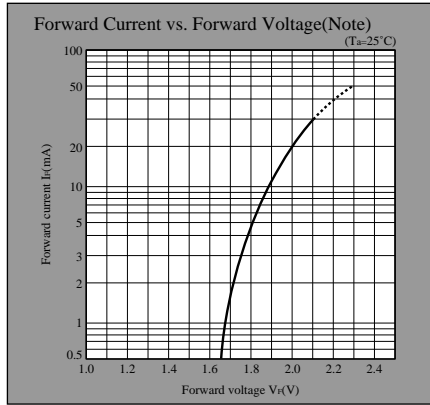
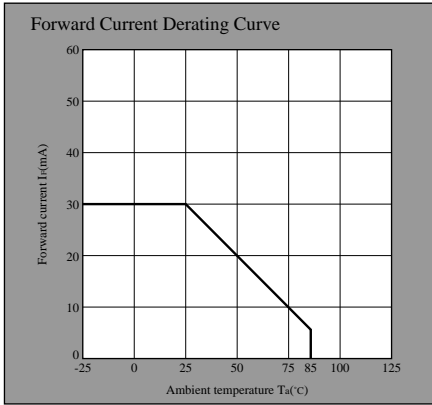
| Lens type | Model No. | Forward voltage V _F (V) | | Peak emission wavelength | | Luminous intensity | | Spectrum radiation bandwidth | | Reverse current | | Terminal capacitance | | Page for characteristics diagrams |
|-------------------|-----------|---------------------------------------|-----|--------------------------|------------------------|----------------------|------------------------|------------------------------|------------------------|---------------------|-----------------------|----------------------|-------|-----------------------------------|
| | | TYP | MAX | λ _p (nm) | I _F (mA) | I _v (mcd) | I _F (mA) | Δλ(nm) | I _F (mA) | I _R (μA) | V _R (V) | C _t (pF) | (MHz) | |
| | | | | | | | | | | | | | | |
| Colored diffusion | LT9525D | 2.0 | 2.8 | 635 | 40 | 70 | 40 | 35 | 40 | 10 | 4 | 35 | 1 | → |
| | LT9525S | 2.0 | 2.8 | 610 | 40 | 80 | 40 | 35 | 40 | 10 | 4 | 30 | 1 | → |
| | LT9525H | 1.9 | 2.6 | 585 | 20 | 35 | 20 | 30 | 20 | 10 | 4 | 30 | 1 | → |
| | LT9525E | 2.0 | 2.8 | 565 | 40 | 70 | 40 | 30 | 40 | 10 | 4 | 70 | 1 | → |

*5 Per chip

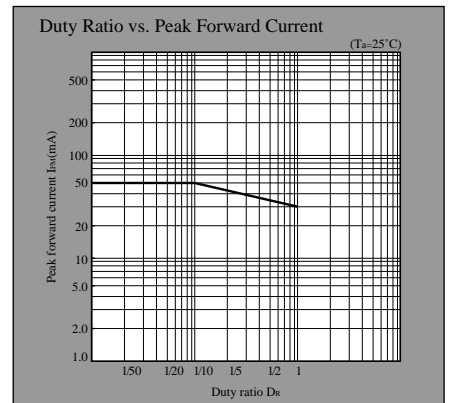
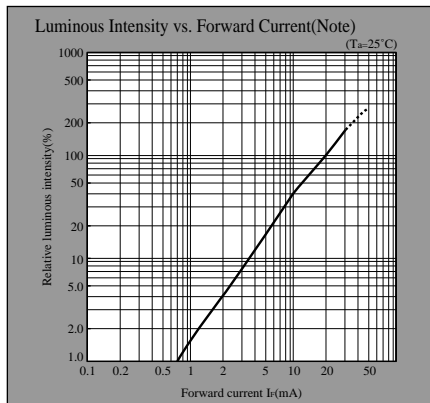
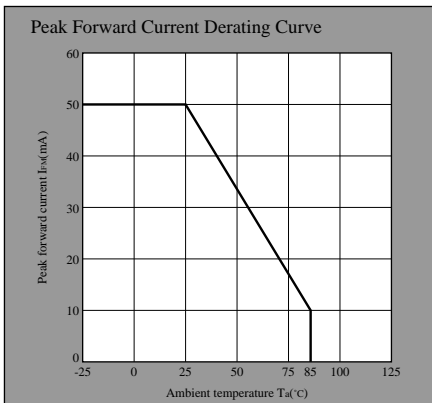
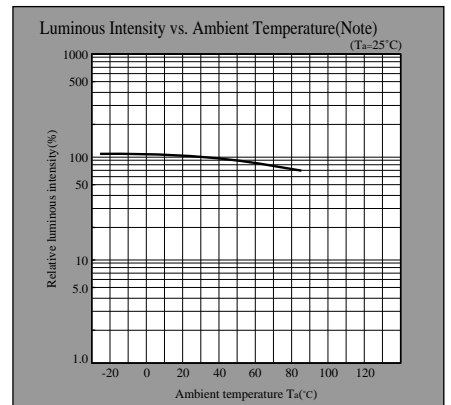
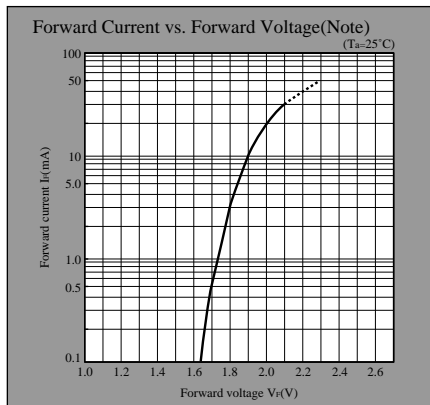
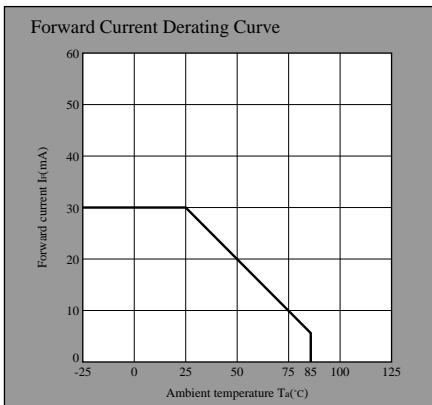
*6 Luminous intensity per lamp at I_F=40mA/chip(6 chips/lamp) Except LT9525H

LED Lamp Characteristics Diagrams

HS series



HY series

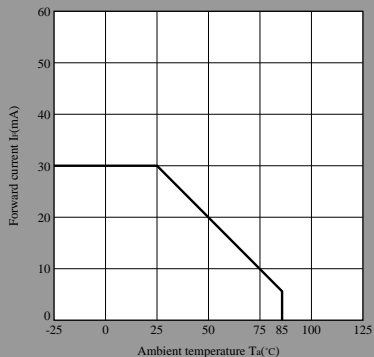


Note) Characteristics shown in diagrams are typical values. (not assurance value)

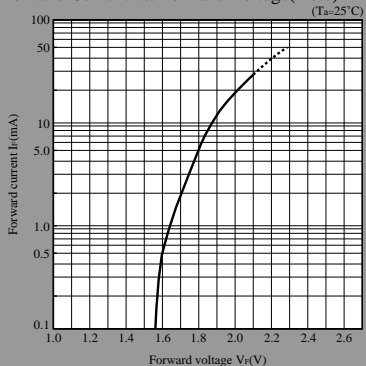
(Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP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

HD series

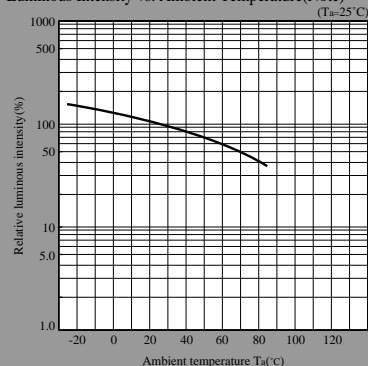
Forward Current Derating Curve



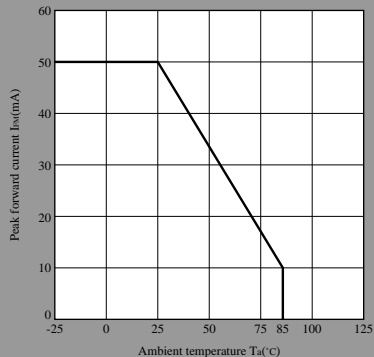
Forward Current vs. Forward Voltage(Note)



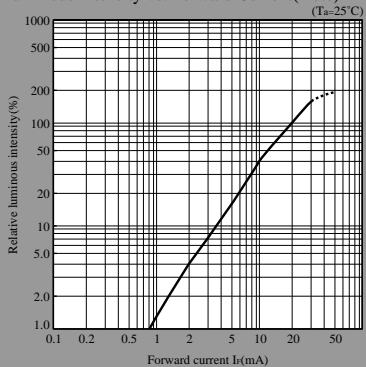
Luminous Intensity vs. Ambient Temperature(Note)



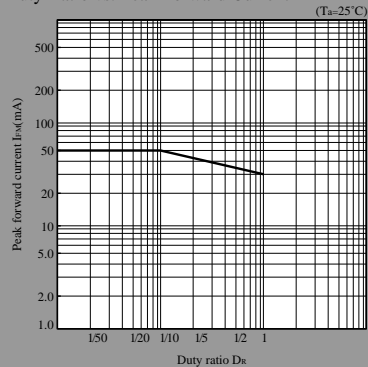
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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

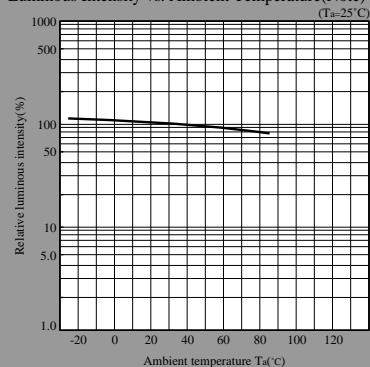
Forward Current Derating Curve



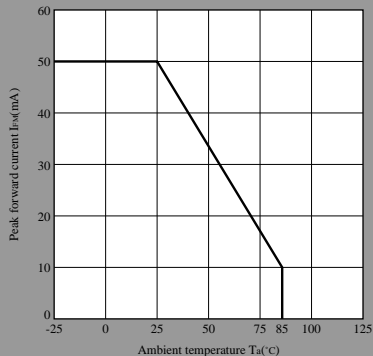
Forward Current vs. Forward Voltage(Note)



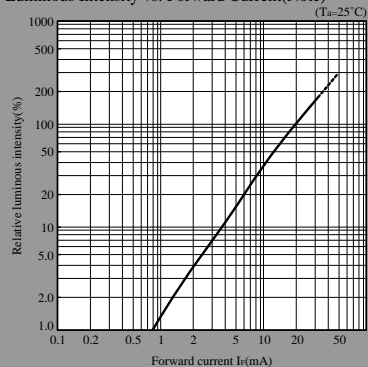
Luminous Intensity vs. Ambient Temperature(Note)



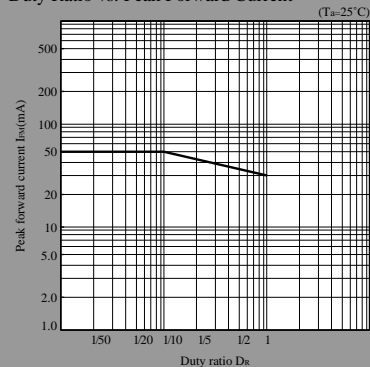
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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