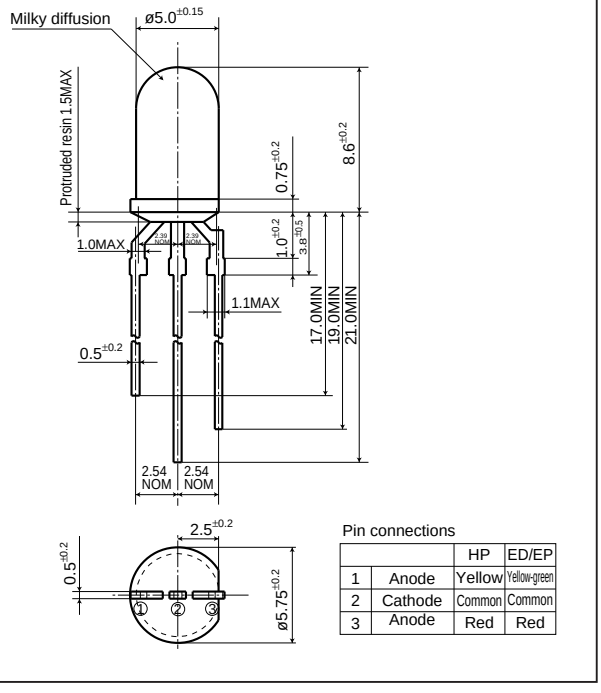
GL5❑❑5 series

ø5mm(T-1 3/4), Cylinder Type, Milky Diffusion, Dichromatic LED Lamps for Backlight/Indicator

■ Outline Dimensions

(Unit : mm)

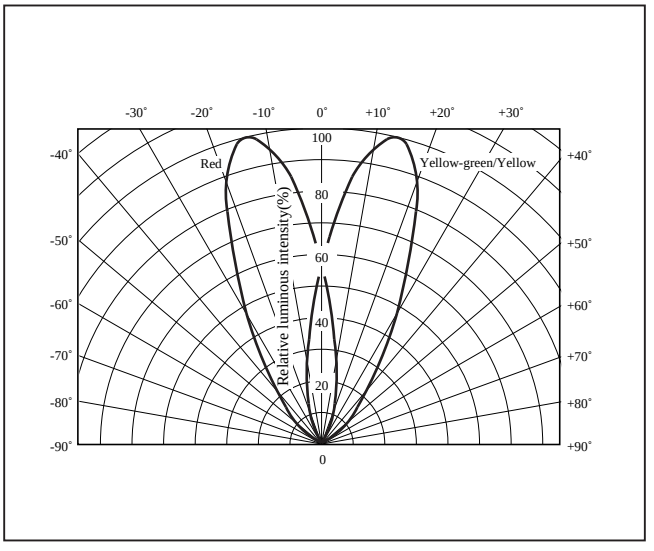


Pin connections

		HP	ED/EP
1	Anode	Yellow	Yellow-green
2	Cathode	Common	Common
3	Anode	Red	Red

■ Radiation Diagram

(Ta=25˚C)



■ Absolute Maximum Ratings

(Ta=25˚C)

Model No.	Radiation color	Radiation material	Power dissipation P*1 (mW)	Forward current IF (mA)	Peak forward current IFM*2 (mA)	Derating factor (mA/˚C) DC	Derating factor (mA/˚C) Pulse	Reverse voltage VR (V)	Operating temperature Topr (˚C)	Storage temperature Tstg (˚C)	Soldering temperature Tsol*3 (˚C)
GL5EP5	Yellow-green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
	Red	GaP	48	20	50	0.27	0.67	5			
GL5ED5	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			
GL5HP5	Yellow	GaAsP on GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	260
	Red	GaP	35	15	50	0.20	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

(Ta=25˚C)

Lens type	Model No.	Radiation color	Forward voltage VF(V) TYP	Forward voltage VF(V) MAX	Peak emission wavelength λp(nm) TYP	Peak emission wavelength IF (mA)	Luminous intensity Iv(mcd) TYP	Luminous intensity IF (mA)	Spectrum radiation bandwidth Δλ(nm) TYP	Spectrum radiation bandwidth IF (mA)	Reverse current IR(μA) MAX	Reverse current VR (V)	Terminal capacitance Ct(pF) TYP	Terminal capacitance (MHz)	Page for characteristics diagrams
Milky diffusion	GL5EP5	Yellow-green	2.1	2.8	565	20	40	20	30	20	10	4	35	1	→
		Red	2.0	2.4	695	10	9.0	10	100	10	10	4	55	1	→
	GL5ED5	Yellow-green	2.1	2.8	565	20	40	20	30	20	10	4	35	1	→
		Red	2.0	2.8	635	20	25	20	35	20	10	4	20	1	→
	GL5HP5	Yellow	1.9	2.5	585	10	15	10	30	10	10	4	35	1	→
		Red	2.0	2.4	695	10	9.0	10	100	10	10	4	55	1	→

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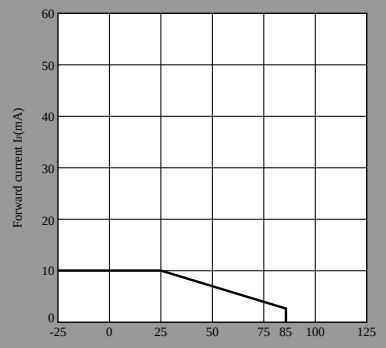
(Internet) ● Data for sharp's optoelectronic/power device is provided for internet.(Address http://www.sharp.co.jp/ecg/)

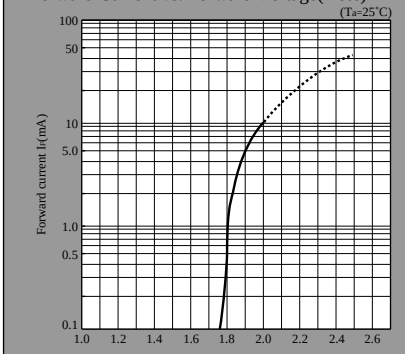
LED Lamp Characteristics Diagrams

PR series

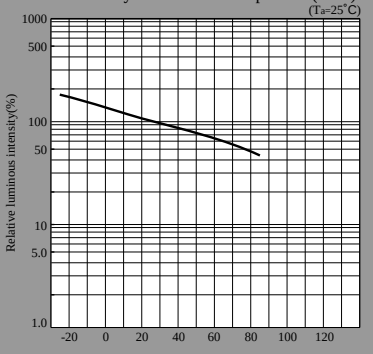
Forward Current Derating Curve



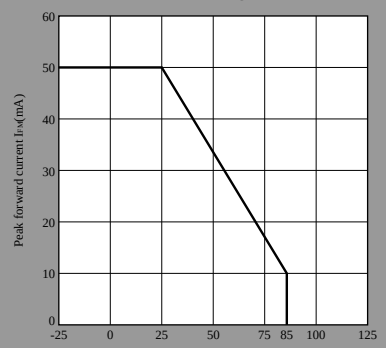
Forward Current vs. Forward Voltage(Note)



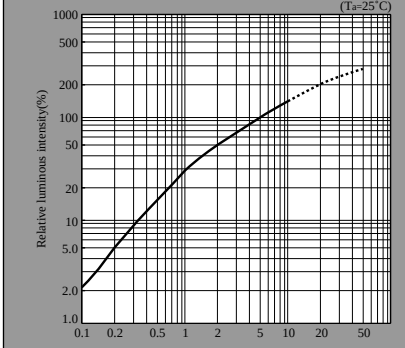
Luminous Intensity vs. Ambient Temperature(Note)



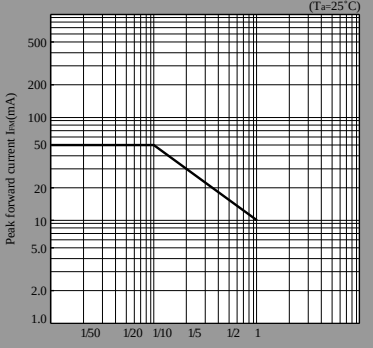
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

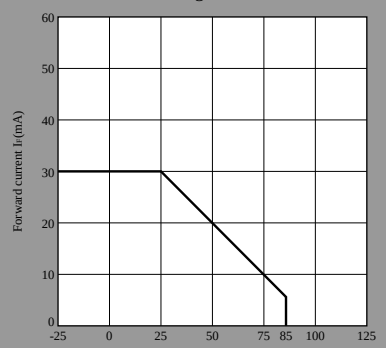


Duty Ratio vs. Peak Forward Current

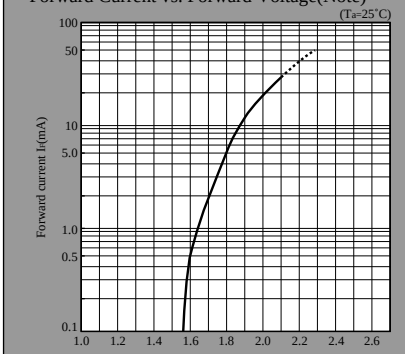


HD series

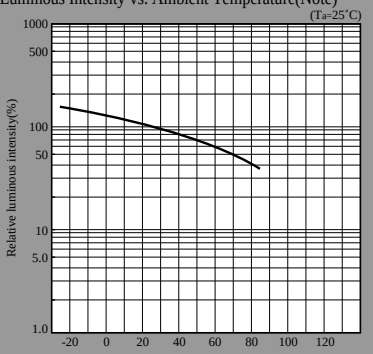
Forward Current Derating Curve



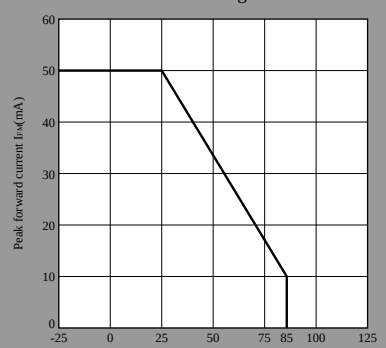
Forward Current vs. Forward Voltage(Note)



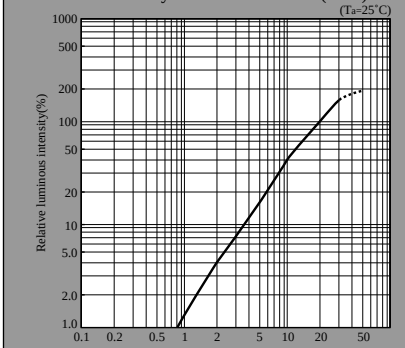
Luminous Intensity vs. Ambient Temperature(Note)



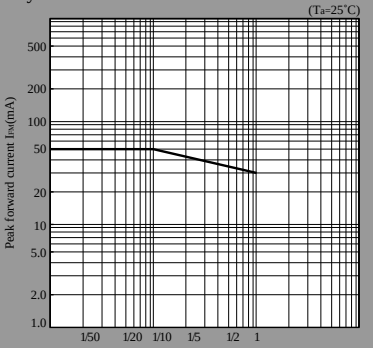
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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

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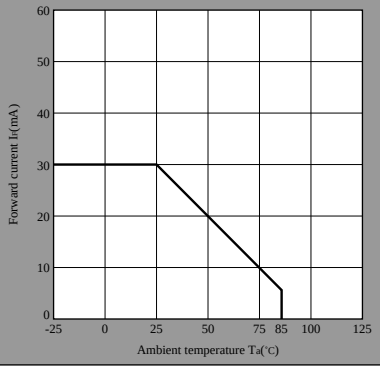
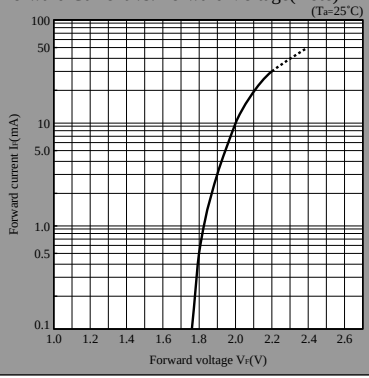
EG series

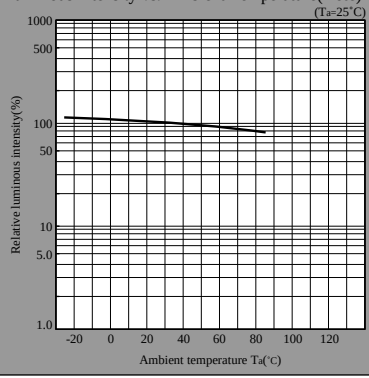
Forward Current Derating Curve



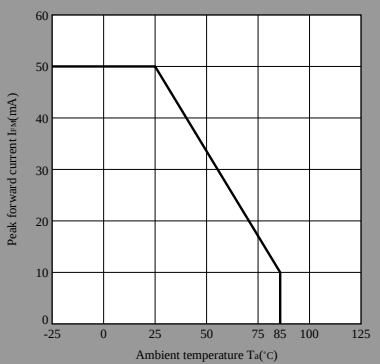
Forward Current vs. Forward Voltage(Note)



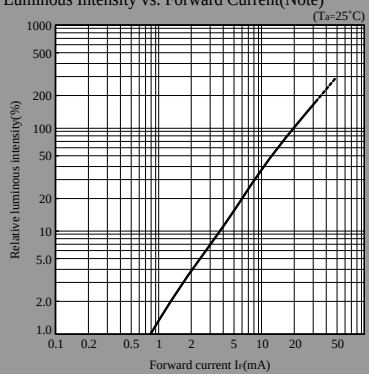
Luminous Intensity vs. Ambient Temperature(Note)



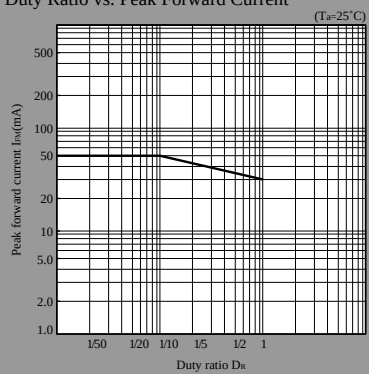
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



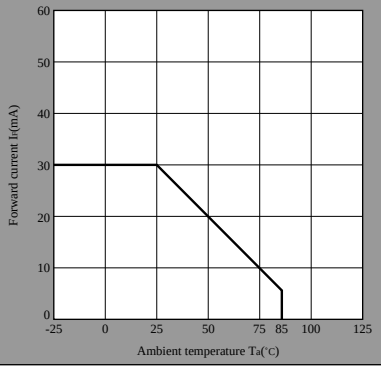
Duty Ratio vs. Peak Forward Current



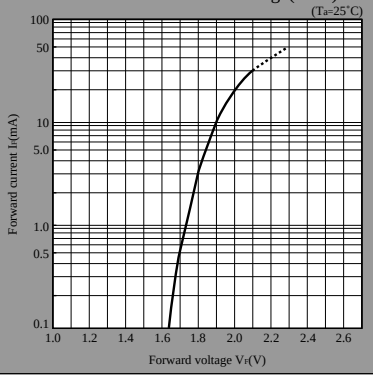
Note)Characteristics shown in diagrams are typical values. (not assurance value)

HY series

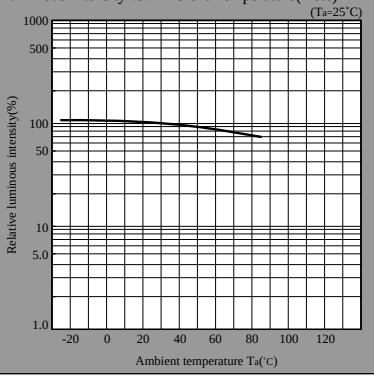
Forward Current Derating Curve



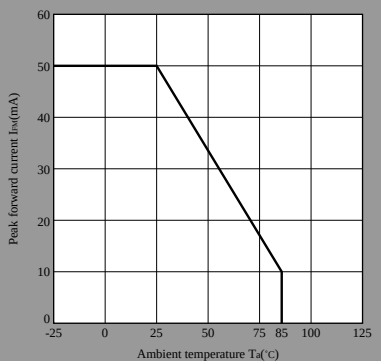
Forward Current vs. Forward Voltage(Note)



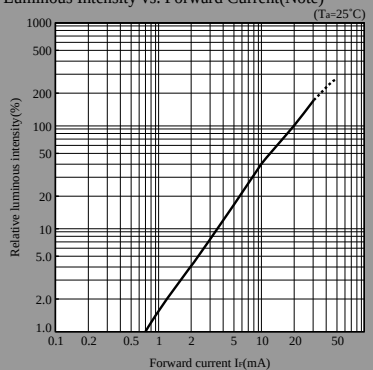
Luminous Intensity vs. Ambient Temperature(Note)



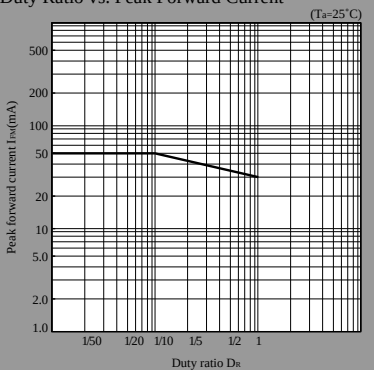
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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