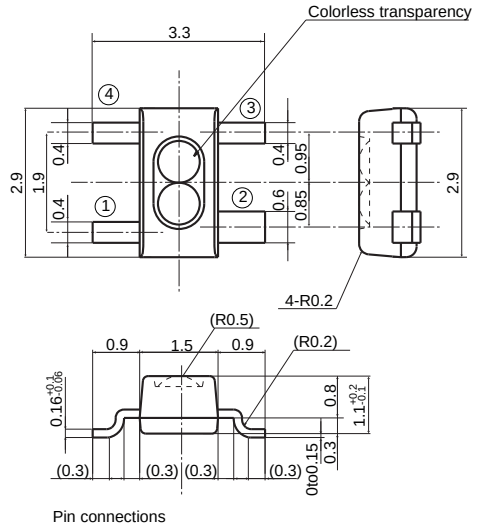
LT1❑❑82A series

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

■ Outline Dimensions

(Unit : mm)



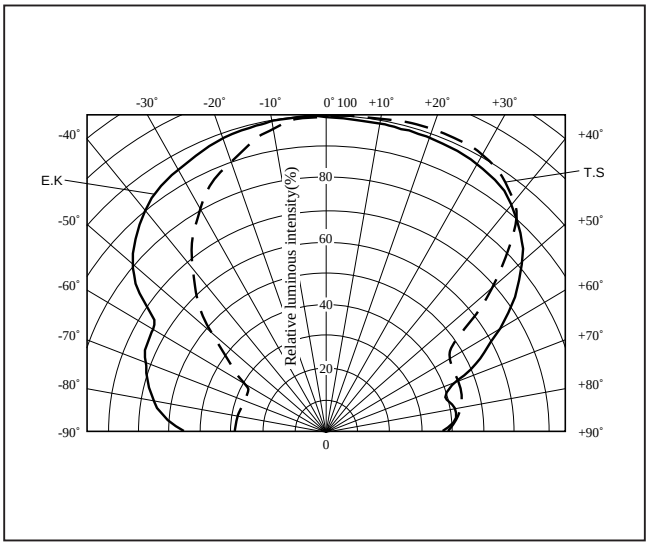
Pin connections

Pin \ series	ET	KS
1 Anode	Red (HL)	Sunset orange
2 Cathode		
3 Cathode	Yellow-green	Green
4 Anode		

Unspecified tolerance:±0.2

■ Radiation Diagram

(Ta=25˚C)



■ Absolute Maximum Ratings*

(Ta=25˚C)

Model No.	Radiation color	Radiation material	Power dissipation P (mW)	Forward current I_F (mA)	Peak forward current I_{FM}*1 (mA)	Derating factor (mA/˚C) DC	Derating factor (mA/˚C) Pulse	Reverse voltage V_R (V)	Operating temperature T_{opr} (˚C)	Storage temperature T_{stg} (˚C)	Soldering temperature T_{sol}*2 (˚C)
LT1ET82A	Yellow-green	GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	350
	Red(High-luminosity)	GaAIAs on GaAs	66	30	50	0.40	0.67	5	-25 to +85	-25 to +100	350
LT1KS82A	Green	GaP	50	20	50	0.27	0.67	5	-25 to +85	-25 to +100	350
	Sunset orange	GaAsP on GaP	85	30	50	0.40	0.67	5	-25 to +85	-25 to +100	350

* 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.

*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

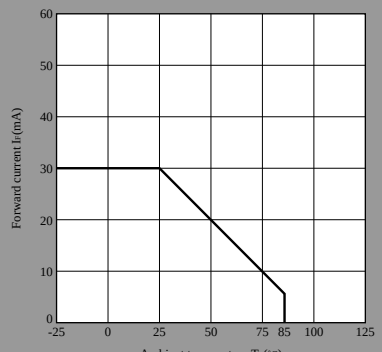
(Ta=25˚C)

Lens type	Model No.	Radiation color	Forward voltage V_F(V) TYP	Forward voltage V_F(V) MAX	Peak emission wavelength λ_p(nm) TYP	Peak emission wavelength I_F (mA)	Luminous intensity I_V(mcd) TYP	Luminous intensity I_F (mA)	Spectrum radiation bandwidth Δλ(nm) TYP	Spectrum radiation bandwidth I_F (mA)	Reverse current I_R(μA) MAX	Reverse current V_R (V)	Terminal capacitance C_t(pF) TYP	Terminal capacitance (MHz)	Page for characteristics diagrams
Colorless transparency	LT1ET82A	Yellow-green	1.95	2.5	565	10	7.0	10	30	10	10	4	35	1	→
		Red(High-luminosity)	1.75	2.2	660	20	11.8	20	20	20	10	4	30	1	→
	LT1KS82A	Green	1.95	2.5	555	10	2.4	10	25	10	10	4	40	1	→
		Sunset orange	2.0	2.8	610	20	10.5	20	35	20	10	4	15	1	→

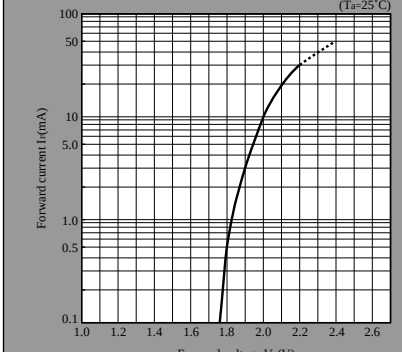
LED Lamp Characteristics Diagrams

EG series

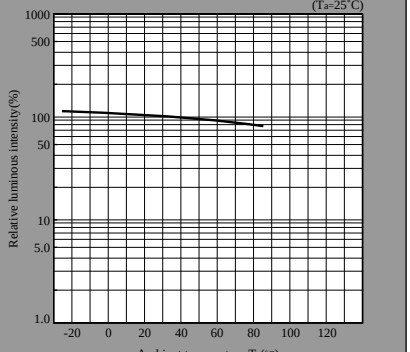
Forward Current Derating Curve



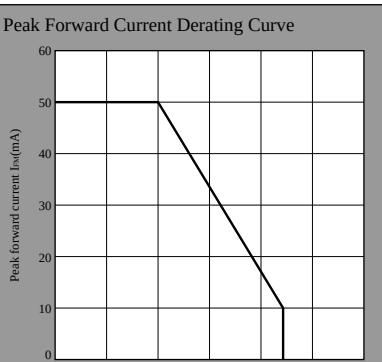
Forward Current vs. Forward Voltage(Note)



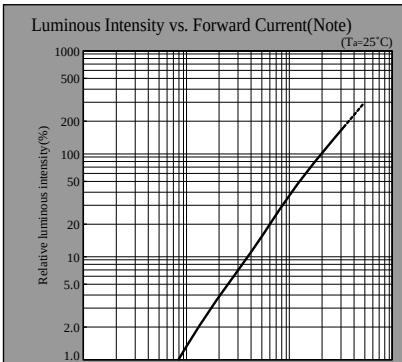
Luminous Intensity vs. Ambient Temperature(Note)



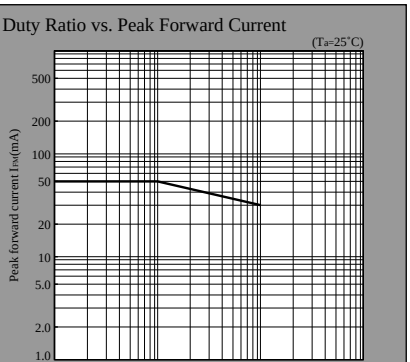
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)

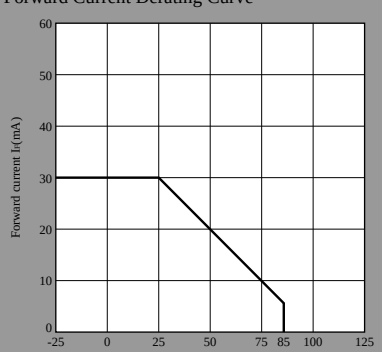


Duty Ratio vs. Peak Forward Current

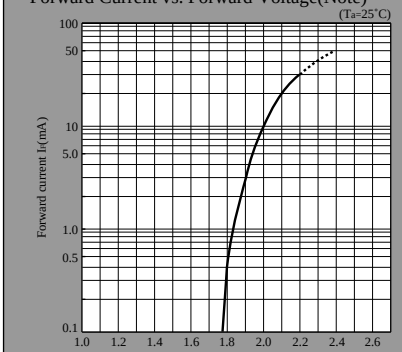


KG series

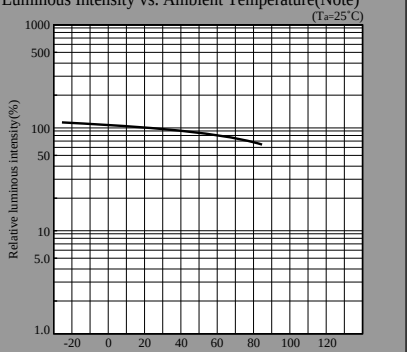
Forward Current Derating Curve



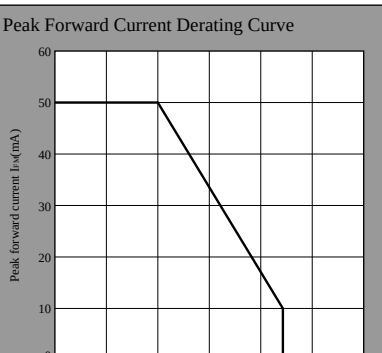
Forward Current vs. Forward Voltage(Note)



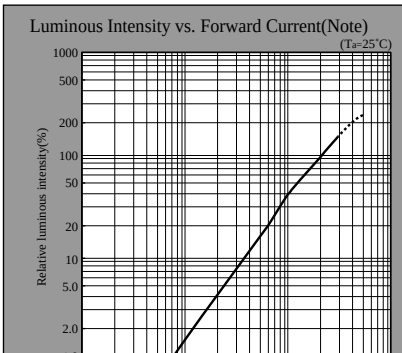
Luminous Intensity vs. Ambient Temperature(Note)



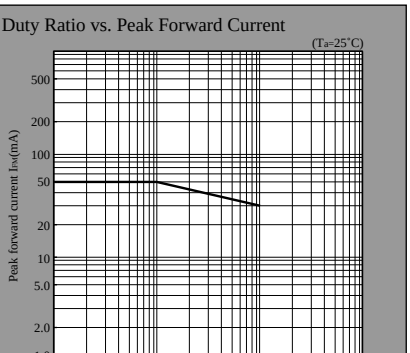
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



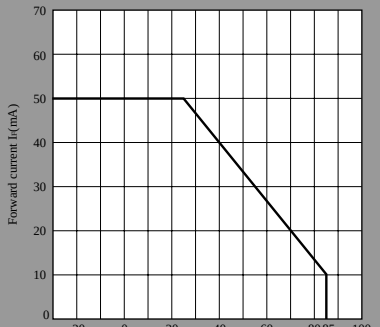
Duty Ratio vs. Peak Forward Current



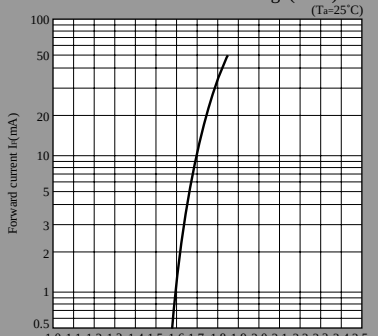
Note)Characteristics shown in diagrams are typical values. (not assurance value)

TR series

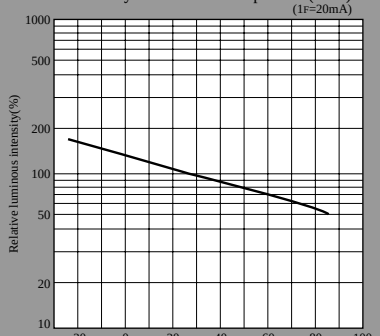
Forward Current Derating Curve



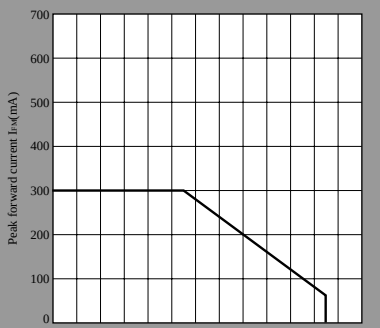
Forward Current vs. Forward Voltage(Note)



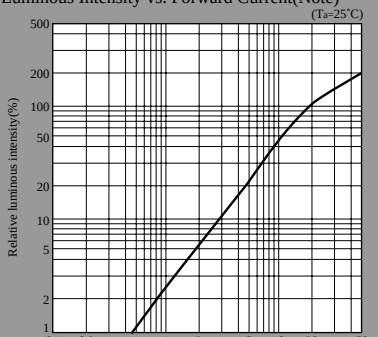
Luminous Intensity vs. Ambient Temperature(Note)



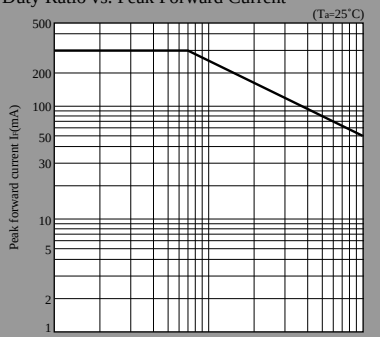
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



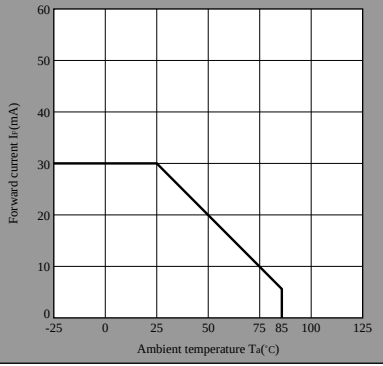
Duty Ratio vs. Peak Forward Current



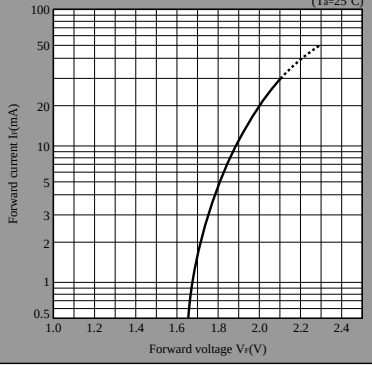
Note)Characteristics shown in diagrams are typical values. (not assurance value)

HS series

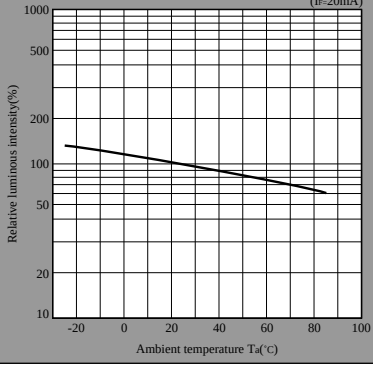
Forward Current Derating Curve



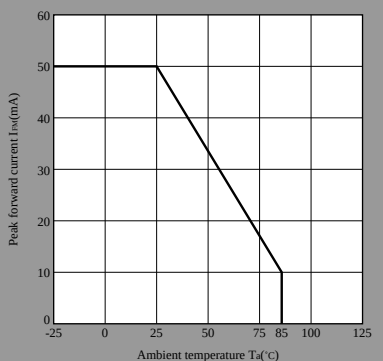
Forward Current vs. Forward Voltage(Note)



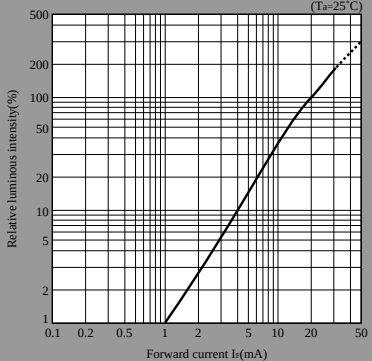
Luminous Intensity vs. Ambient Temperature(Note)



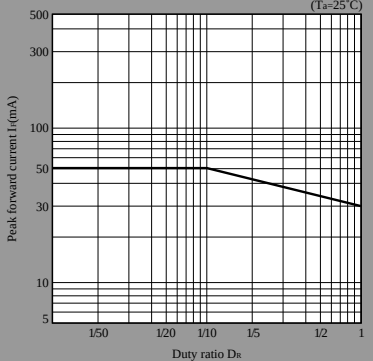
Peak Forward Current Derating Curve



Luminous Intensity vs. Forward Current(Note)



Duty Ratio vs. Peak Forward Current



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