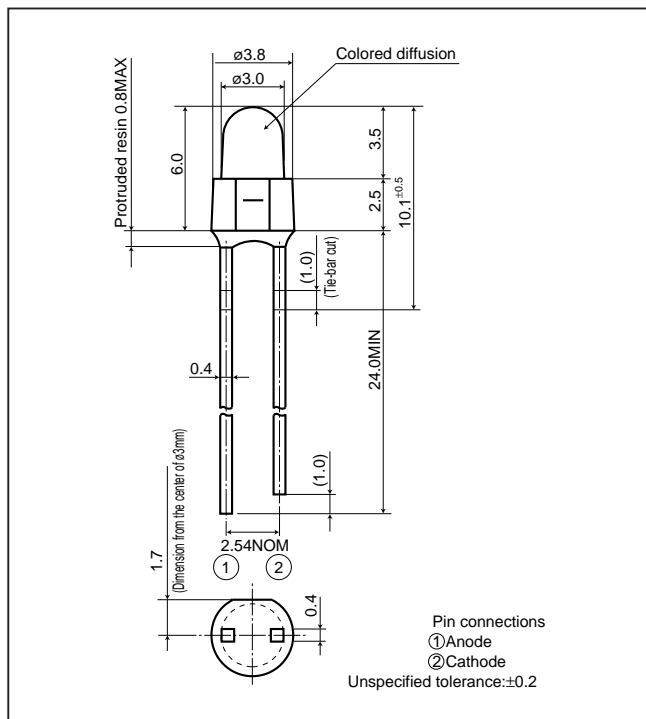


# LT3□31W series

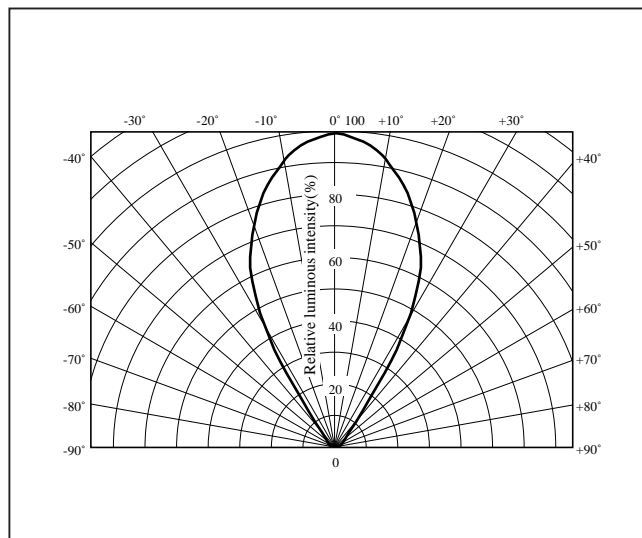
ø3mm(T-1), Cylinder Type(Thick Flange),  
Colored Diffusion, Tape-packaged LED  
Lamps for Surface Mount

## Outline Dimensions

(Unit : mm)



## Radiation Diagram

(T<sub>a</sub>=25°C)

## 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				
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

(T<sub>a</sub>=25°C)

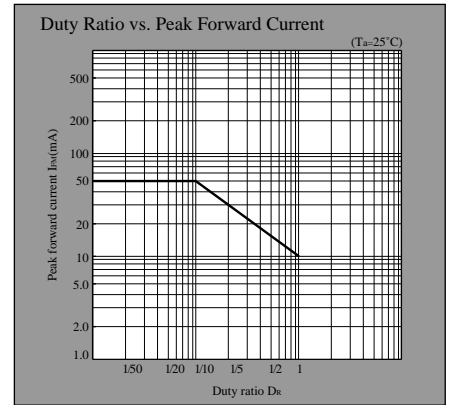
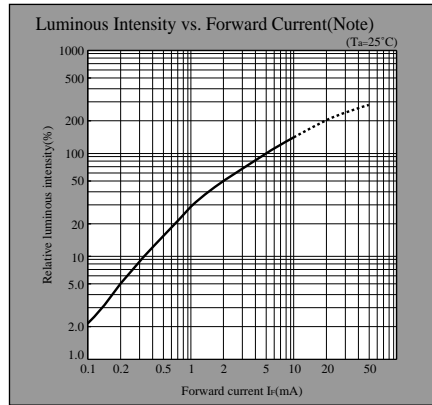
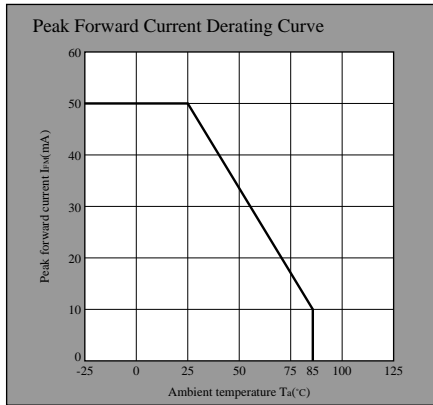
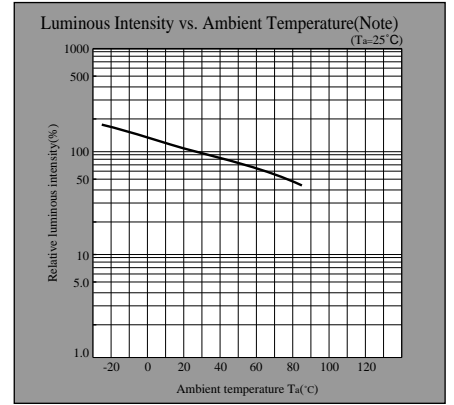
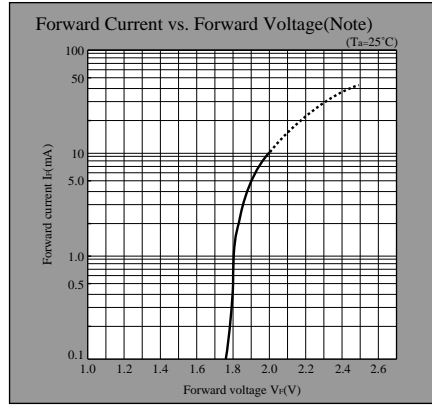
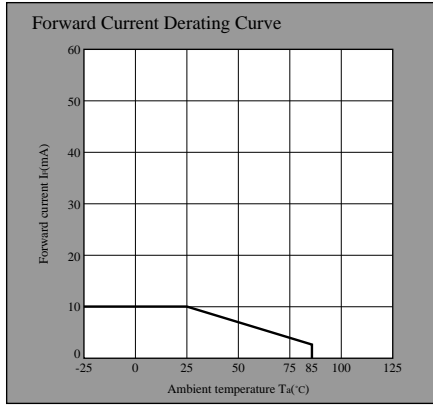
Lens type	Model No.	Forward voltage V <sub>F</sub> (V)		Peak emission wavelength		Luminous intensity		Spectrum radiation bandwidth		Reverse current		Terminal capacitance		Page for characteristics diagrams
		TYP	MAX	λ <sub>p</sub> (nm) TYP	I <sub>F</sub> (mA)	I <sub>v</sub> (mcd) TYP	I <sub>F</sub> (mA)	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	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	→

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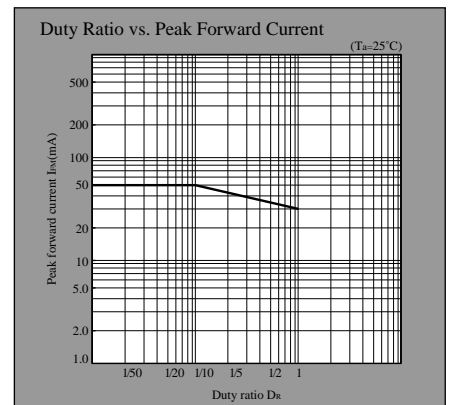
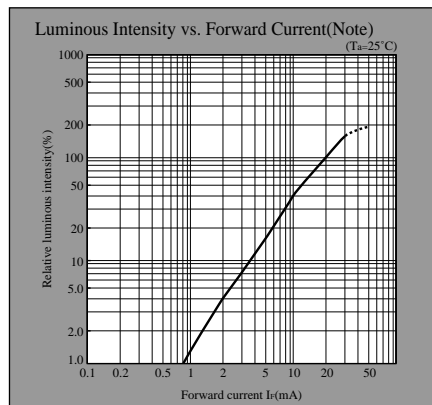
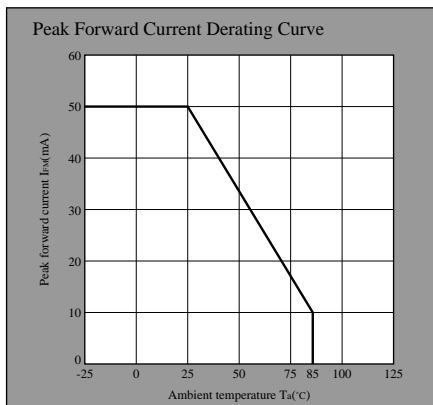
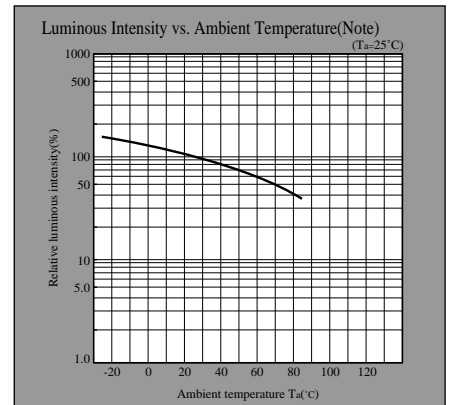
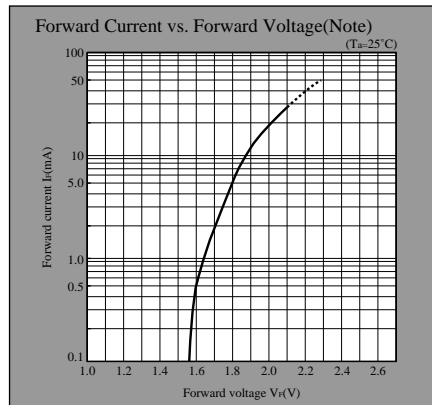
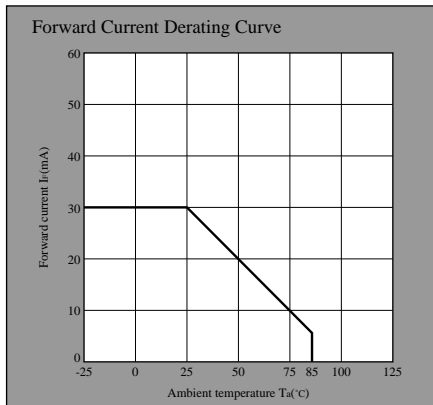
(Internet) • Data for sharp's optoelectronic/power device is provided for internet.(Address <http://www.sharp.co.jp/ecg/>)

# LED Lamp Characteristics Diagrams

## PR series



## HD series

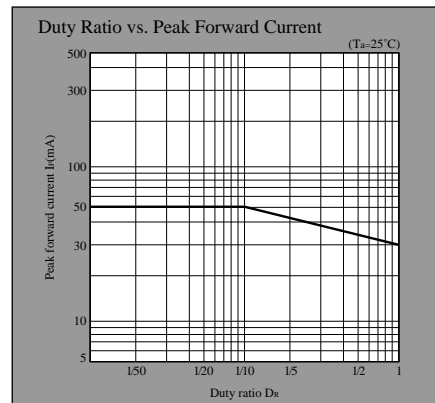
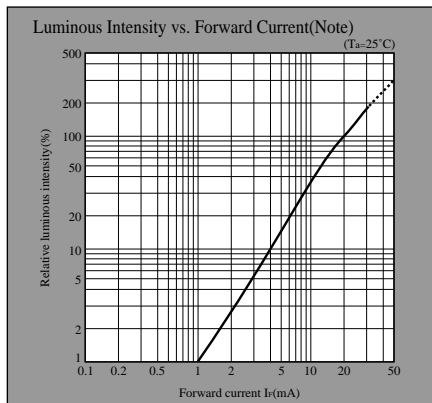
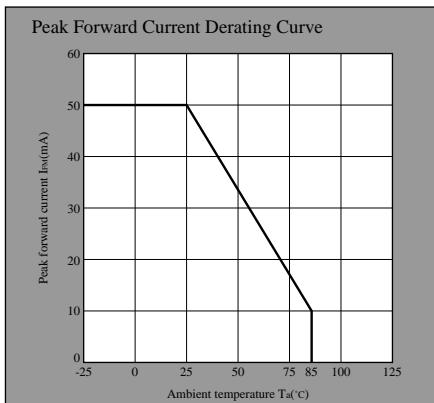
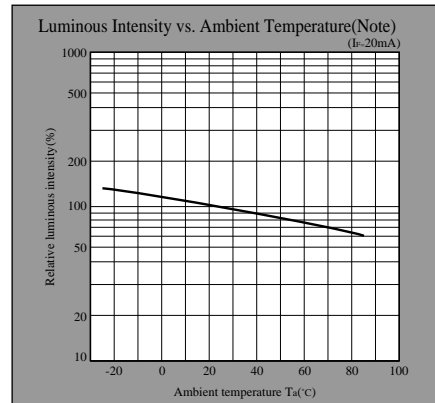
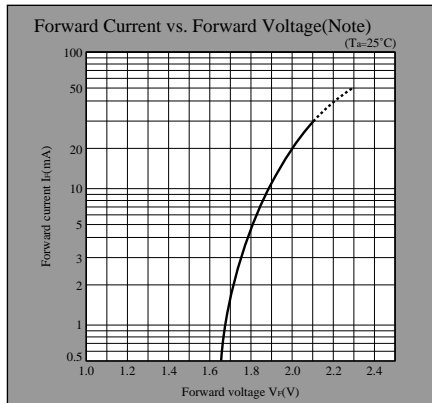
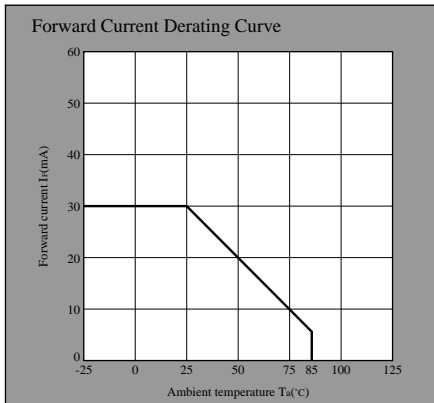


Note) Characteristics shown in diagrams are typical values. (not assurance value)

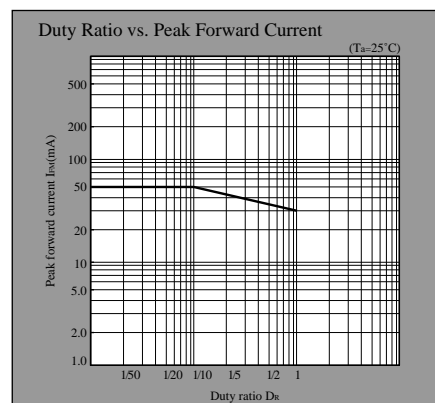
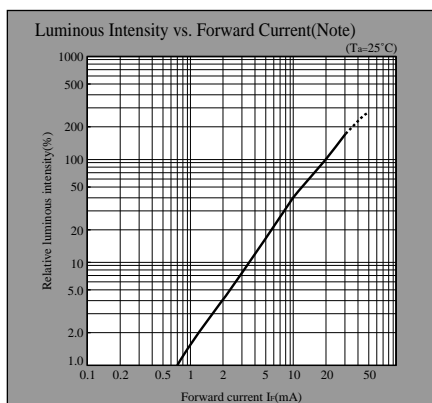
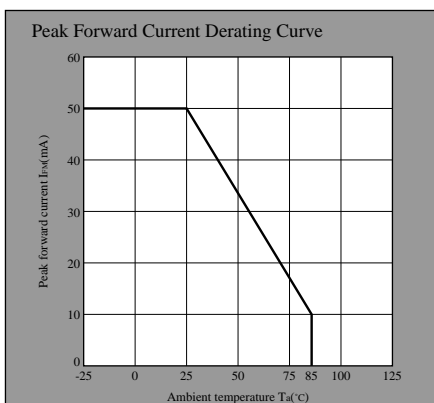
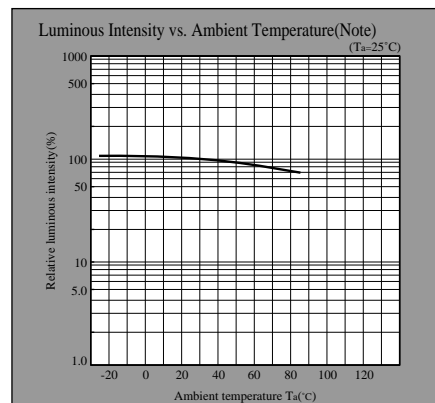
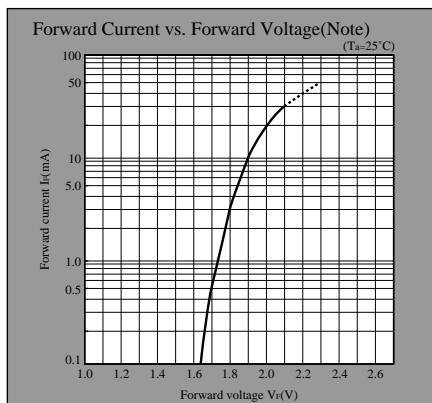
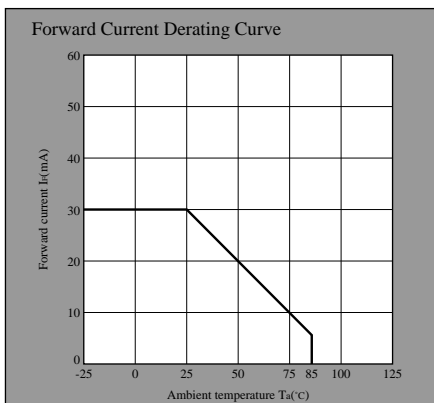
- (Notice) • In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP 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



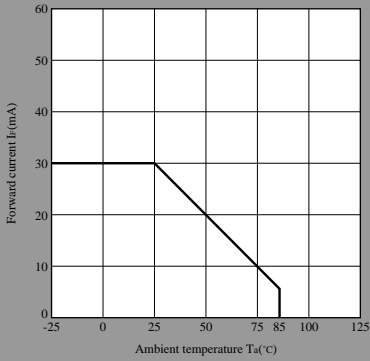
Note) Characteristics shown in diagrams are typical values. (not assurance value)

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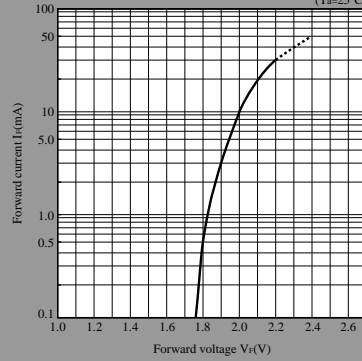
# LED Lamp Characteristics Diagrams

## EG series

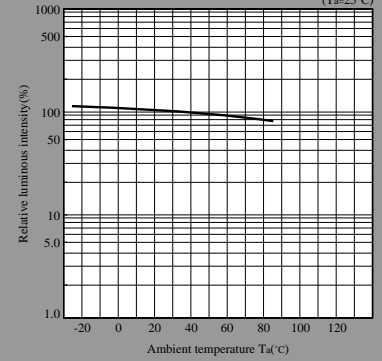
Forward Current Derating Curve



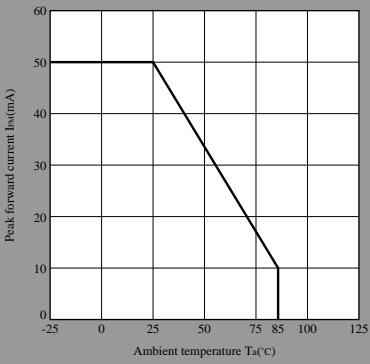
Forward Current vs. Forward Voltage(Note)



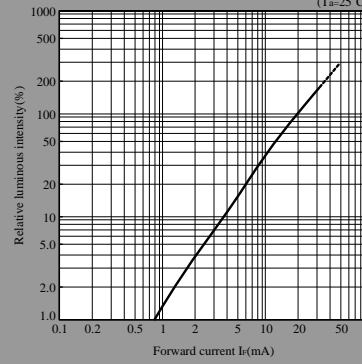
Luminous Intensity vs. Ambient Temperature(Note)



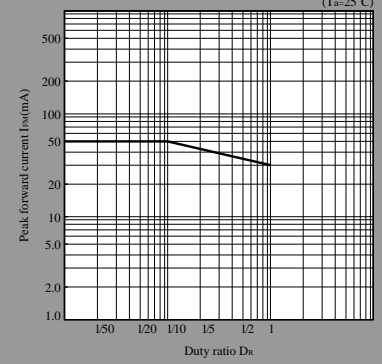
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

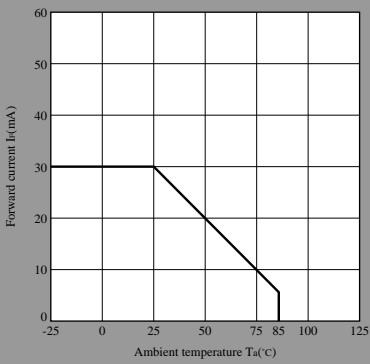


Duty Ratio vs. Peak Forward Current

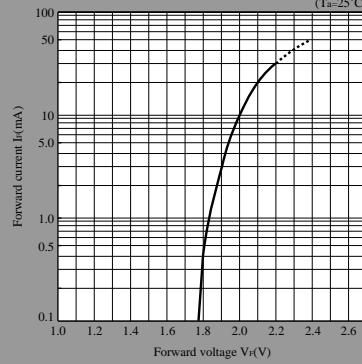


## KG series

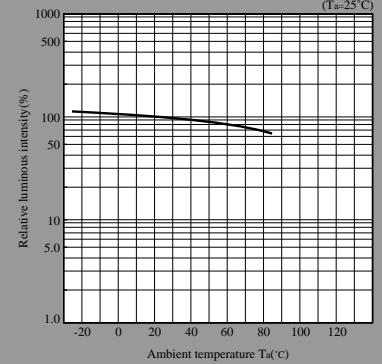
Forward Current Derating Curve



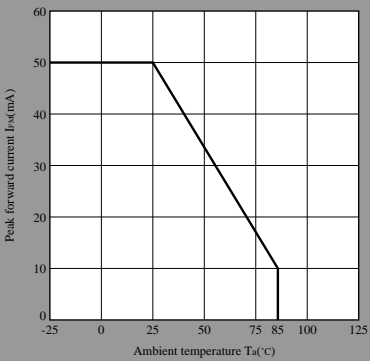
Forward Current vs. Forward Voltage(Note)



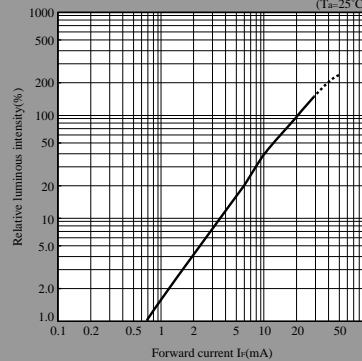
Luminous Intensity vs. Ambient Temperature(Note)



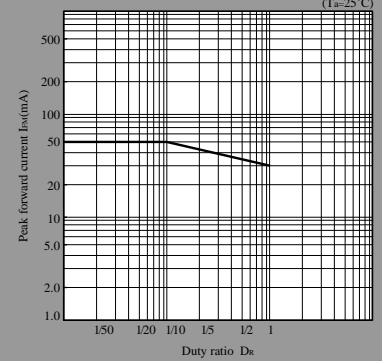
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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