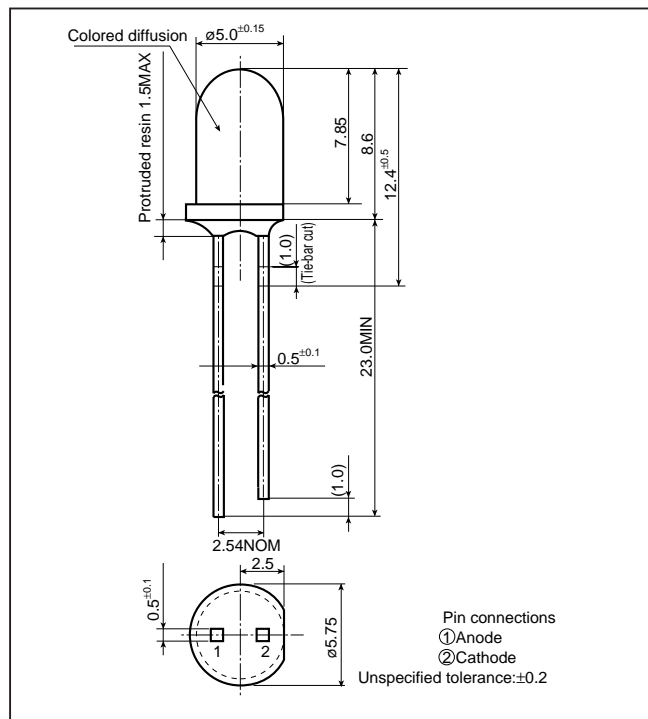


## GL5□□8 series

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

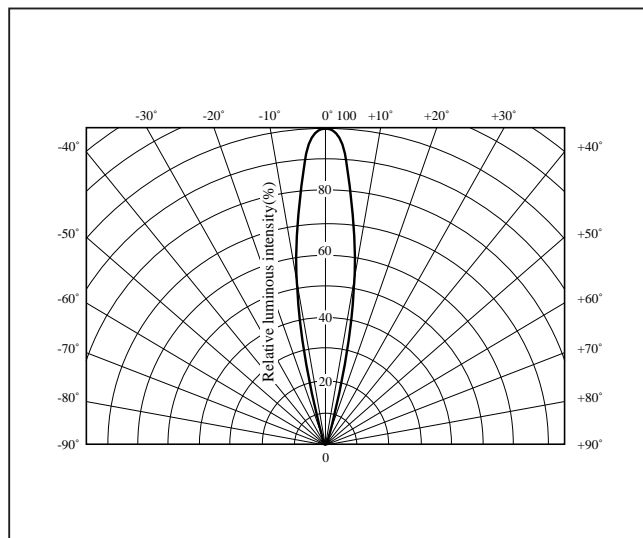
## ■ Outline Dimensions

(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 T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)	Soldering temperature T <sub>sol</sub> *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)

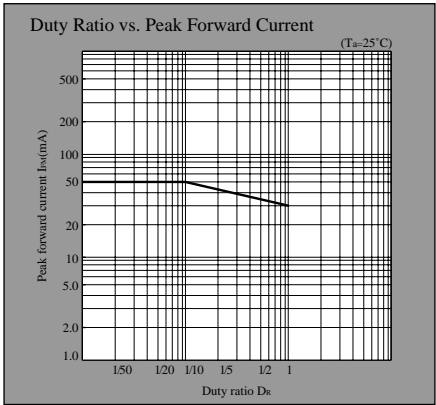
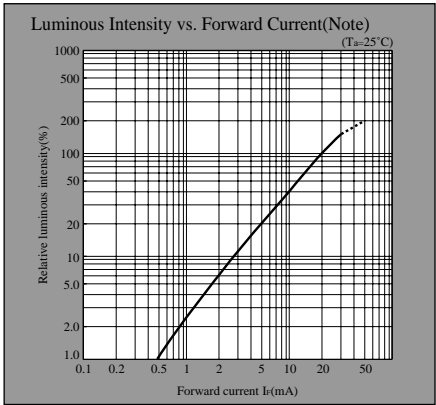
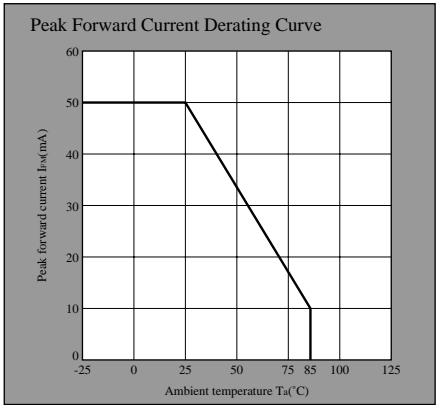
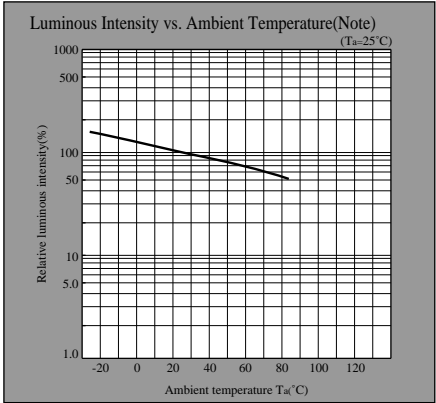
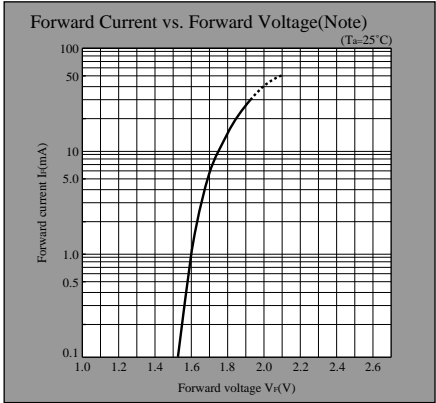
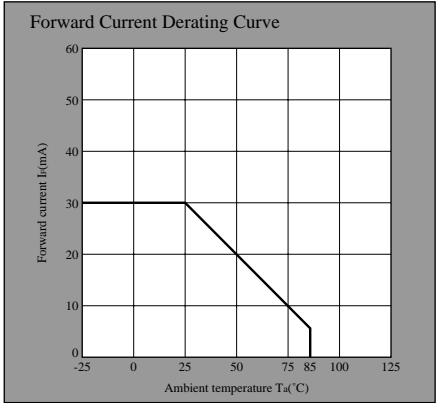
Lens type	Model No.	Forward voltage VF(V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		TYP	MAX	λp(nm) TYP	IF (mA)	Iv(mcd) TYP	IF (mA)	Δλ(nm) TYP	IF (mA)	IR(μA) MAX	VR (V)	Ct(pF) TYP	(MHz)	
Colored 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.

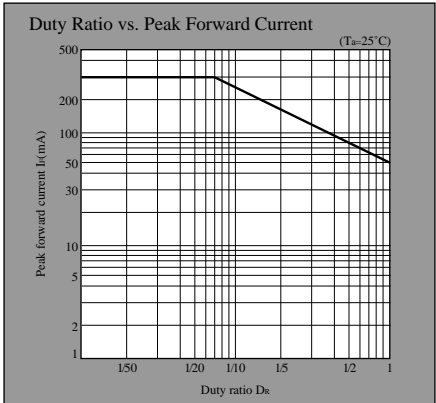
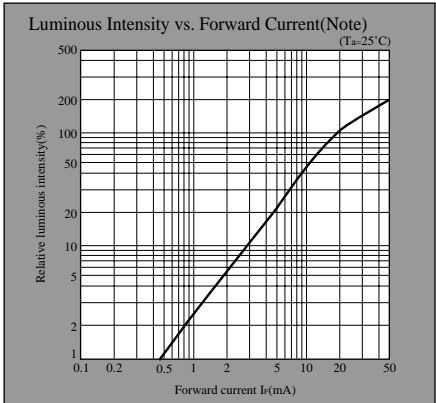
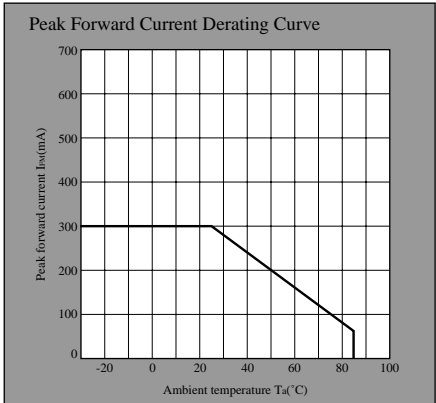
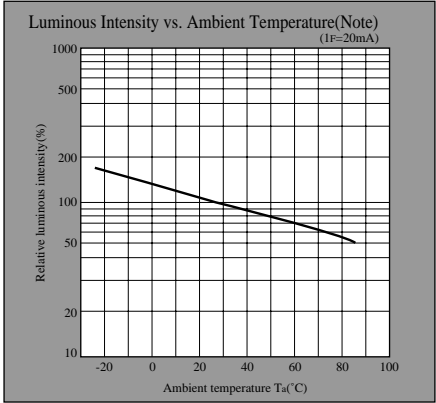
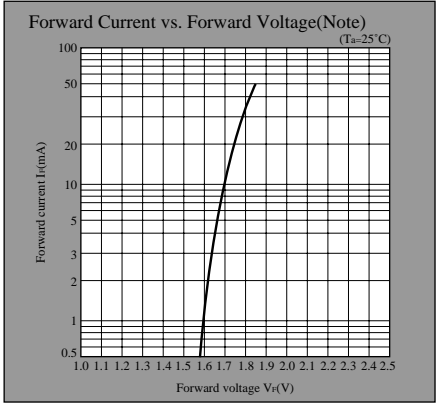
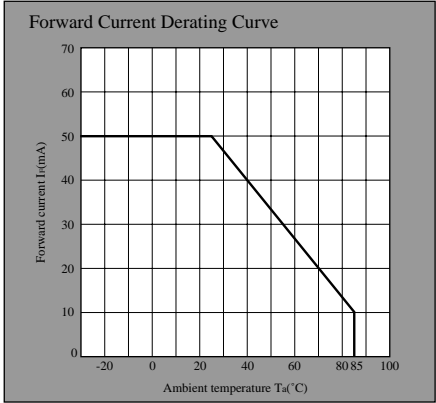
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

# LED Lamp Characteristics Diagrams

## UR series



## TR series



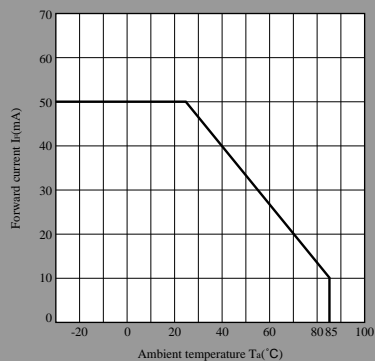
Note) Characteristics shown in diagrams are typical values. (not assurance value)

(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/>)

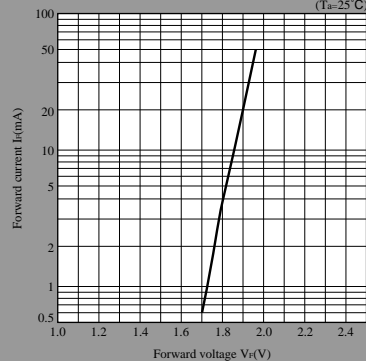
# LED Lamp Characteristics Diagrams

## HV series

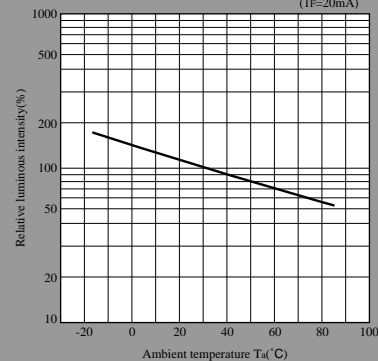
Forward Current Derating Curve



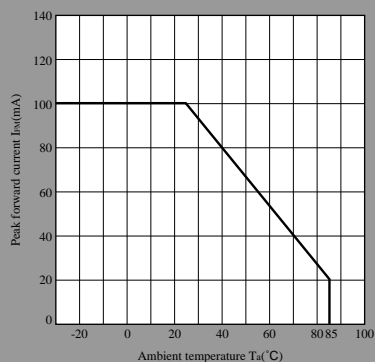
Forward Current vs. Forward Voltage(Note)



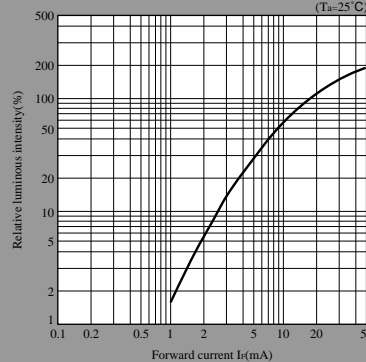
Luminous Intensity vs. Ambient Temperature(Note)



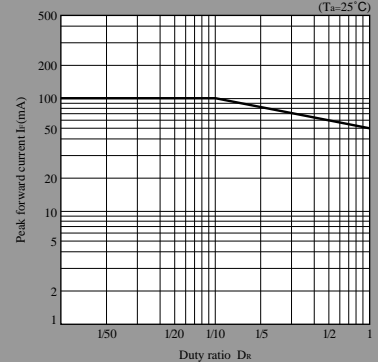
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

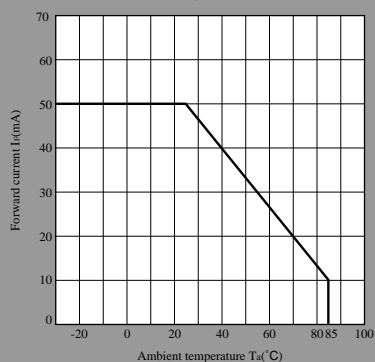


Duty Ratio vs. Peak Forward Current

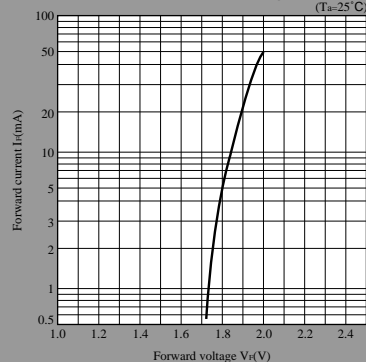


## HJ series

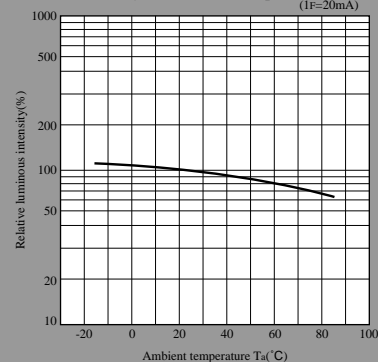
Forward Current Derating Curve



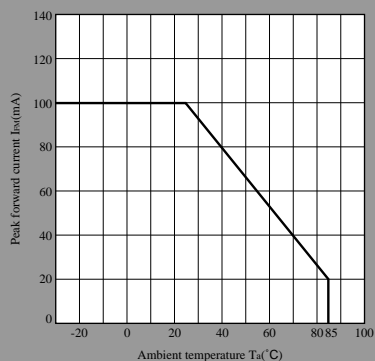
Forward Current vs. Forward Voltage(Note)



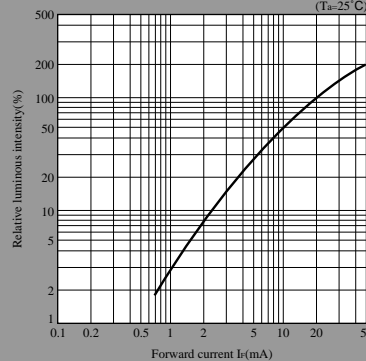
Luminous Intensity vs. Ambient Temperature(Note)



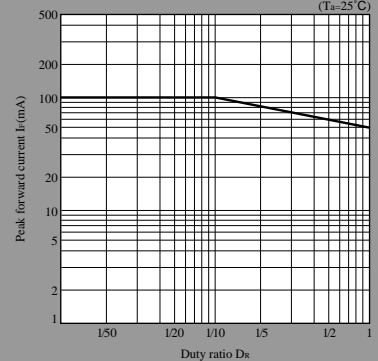
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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