

# LED Lamp

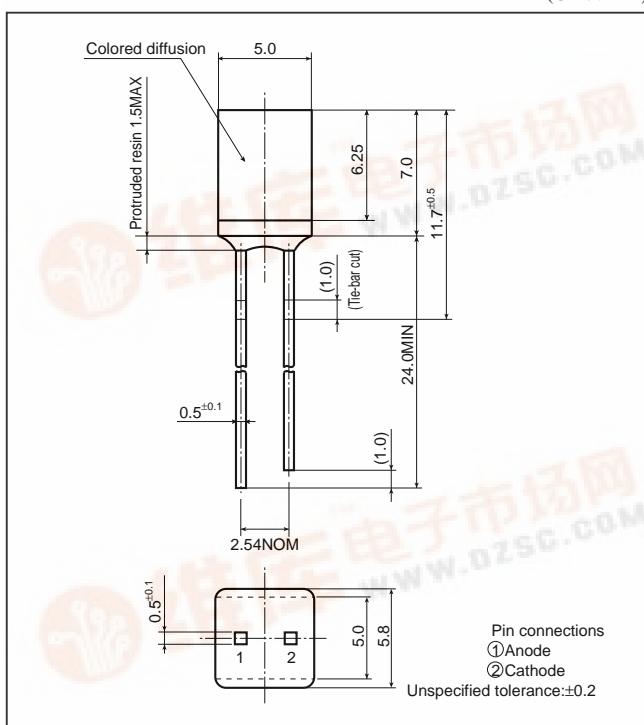
## GL8□□22 series

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## 5.0×5.0mm, Square Type, Colored Diffusion LED Lamps for Indicator

## ■ Outline Dimensions

(Unit : mm)



## ■ Absolute Maximum Ratings

Model No.	Radiation color	Radiation material	Power dissipation P (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current I <sub>FM</sub> <sup>*1</sup> (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> <sup>*2</sup> (°C)
						DC	Pulse				
GL8PR22	Red	GaP	23	10	50	0.13	0.67	5	-25 to +85	-25 to +100	260
GL8HD22	Red	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8HS22	Sunset orange	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8HY22	Yellow	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8EG22	Yellow-green	GaP	50	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
GL8KG22	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)

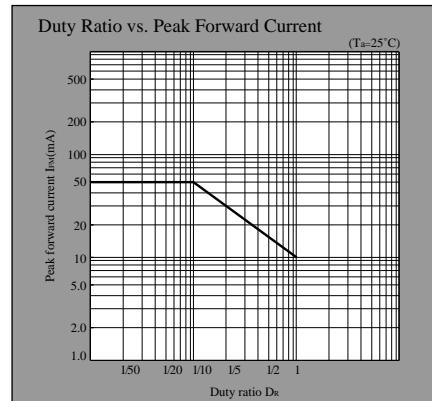
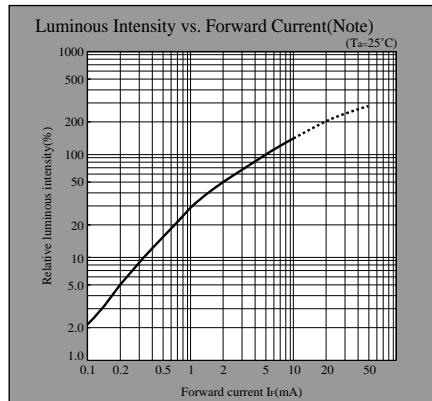
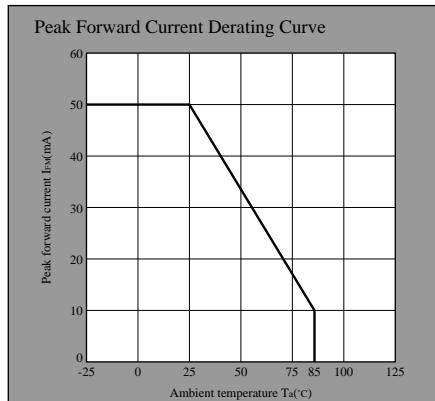
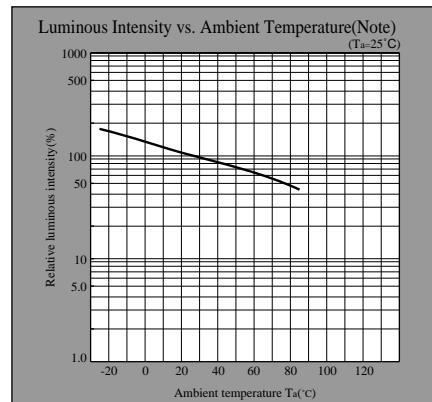
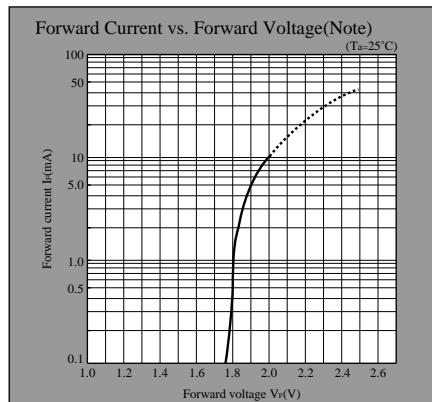
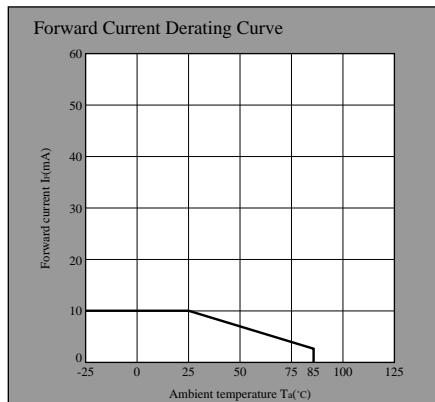
## ■ Electro-optical Characteristics

(T<sub>a</sub>=25°C)

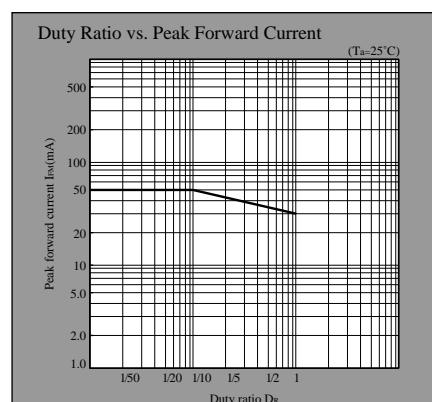
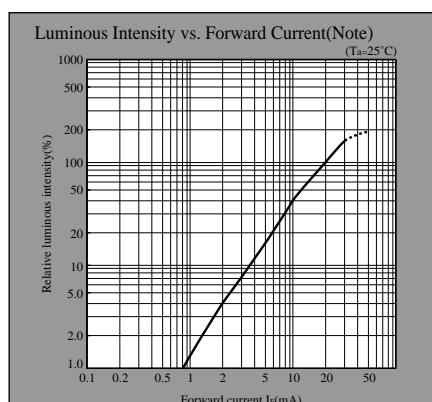
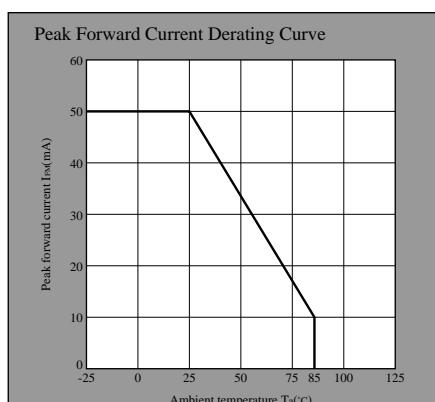
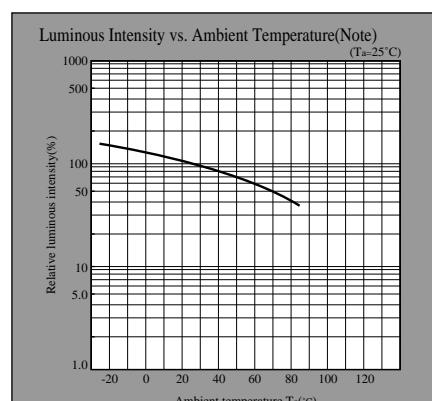
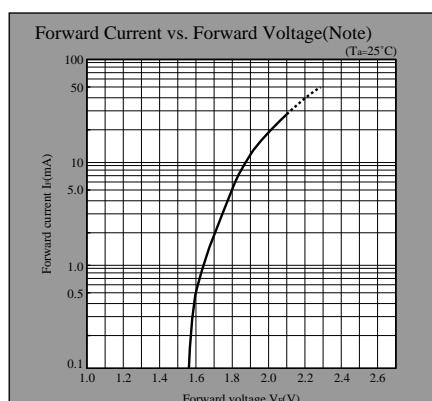
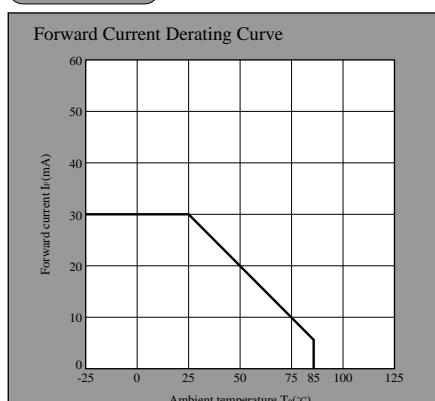
Lens type	Model No.	Forward voltage V <sub>F</sub> (V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		V <sub>F</sub> (V)		λ <sub>p</sub> (nm) TYP	I <sub>F</sub> (mA)	I <sub>V</sub> (mcd) TYP	I <sub>F</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)	
		TYP	MAX											
Colored diffusion	GL8PR22	1.9	2.3	695	5	1.2	5	100	5	10	4	55	1	→
	GL8HD22	2.0	2.8	635	20	8.0	20	35	20	10	4	20	1	→
	GL8HS22	2.0	2.8	610	20	5.0	20	35	20	10	4	15	1	→
	GL8HY22	2.0	2.8	585	10	5.0	10	30	20	10	4	35	1	→
	GL8EG22	2.1	2.8	565	20	6.0	20	30	20	10	4	35	1	→
	GL8GC22	2.1	2.8	555	20	3.5	20	25	20	10	4	40	1	→

# LED Lamp Characteristics Diagrams

## PR series



## HD series



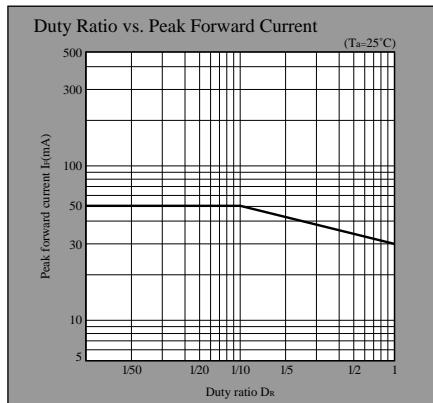
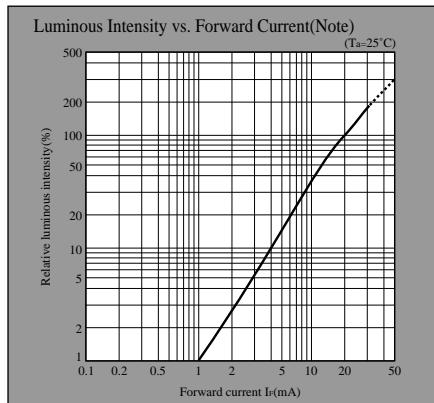
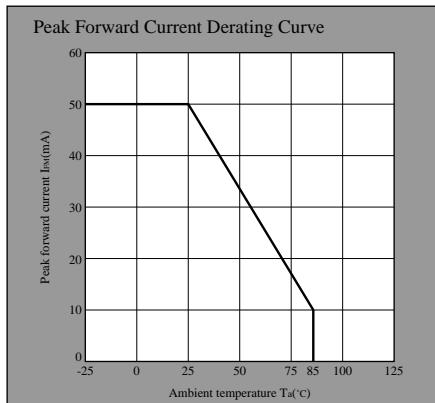
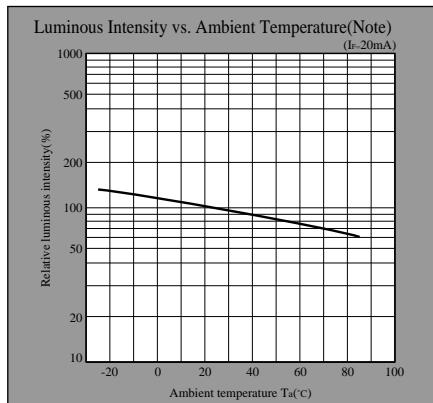
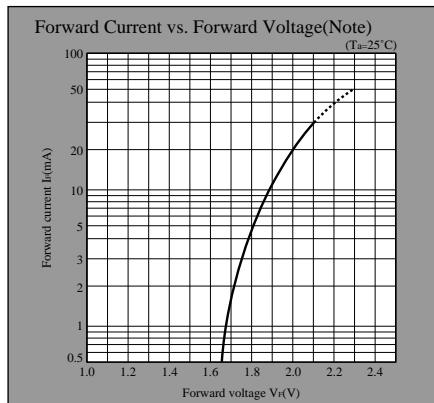
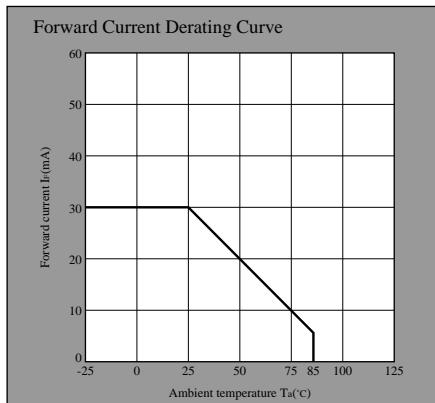
Note) Characteristics shown in diagrams are typical values. (not assurance value)

(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.

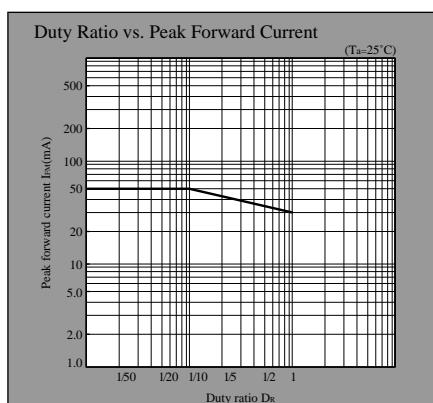
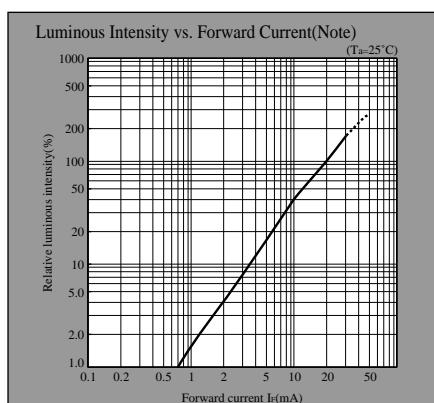
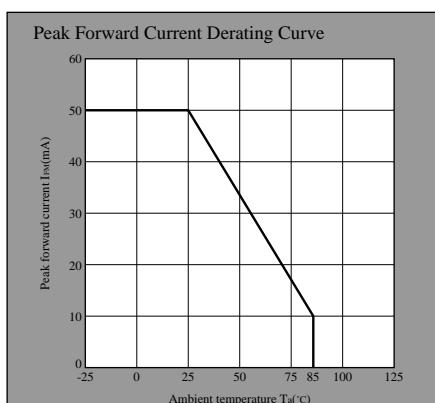
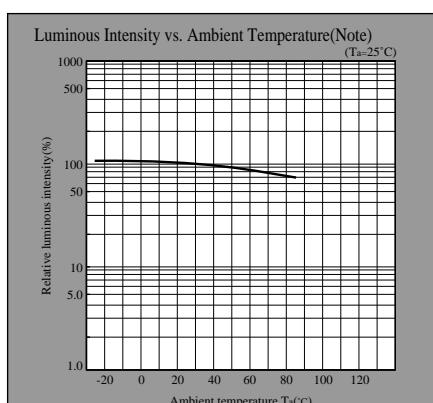
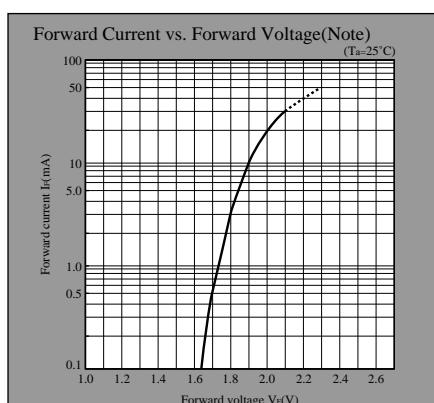
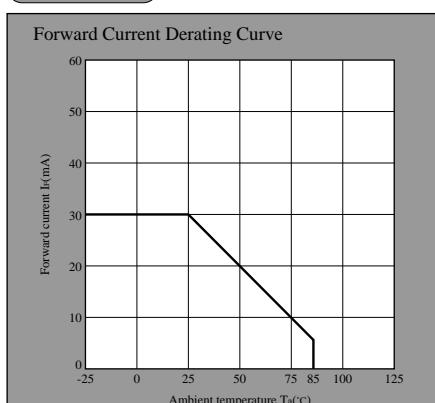
(Note) ● Data for the characteristics in these diagrams is measured at 100% duty ratio. (Ambient temperature 25°C, forward current 10mA, forward voltage 1.8V)

# LED Lamp Characteristics Diagrams

## HS series



## HY series



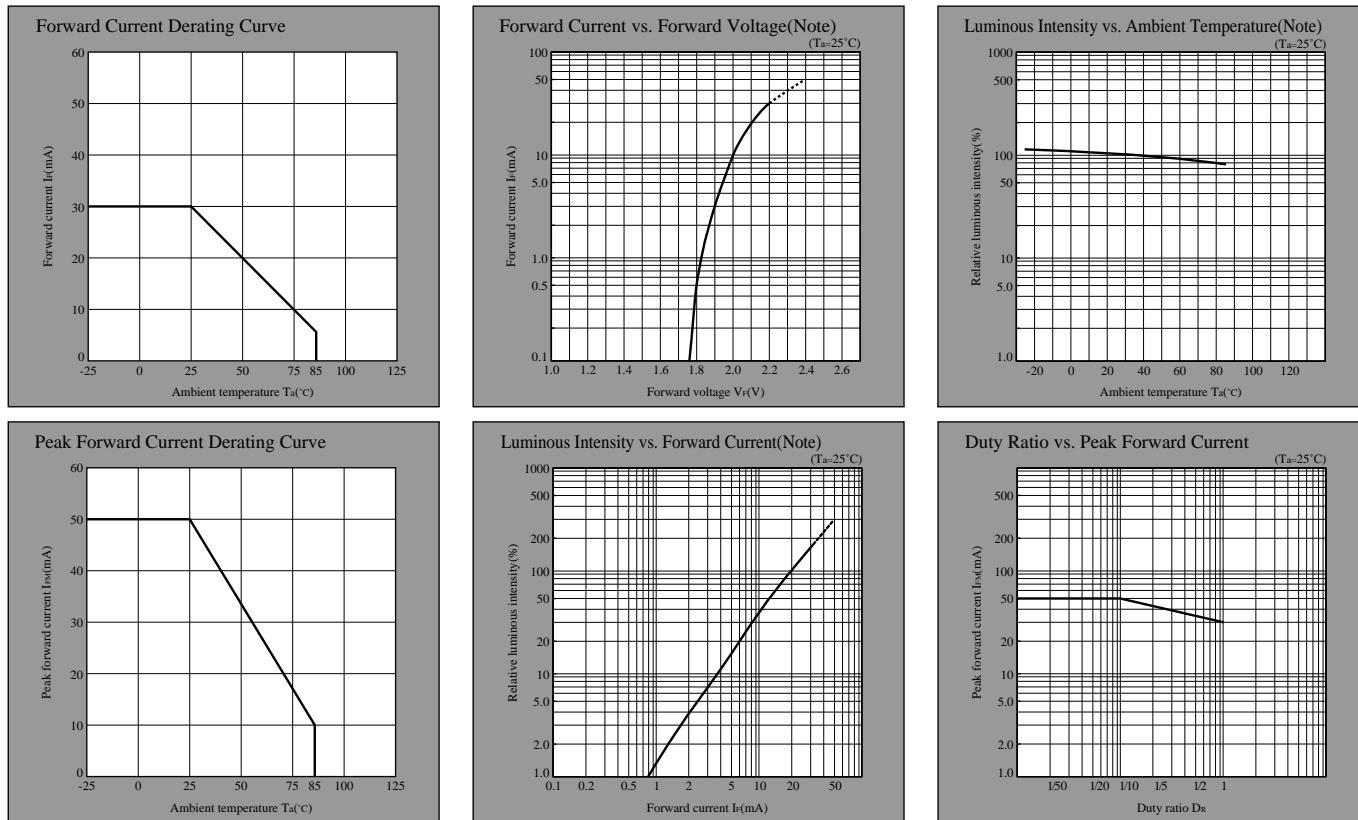
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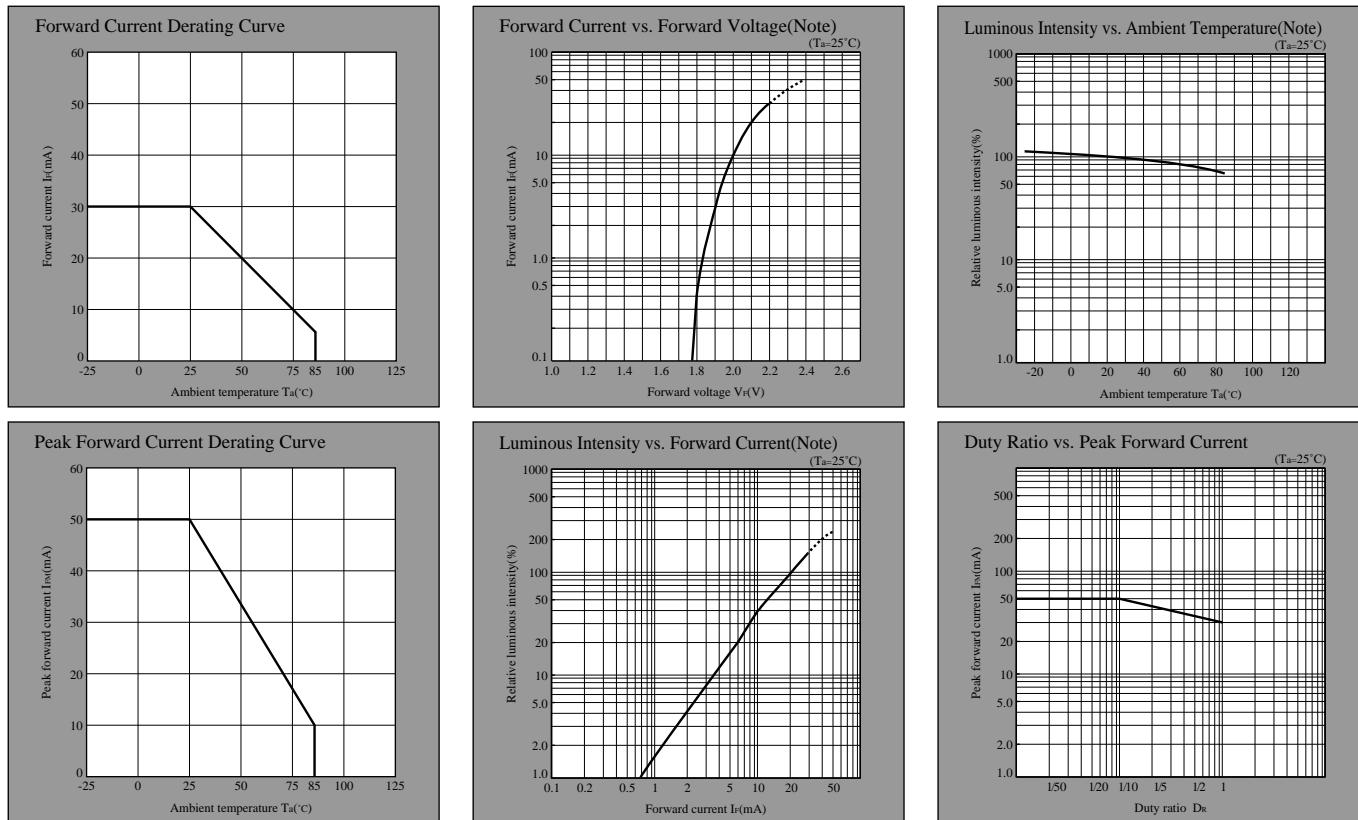
(Notice) • Due to the characteristics of the device, it is recommended to use it at a maximum ambient temperature of 40°C. Use under the "overheat protection" function.

# LED Lamp Characteristics Diagrams

## EG series



## KG series



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

(Notice) 

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(Note) 

- Peak forward current  $I_{fs}$  is the maximum current that can be sustained for a period of time (10 minutes) at  $T_a = 25^\circ\text{C}$  under a duty ratio of 1.0.