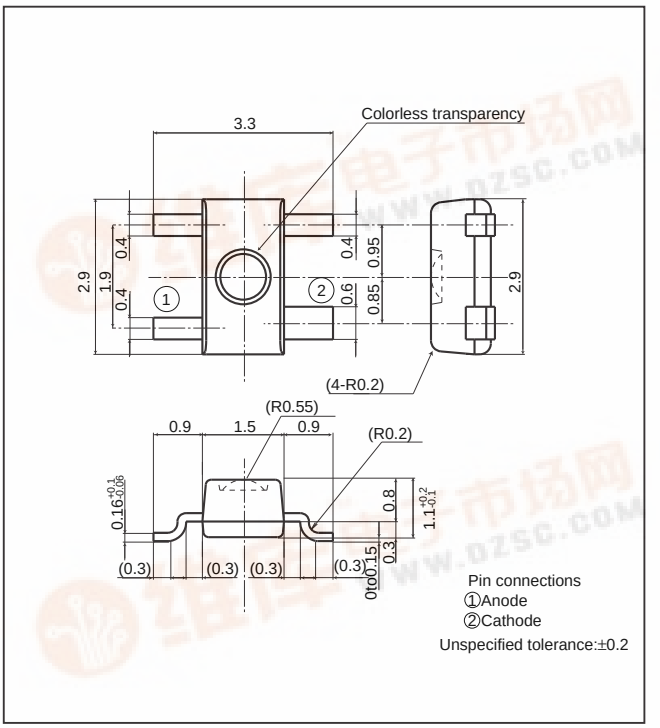
LT1❑82A series

3.3×2.9mm, 1.1mm Thickness, High-luminosity Chip LED Devices with Lens

■ Outline Dimensions

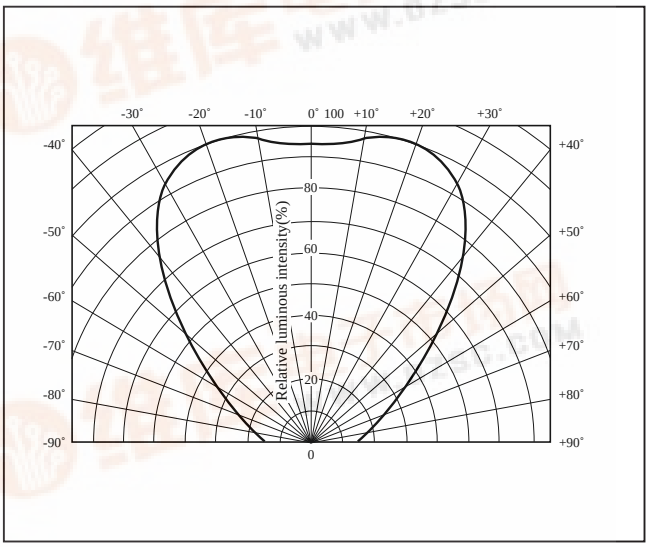
(Unit : mm)



U,T type:Polarity faces in the opposite direction.

■ 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) DC	Derating factor (mA/˚C) Pulse	Reverse voltage VR (V)	Operating temperature Topr (˚C)	Storage temperature Tstg (˚C)	Soldering temperature Tsol*2 (˚C)
LT1U82A	Red(Super-luminosity)	GaAlAs on GaAIAs	75	30	50	0.40	0.67	4	-25 to +85	-25 to +100	350
LT1T82A	Red(High-luminosity)	GaAlAs on GaAs	66	30	50	0.40	0.67	5	-25 to +85	-25 to +100	350
LT1P82A	Red	GaP	23	10	50	0.13	0.67	5	-25 to +85	-25 to +100	350
LT1D82A	Red	GaAsP on GaP	85	30	50	0.40	0.67	5	-25 to +85	-25 to +100	350
LT1S82A	Sunset orange	GaAsP on GaP	85	30	50	0.40	0.67	5	-25 to +85	-25 to +100	350
LT1H82A	Yellow	GaAsP on GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	350
LT1E82A	Yellow-green	GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	350
LT1K82A	Green	GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	350

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

*2 For 3s or less at the temperature of hand soldering. Temperature of reflow soldering is shown on the below page.

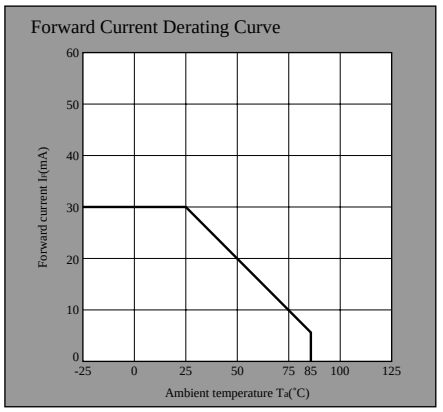
■ Electro-optical Characteristics

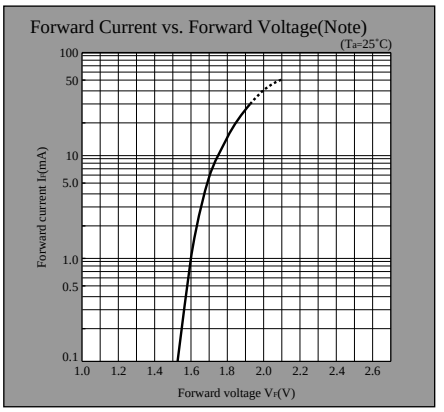
(Ta=25˚C)

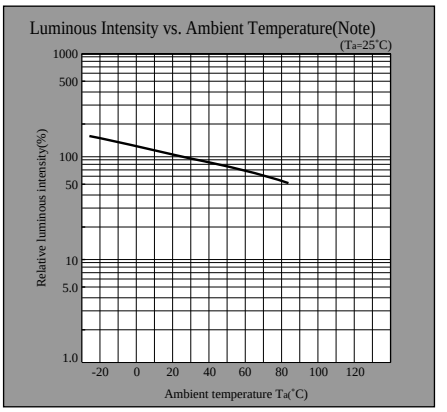
Lens type	Model No.	Forward voltage VF(V) TYP	Forward voltage VF(V) MAX	Peak emission wavelength λp(nm) TYP	Peak emission wavelength IF (mA)	Luminous intensity Iv(mcd) TYP	Luminous intensity IF (mA)	Spectrum radiation bandwidth Δλ(nm) TYP	Spectrum radiation bandwidth IF (mA)	Reverse current IR(μA) MAX	Reverse current VR (V)	Terminal capacitance Ct(pF) TYP	Terminal capacitance (MHz)	Page for characteristics diagrams
Colorless transparency	LT1U82A	1.85	2.5	660	20	54.0	20	20	20	100	3	25	1	→
	LT1T82A	1.75	2.2	660	20	13.1	20	20	20	10	4	30	1	→
	LT1P82A	1.9	2.3	695	5	1.6	5	100	5	10	4	55	1	→
	LT1D82A	2.0	2.8	635	20	14.4	20	35	20	10	4	20	1	→
	LT1S82A	2.0	2.8	610	20	11.7	20	35	20	10	4	15	1	→
	LT1H82A	1.9	2.5	585	10	5.6	10	30	10	10	4	35	1	→
	LT1E82A	1.95	2.5	565	10	7.8	10	30	10	10	4	35	1	→
	LT1K82A	1.95	2.5	555	10	2.7	10	25	10	10	4	40	1	→

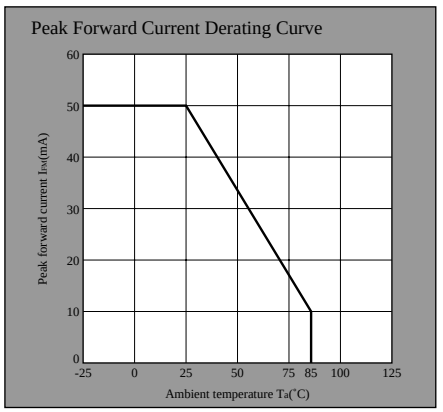
LED Lamp Characteristics Diagrams

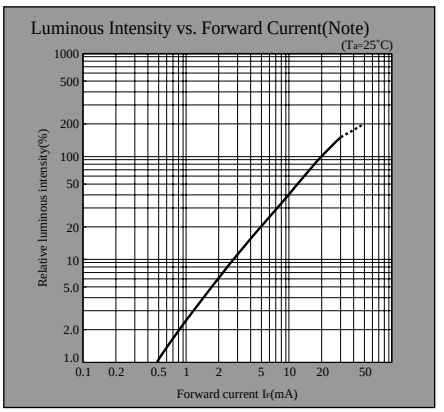
UR series

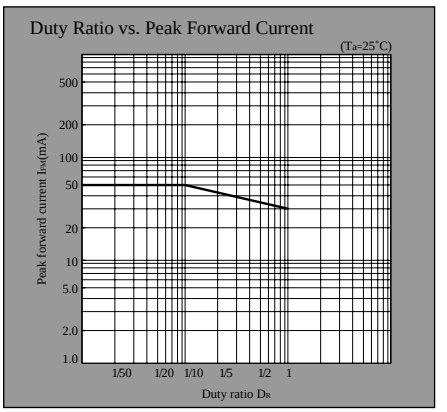




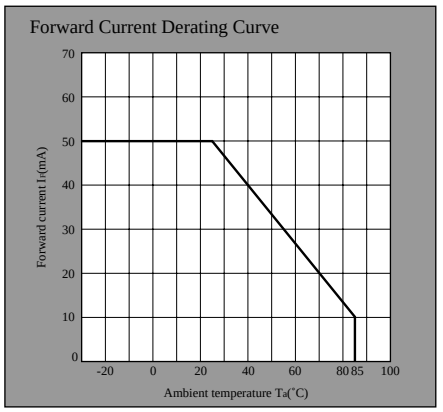


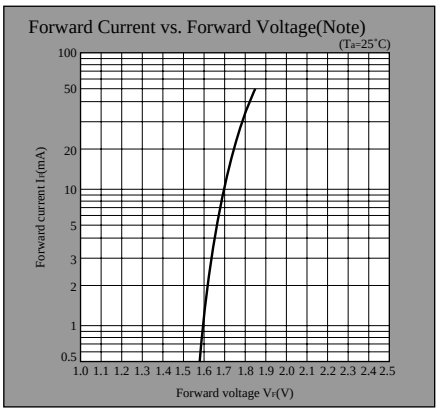


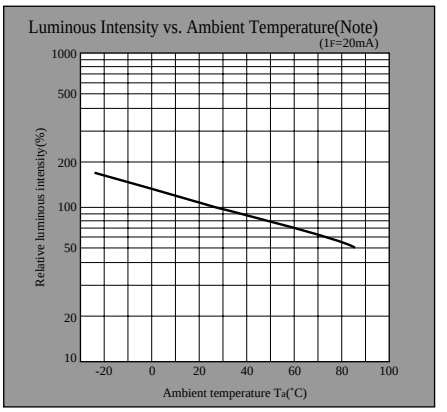


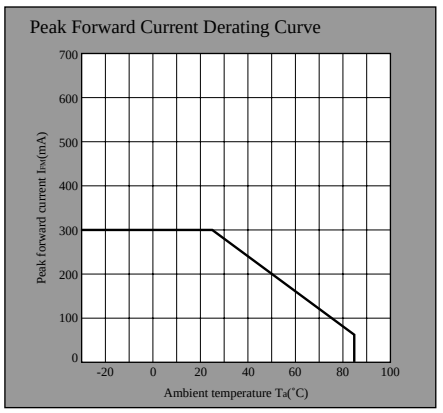


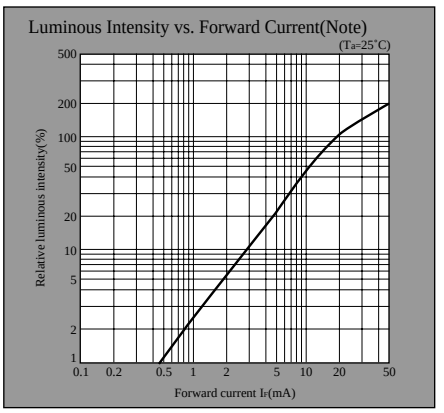
TR series

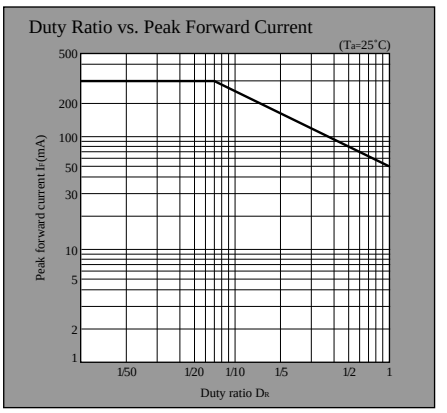








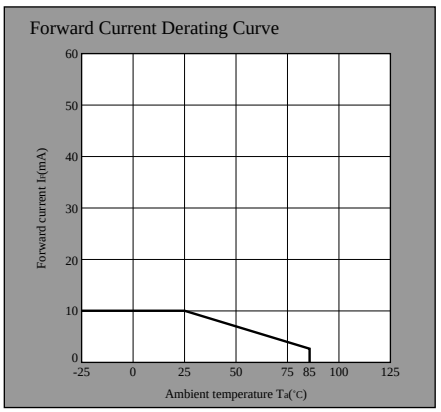


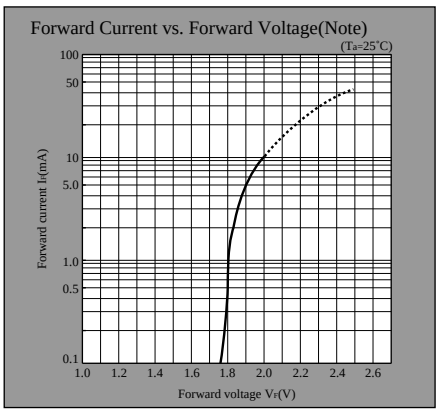


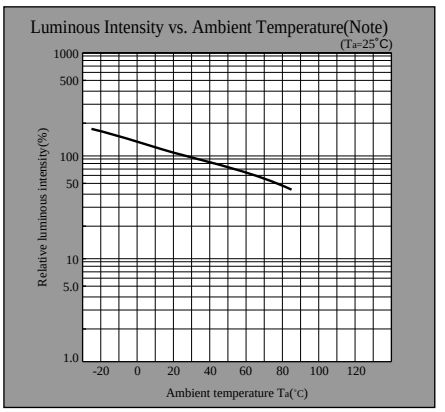
Note)Characteristics shown in diagrams are typical values. (not assurance value)

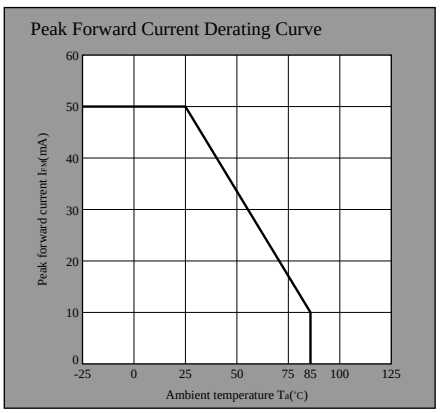
LED Lamp Characteristics Diagrams

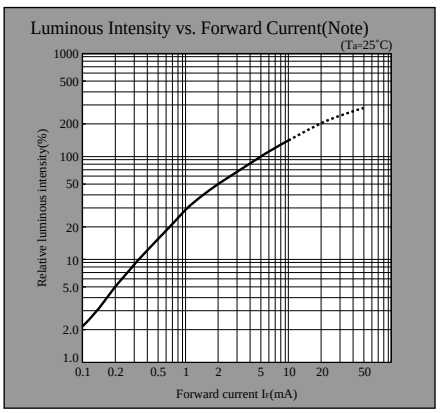
PR series

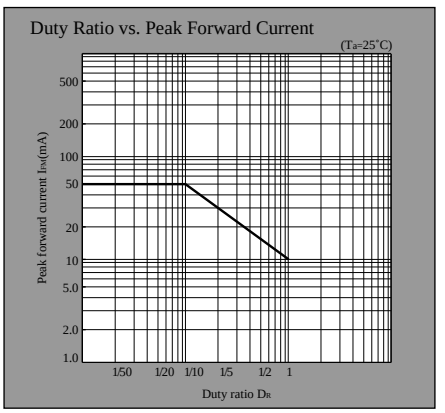




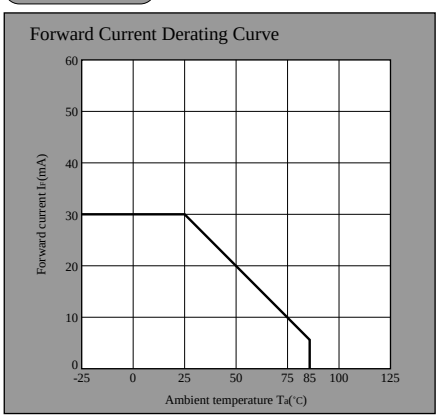


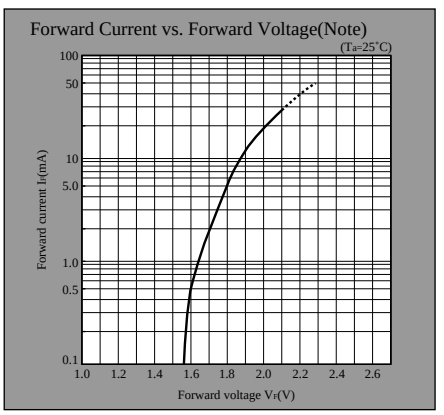


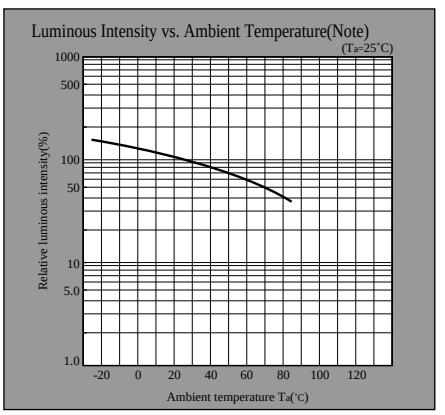


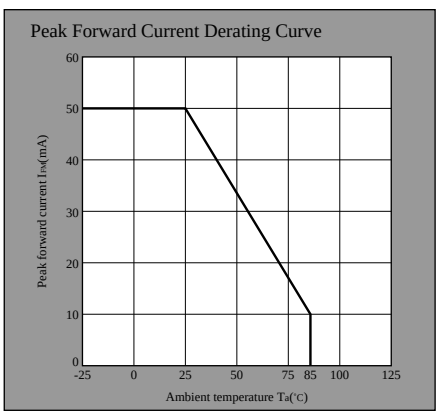


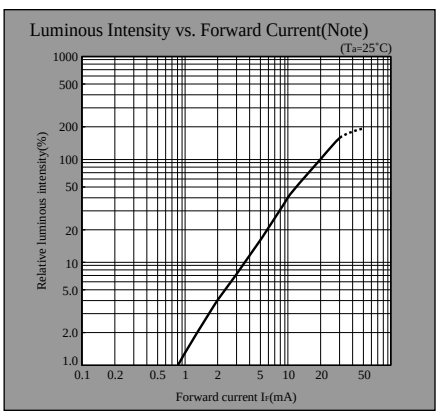
HD series

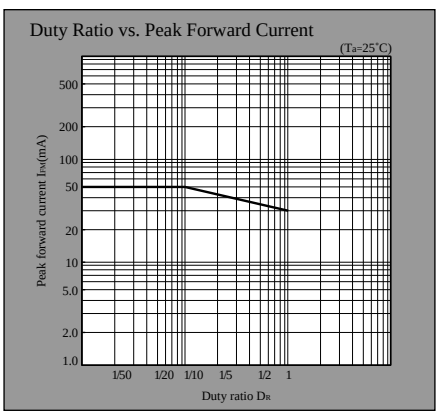












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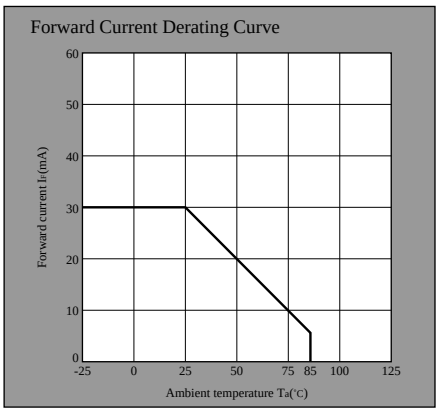
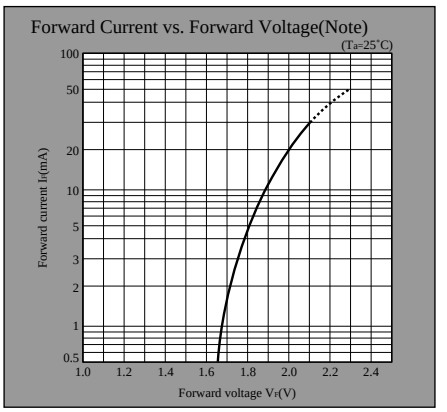
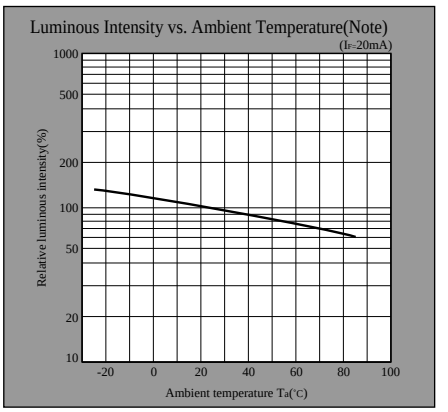
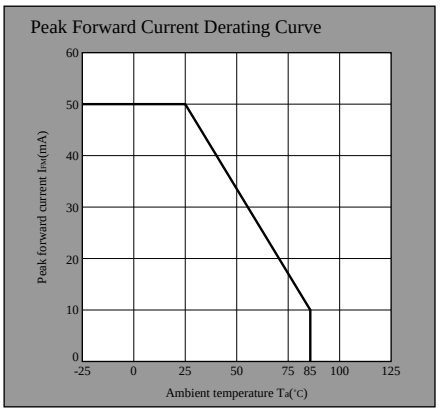
LED Lamp Characteristics Diagrams

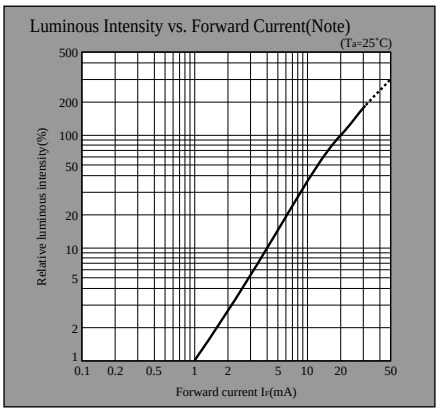
HS series

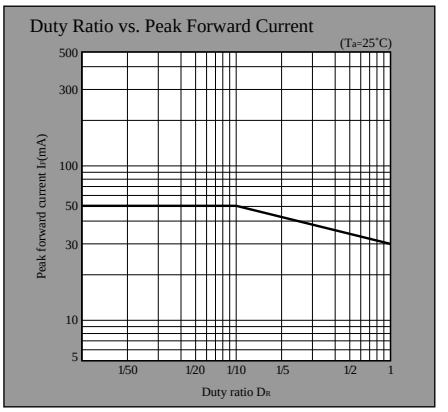




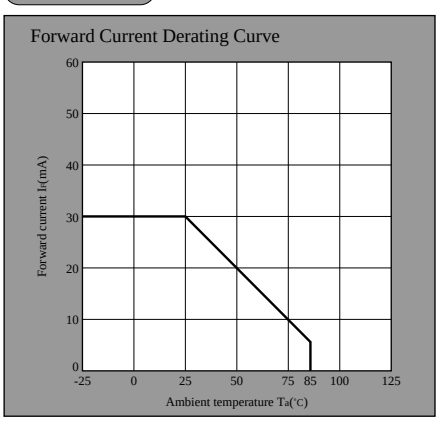


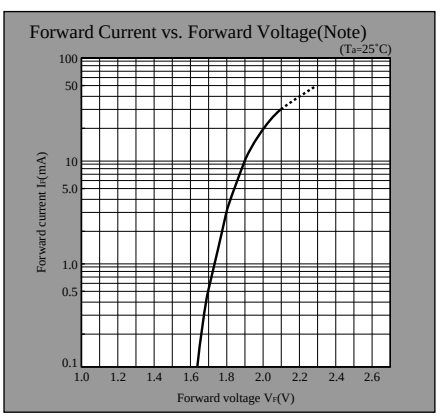


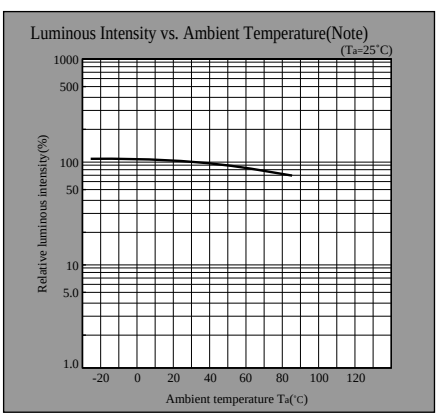


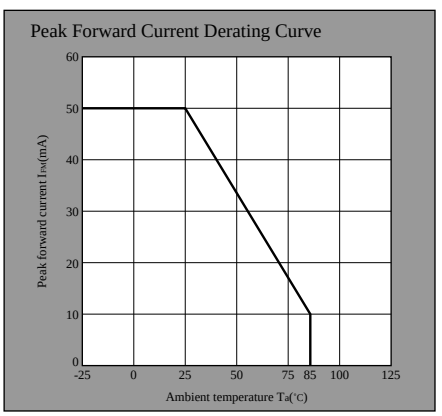


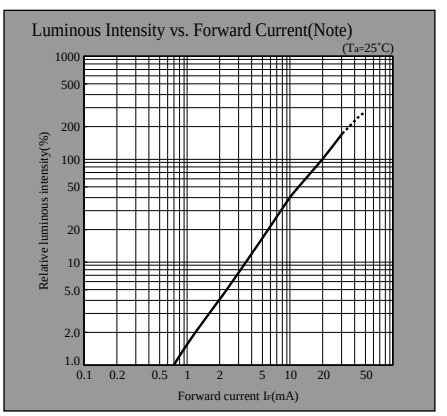
HY series

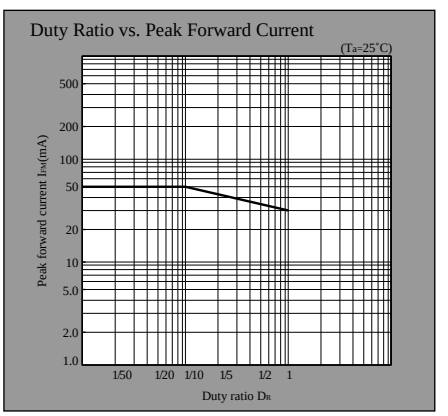












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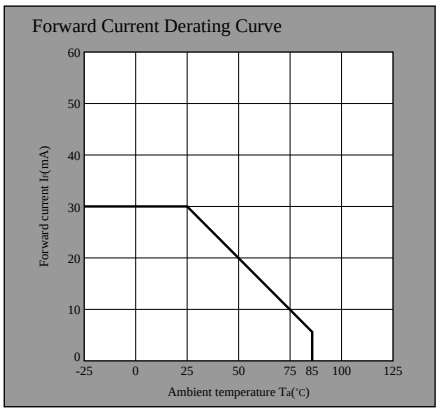
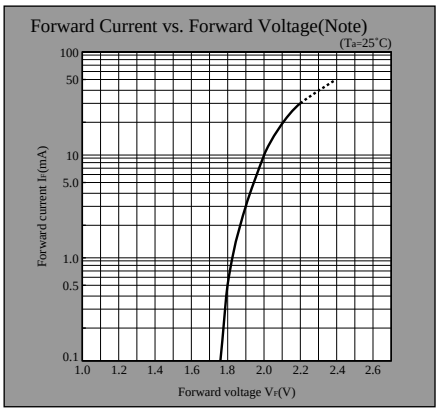
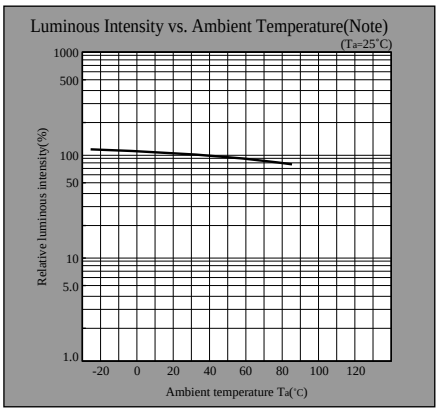
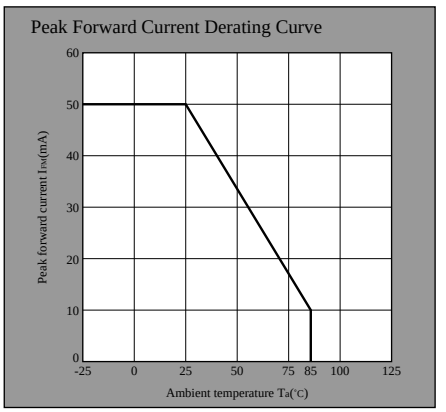
LED Lamp Characteristics Diagrams

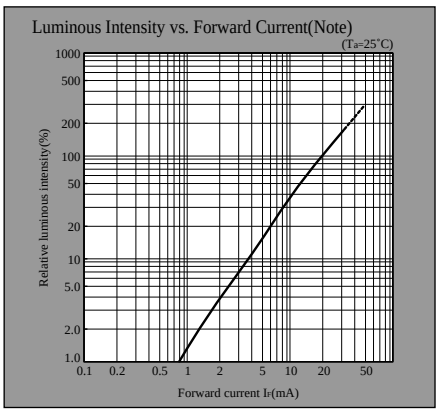
EG series

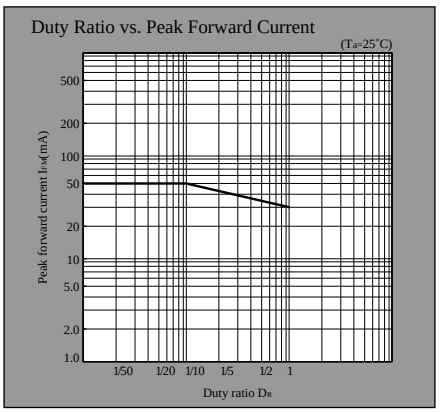




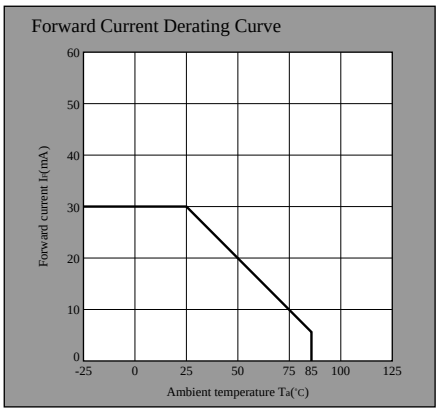


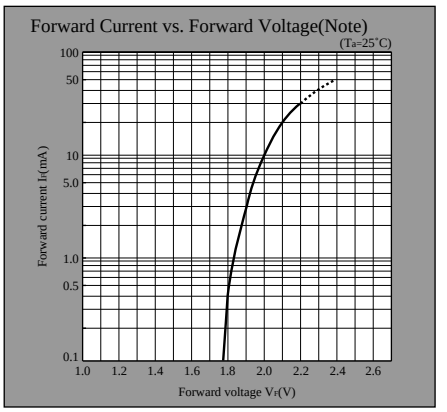


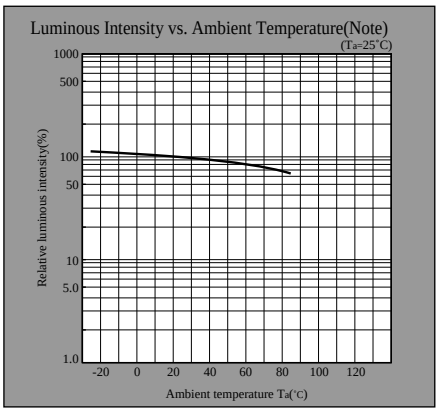


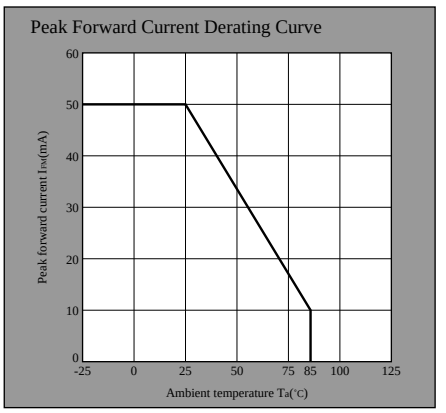


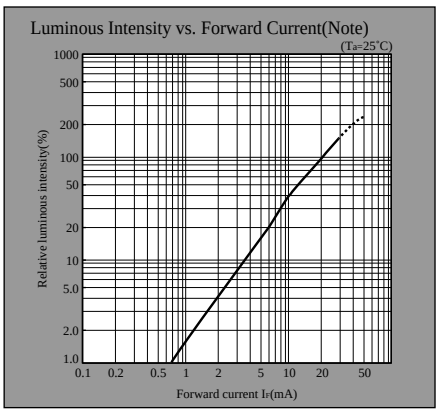
KG series

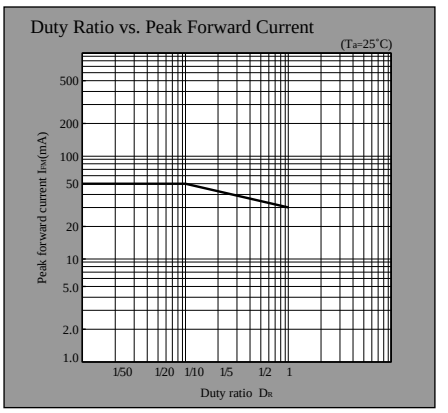












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