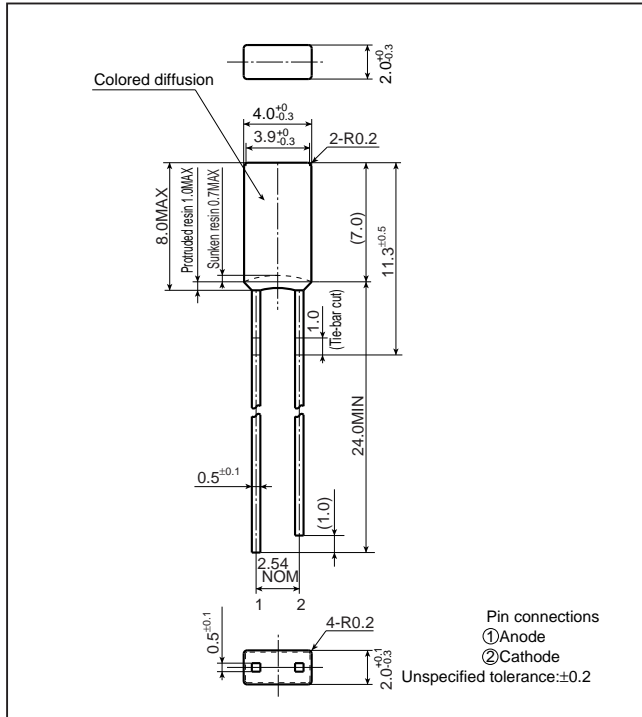


## GL8□□42 series

2.0X4.0mm, Rectangle Type,  
Colored Diffusion LED Lamps for  
Indicator

## ■ Outline Dimensions

(Unit : mm)



## ■ Absolute Maximum Ratings

(T<sub>a</sub>=25°C)

Model No.	Radiation color	Radiation material	Power dissipation P (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current I <sub>FM</sub> *1 (mA)	Derating factor (mA/°C)		Reverse voltage V <sub>R</sub> (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)	Soldering temperature T <sub>sol</sub> *2 (°C)
						DC	Pulse				
GL8PR42	Red	GaP	23	10	50	0.13	0.67	5	-25 to +85	-25 to +100	260
GL8HD42	Red	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8HS42	Sunset orange	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8HY42	Yellow	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8EG42	Yellow-green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8KG42	Green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260

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

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

## ■ Electro-optical Characteristics

(T<sub>a</sub>=25°C)

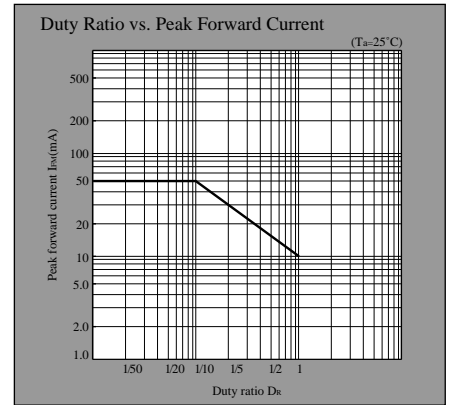
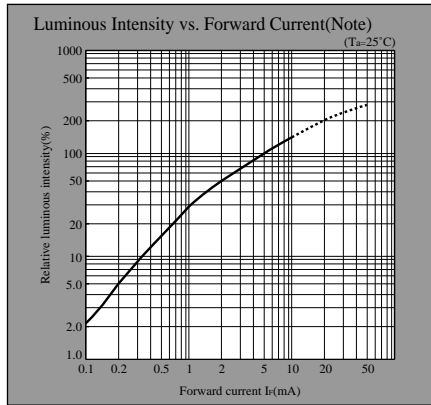
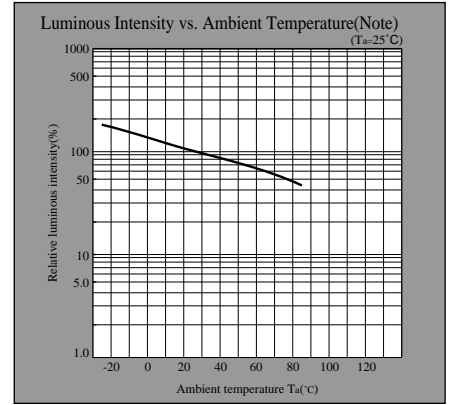
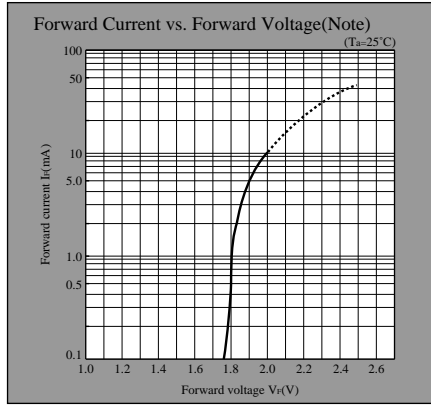
Lens type	Model No.	Forward voltage V <sub>F</sub> (V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		TYP	MAX	λ <sub>p</sub> (nm) TYP	I <sub>F</sub> (mA)	I <sub>v</sub> (mcd) TYP	I <sub>F</sub> (mA)	Δλ(nm) TYP	I <sub>F</sub> (mA)	I <sub>R</sub> (μA) MAX	V <sub>R</sub> (V)	C <sub>t</sub> (pF) TYP	(MHz)	
Colored diffusion	GL8PR42	1.9	2.3	695	5	0.7	5	100	5	10	4	55	1	→
	GL8HD42	2.0	2.8	635	20	5.0	20	35	20	10	4	20	1	→
	GL8HS42	2.0	2.8	610	20	4.0	20	35	20	10	4	15	1	→
	GL8HY42	2.0	2.8	585	20	6.0	20	30	20	10	4	35	1	→
	GL8EG42	2.1	2.8	565	20	5.0	20	30	20	10	4	35	1	→
	GL8KG42	2.1	2.8	555	20	1.5	20	25	20	10	4	40	1	→

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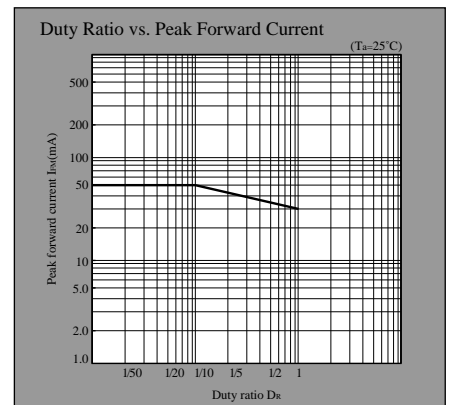
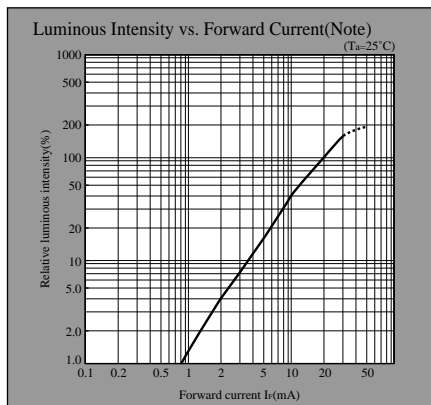
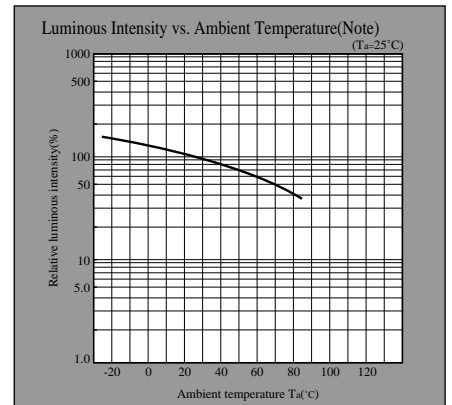
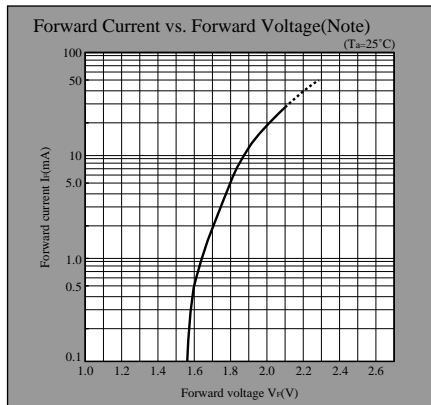
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

# LED Lamp Characteristics Diagrams

## PR series



## HD series

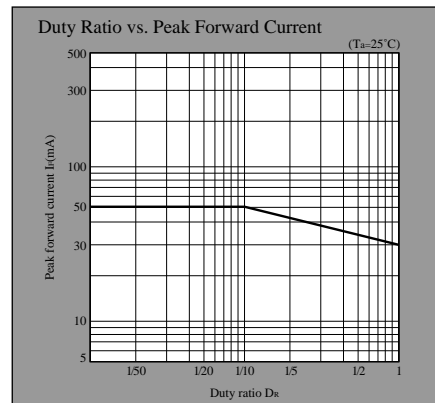
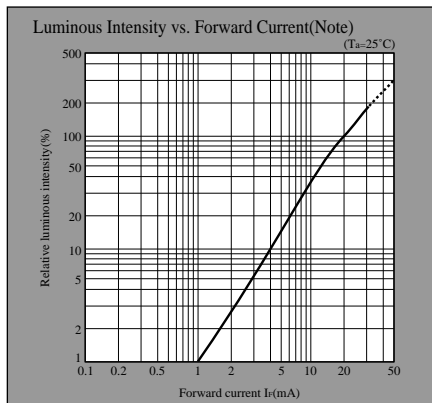
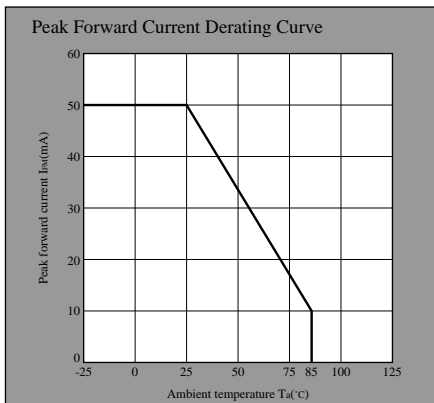
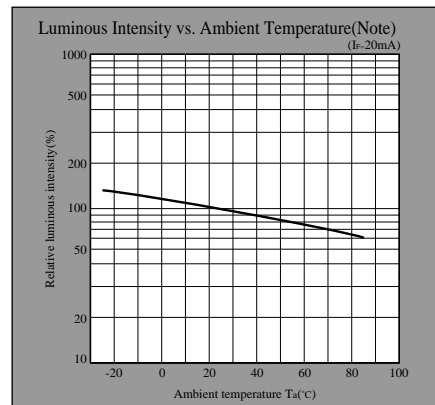
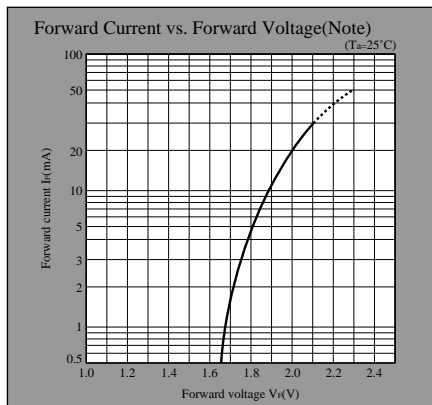
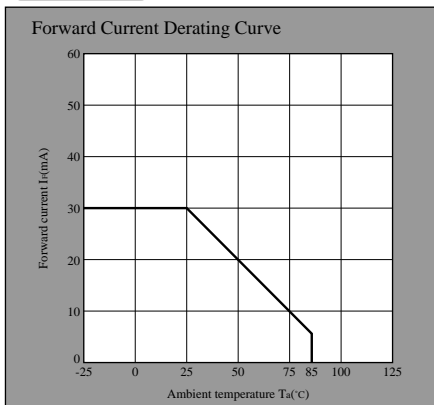


Note) Characteristics shown in diagrams are typical values. (not assurance value)

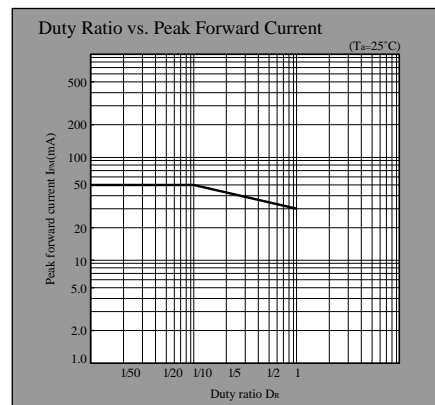
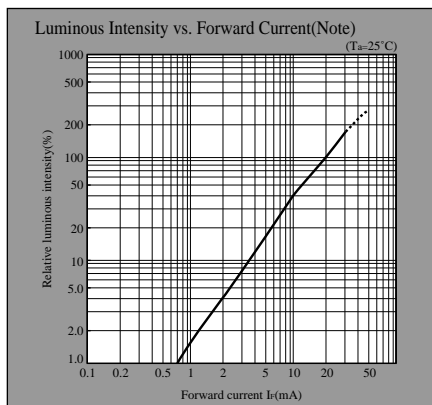
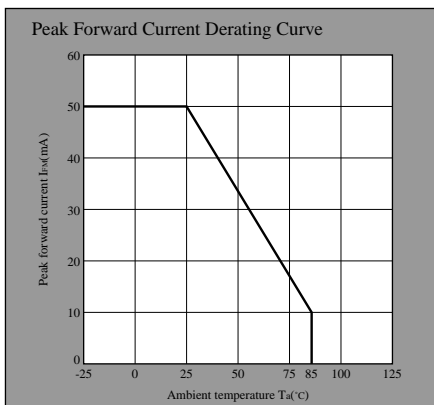
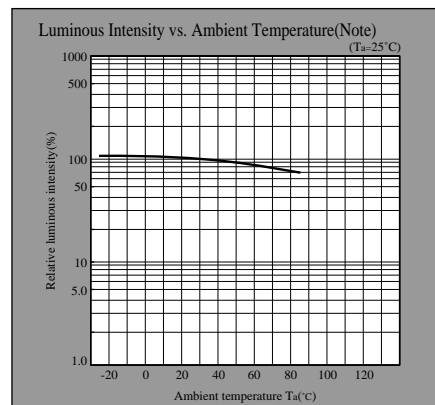
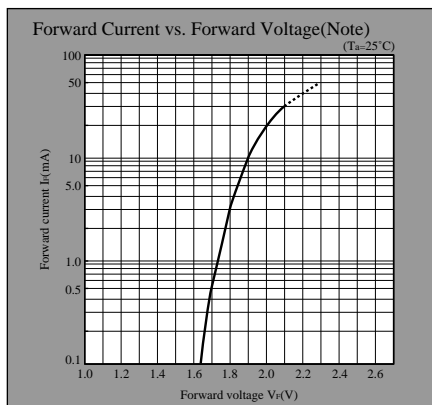
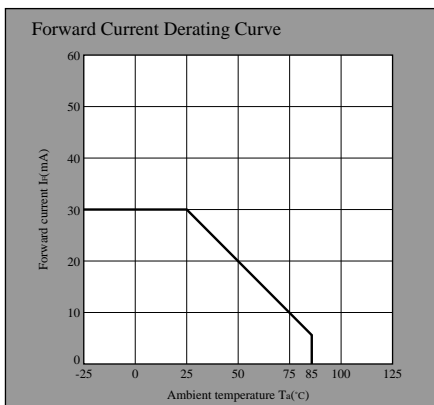
- (Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP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

# LED Lamp Characteristics Diagrams

## HS series



## HY series



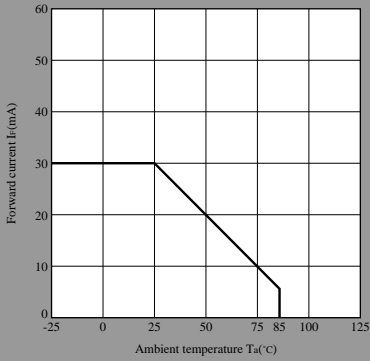
Note) Characteristics shown in diagrams are typical values. (not assurance value)

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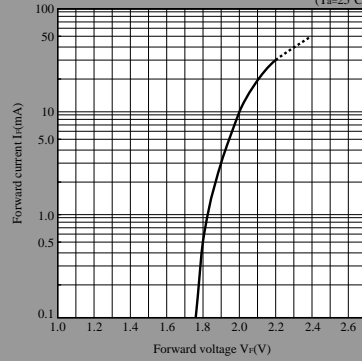
# LED Lamp Characteristics Diagrams

## EG series

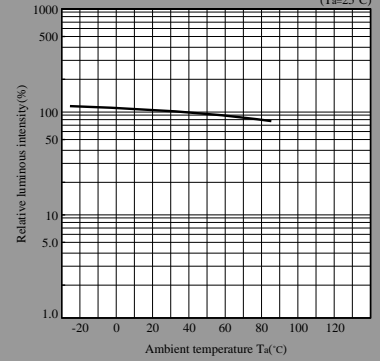
Forward Current Derating Curve



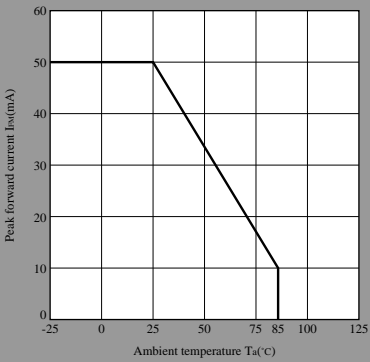
Forward Current vs. Forward Voltage(Note)



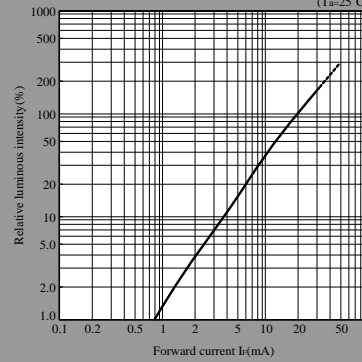
Luminous Intensity vs. Ambient Temperature(Note)



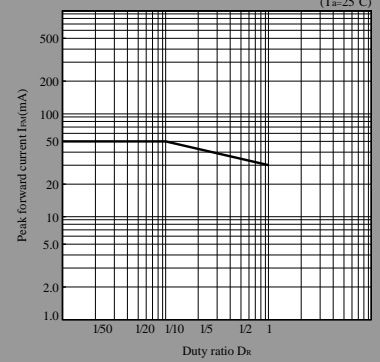
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

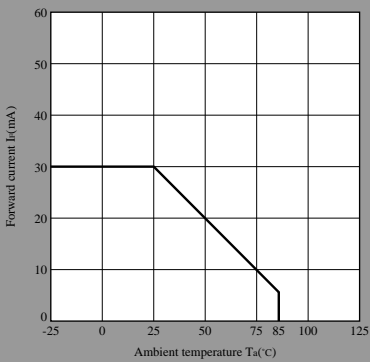


Duty Ratio vs. Peak Forward Current

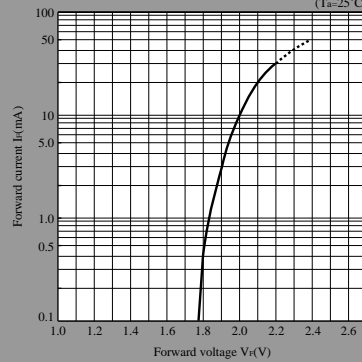


## KG series

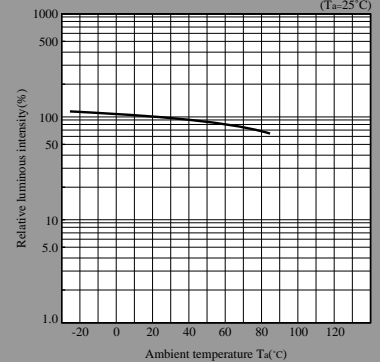
Forward Current Derating Curve



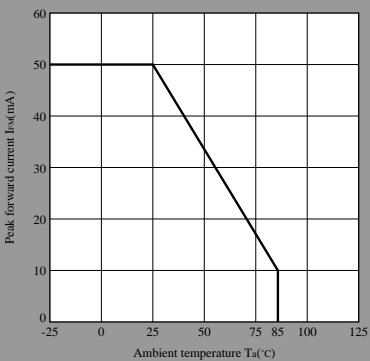
Forward Current vs. Forward Voltage(Note)



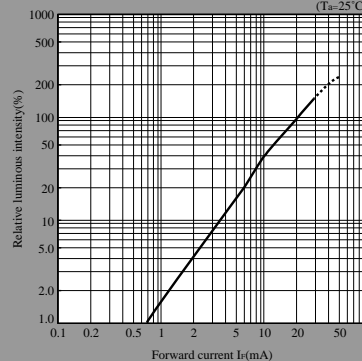
Luminous Intensity vs. Ambient Temperature(Note)



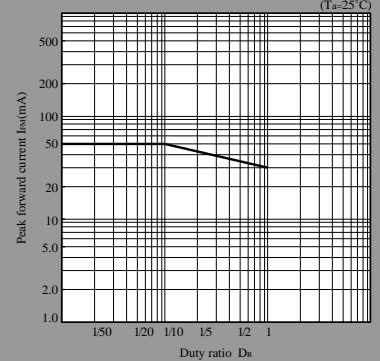
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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