

Features

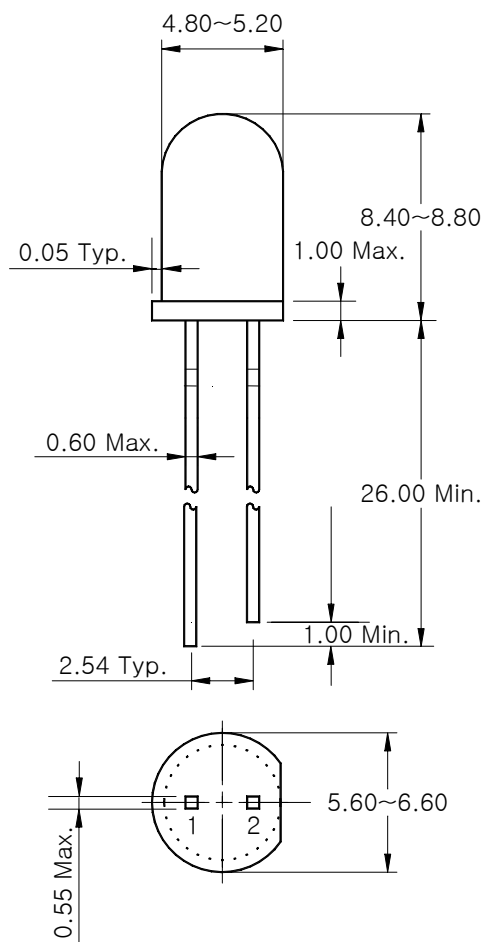
- Colorless transparency lens type
- $\phi 5\text{mm}$ (T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Massage Board

Outline Dimensions

unit : mm



PIN Connections

1. Anode
2. Cathode

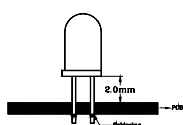
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	70	mW
Forward current	I_F	30	mA
*1 Peak forward current	I_{FP}	65	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25~85	°C
Storage temperature range	T_{stg}	-30~100	°C
*2 Soldering temperature	T_{sol}	260°C for 10 seconds	

*1. Duty ratio = 1/16, Pulse width = 0.1ms

*2. Keep the distance more than 2.0mm from PCB to the bottom of LED package



Electrical / Optical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	$I_F = 20\text{mA}$	1.9	-	2.4	V
*4 Luminous intensity	I_V	$I_F = 20\text{mA}$	3400	-	8910	mcd
Peak wavelength	λ_D	$I_F = 20\text{mA}$	615	620	625	nm
Spectrum bandwidth	$\Delta\lambda$	$I_F = 20\text{mA}$	-	30	-	nm
Reverse current	I_R	$V_R = 4\text{V}$	-	-	10	uA
*3 Half angle	$\theta_{1/2}$	$I_F = 20\text{mA}$	-	± 15	-	deg

*3. $\theta_{1/2}$ is the off-axis angle where the luminous intensity is 1/2 the peak intensity*4. Luminous intensity maximum tolerance for each grade classification limit is $\pm 18\%$ • $V_F / I_V / \lambda_D$ Grade Classification (Ta=25°C)

Test Condition @ $I_F = 20\text{mA}$		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 1.9~2.0	$T_2 : 3400\sim 3960$	a : 615~620
2 : 2.0~2.1	$U_1 : 3960\sim 4900$	
3 : 2.1~2.2	$U_2 : 4900\sim 5940$	
4 : 2.2~2.3	$V_1 : 5940\sim 7400$	b : 620~625
5 : 2.3~2.4	$V_2 : 7400\sim 8910$	

(Do not use to combine grade classification. It must be used separately grade classification)

Characteristic Diagrams

Fig. 1 $I_F - V_F$

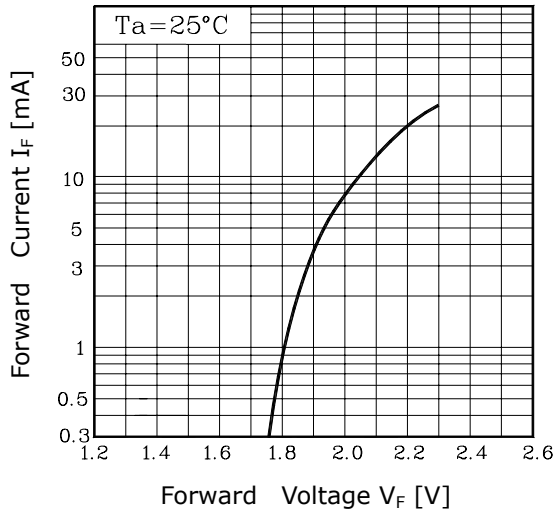


Fig. 2 $I_V - I_F$

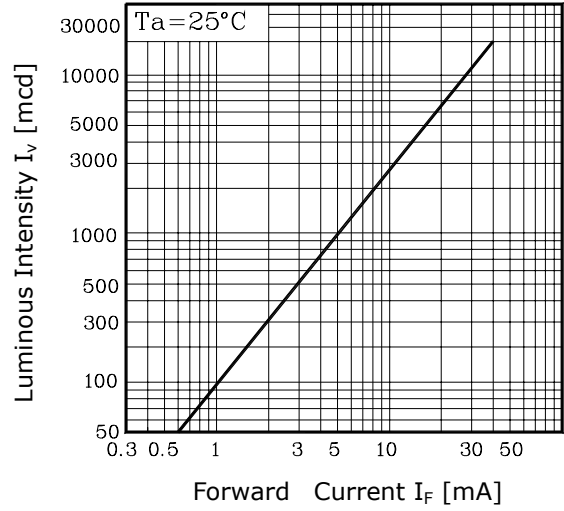


Fig. 3 $I_F - T_a$

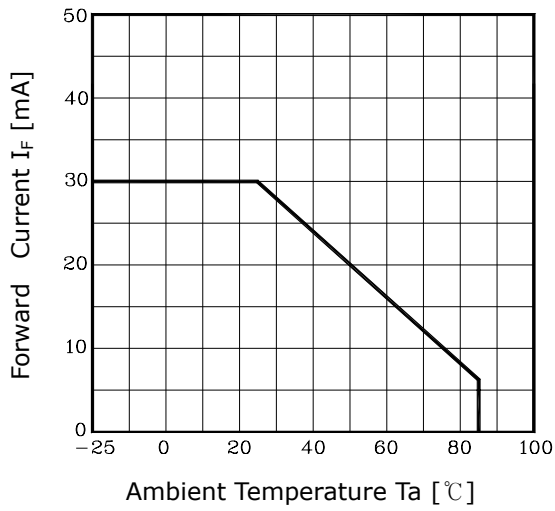


Fig.4 Spectrum Distribution

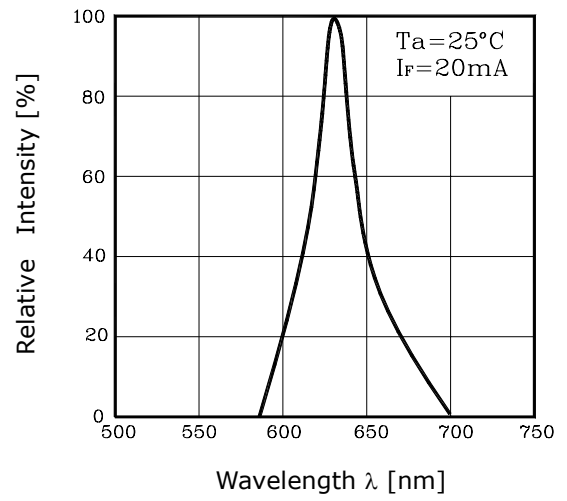
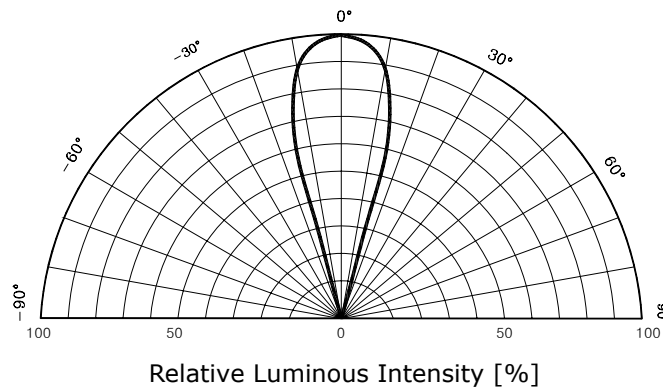


Fig. 5 Radiation Diagram



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