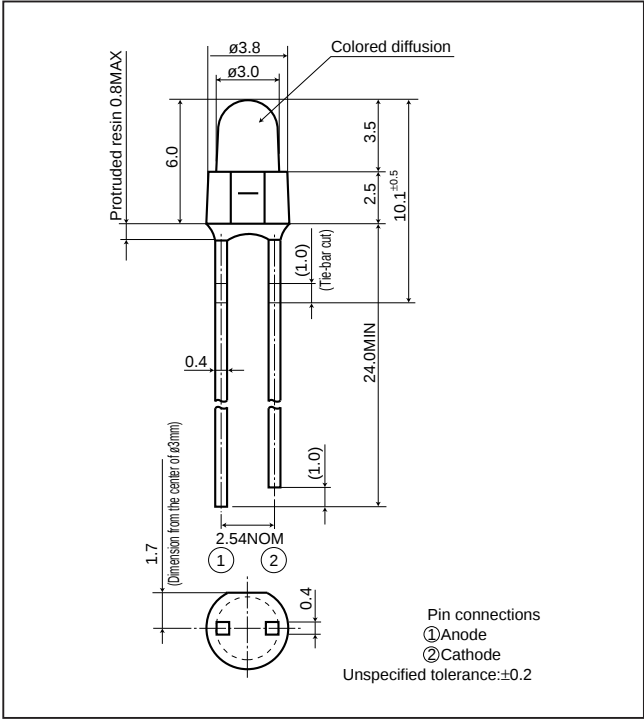


LT3□31W series

ø3mm(T-1), Cylinder Type(Thick Flange), Colored Diffusion, Tape-packaged LED Lamps for Surface Mount

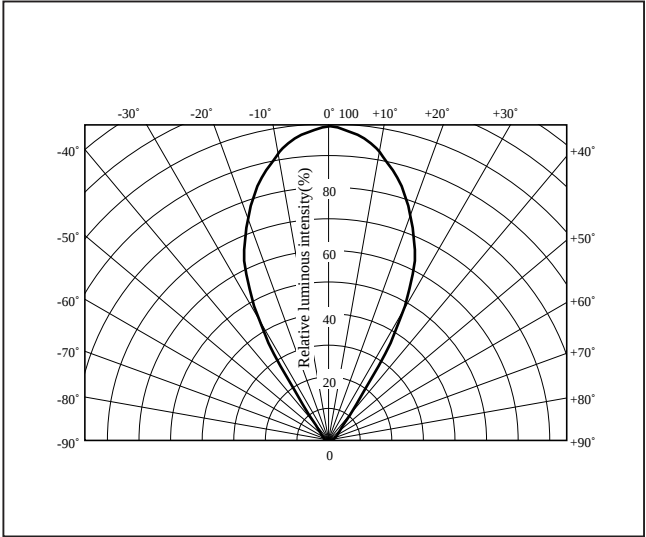
Outline Dimensions

(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*1 (mA)	Derating factor (mA/°C)		Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)	Soldering temperature Tsol*2 (°C)
						DC	Pulse				
LT3P31W	Red	GaP	23	10	50	0.13	0.67	5	-25 to +85	-25 to +100	260
LT3D31W	Red	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
LT3S31W	Sunset orange	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
LT3H31W	Yellow	GaAsP on GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
LT3E31W	Yellow-green	GaP	84	30	50	0.40	0.67	5	-25 to +85	-25 to +100	260
LT3K31W	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

(Ta=25°C)

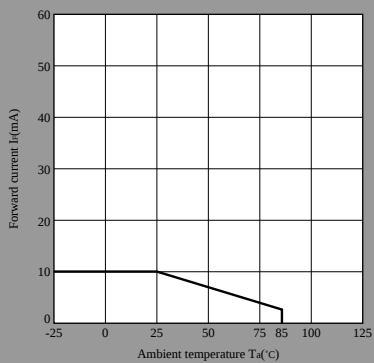
Lens type	Model No.	Forward voltage VF(V)		Peak emission wavelength λp(nm)		Luminous intensity Iv(mcd)		Spectrum radiation bandwidth Δλ(nm)		Reverse current IR(μA)		Terminal capacitance Ct(pF)		Page for characteristics diagrams
		TYP	MAX	TYP	IF (mA)	TYP	IF (mA)	TYP	IF (mA)	MAX	VR (V)	TYP	(MHz)	
Colored diffusion	LT3P31W	1.9	2.3	695	5	1.5	5	100	5	10	4	55	1	→
	LT3D31W	2.0	2.8	635	20	11.0	20	35	20	10	4	20	1	→
	LT3S31W	2.0	2.8	610	20	15.0	20	35	20	10	4	15	1	→
	LT3H31W	2.0	2.8	585	20	15.0	20	30	20	10	4	35	1	→
	LT3E31W	2.1	2.8	565	20	18.0	20	30	20	10	4	35	1	→
	LT3K31W	2.1	2.8	555	20	6.0	20	25	20	10	4	40	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/>)

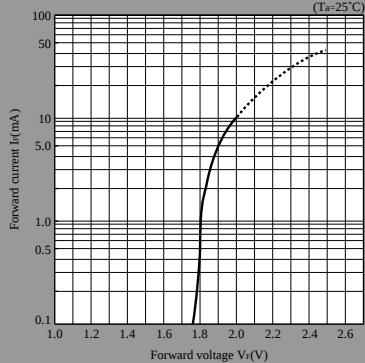
LED Lamp Characteristics Diagrams

PR series

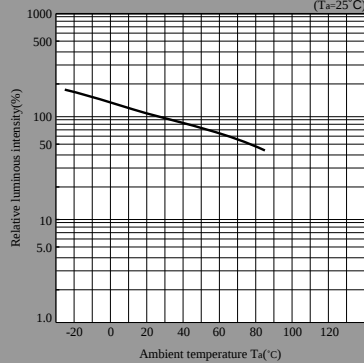
Forward Current Derating Curve



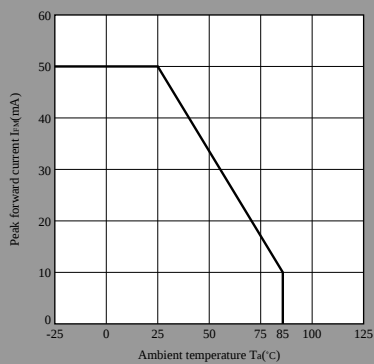
Forward Current vs. Forward Voltage(Note)



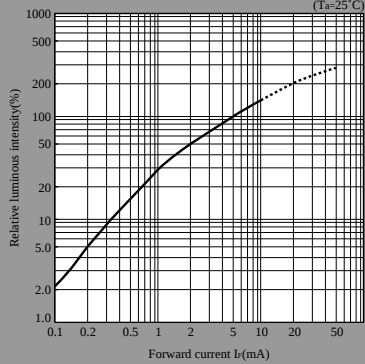
Luminous Intensity vs. Ambient Temperature(Note)



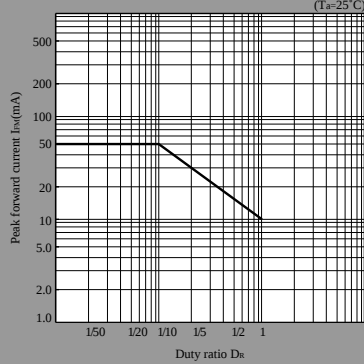
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

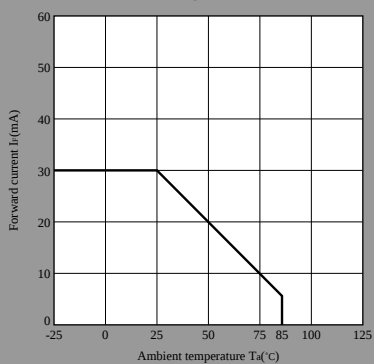


Duty Ratio vs. Peak Forward Current

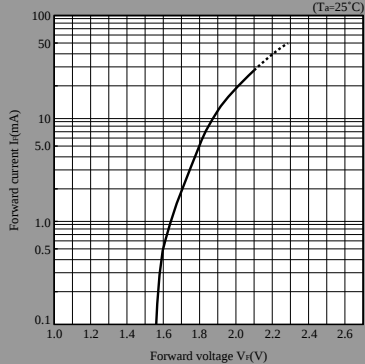


HD series

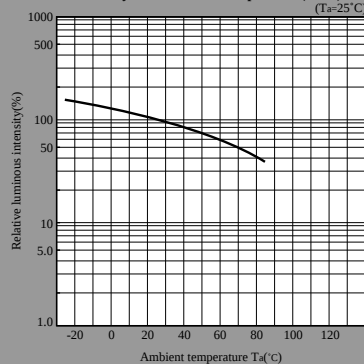
Forward Current Derating Curve



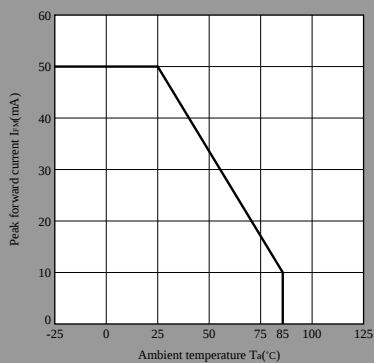
Forward Current vs. Forward Voltage(Note)



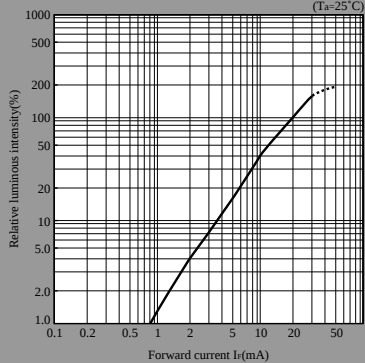
Luminous Intensity vs. Ambient Temperature(Note)



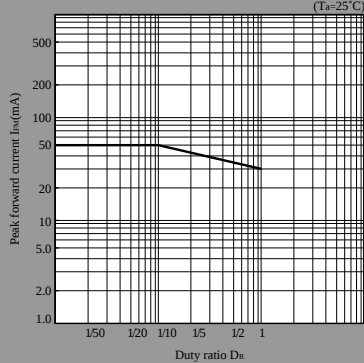
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



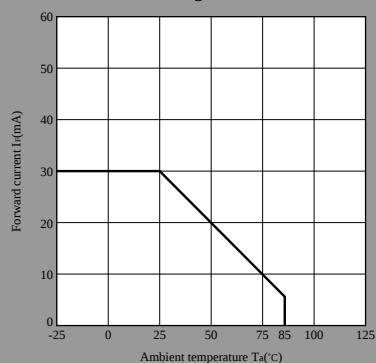
Note) Characteristics shown in diagrams are typical values. (not assurance value)

(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/>)

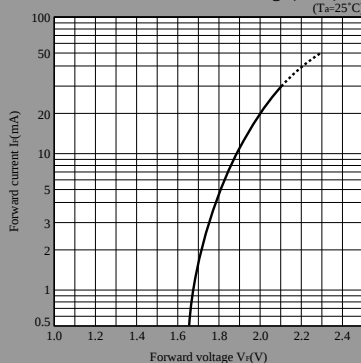
LED Lamp Characteristics Diagrams

HS series

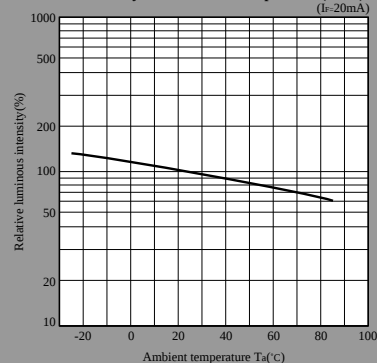
Forward Current Derating Curve



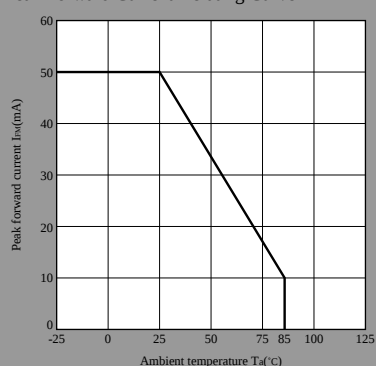
Forward Current vs. Forward Voltage(Note)



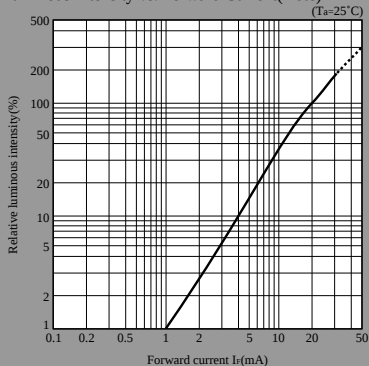
Luminous Intensity vs. Ambient Temperature(Note)



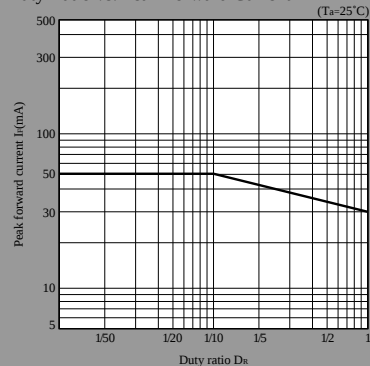
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

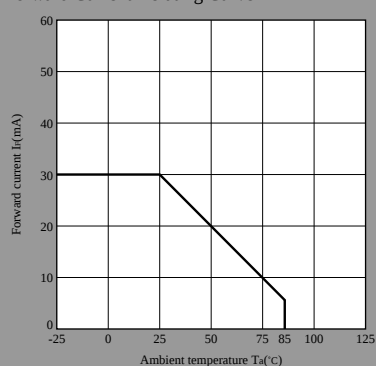


Duty Ratio vs. Peak Forward Current

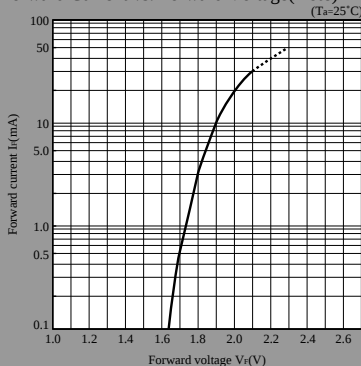


HY series

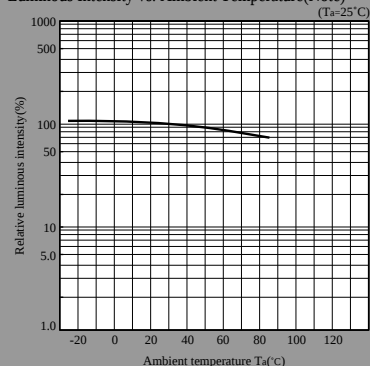
Forward Current Derating Curve



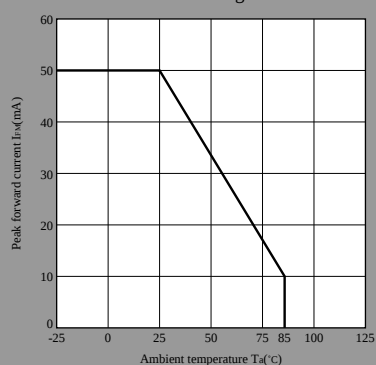
Forward Current vs. Forward Voltage(Note)



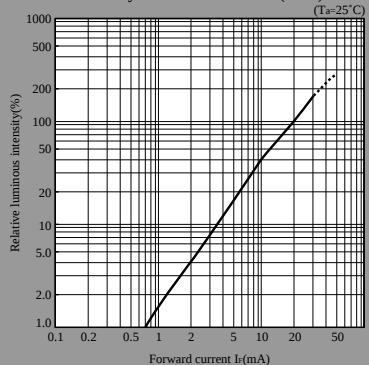
Luminous Intensity vs. Ambient Temperature(Note)



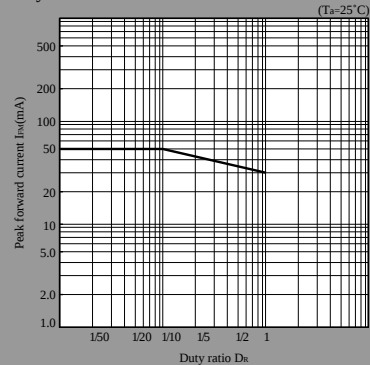
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current

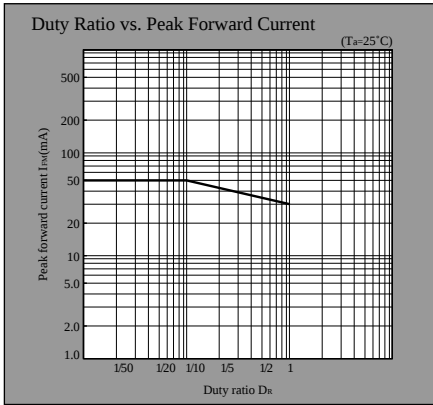
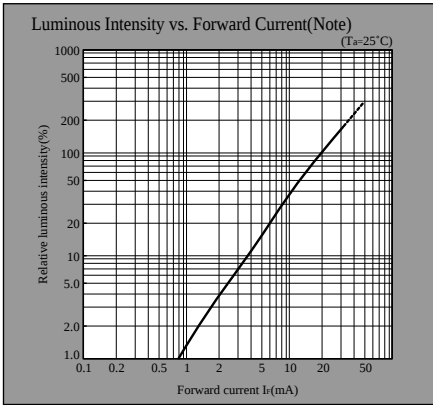
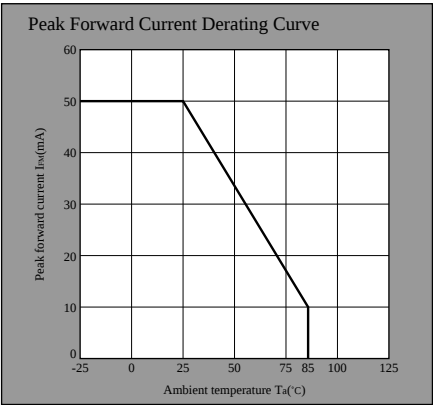
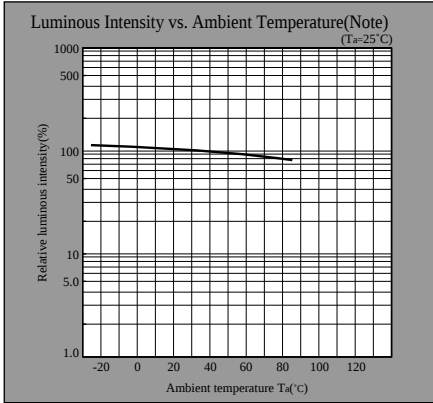
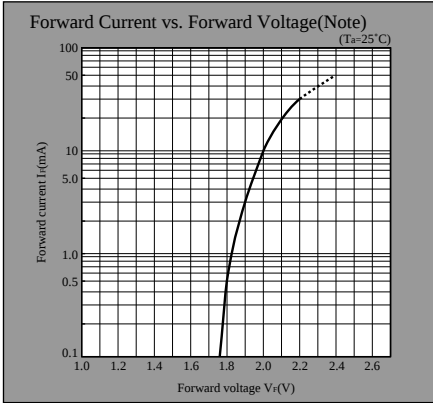
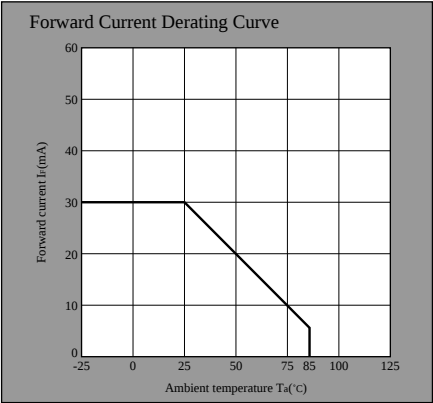


Note) Characteristics shown in diagrams are typical values. (not assurance value)

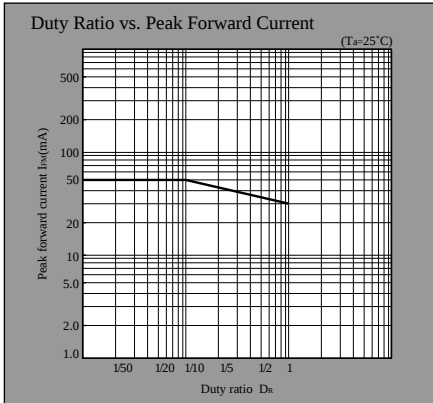
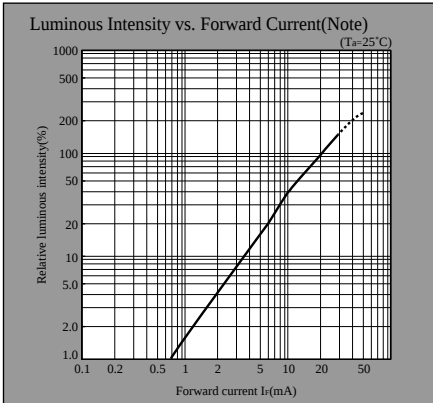
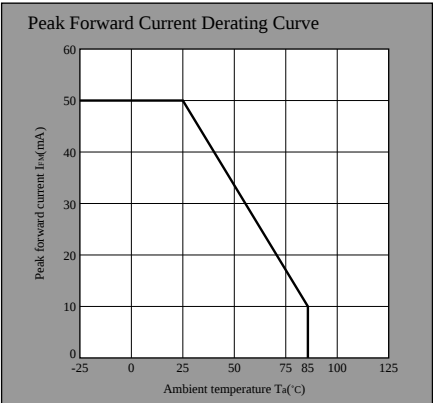
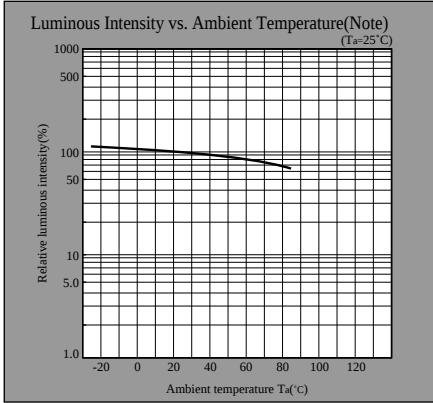
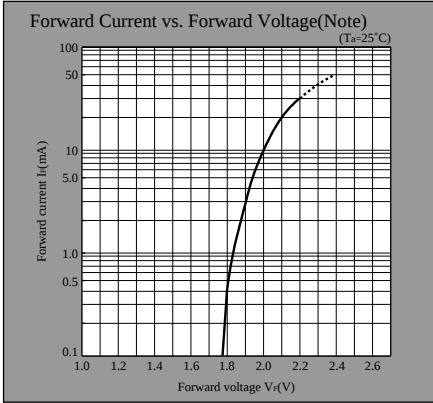
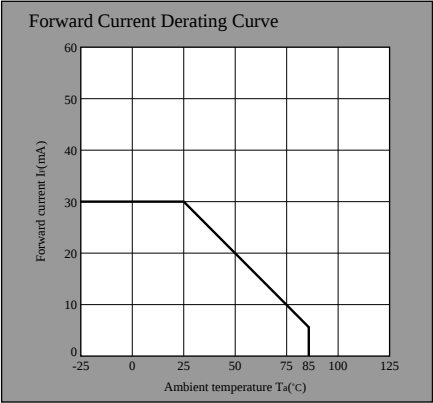
- (Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP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

LED Lamp Characteristics Diagrams

EG series



KG 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/>)