AUK Semiconductor

SY5315-F

High Brightness LED Lamp

Features

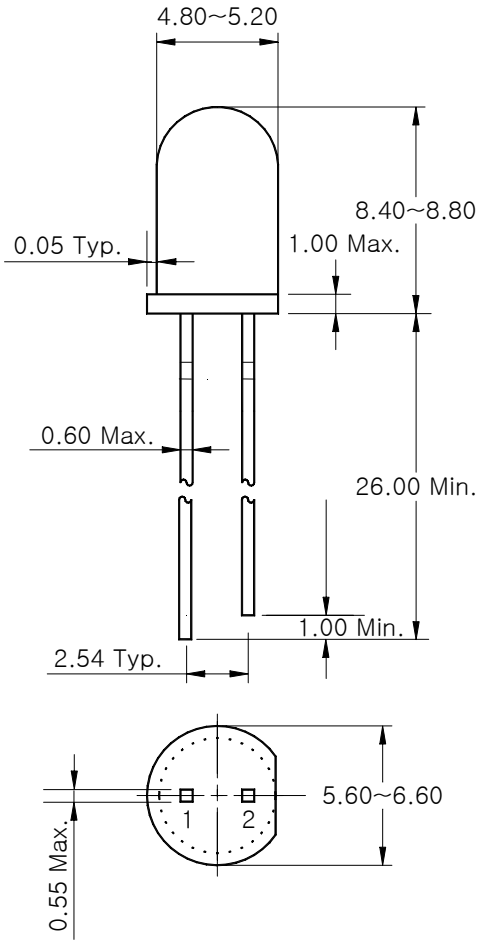
- Colorless transparency lens type
- ϕ5mm(T-13/4) all plastic mold type
- Super luminosity

Application

- Traffic Signal
- Massage Board

Outline Dimensions

unit : mm

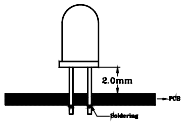


PIN Connections
1. Anode
2. Cathode

Absolute Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Power dissipation	P_D	70	mW
Forward current	I_F	30	mA
*1Peak forward current	I_{FP}	65	mA
Reverse voltage	V_R	4	V
Operating temperature range	T_{opr}	-25～85	℃
Storage temperature range	T_{stg}	-30～100	℃
*2Soldering temperature	T_{sol}	260℃ 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= 20mA	1.9	-	2.4	V
*4Luminors intensity	I_V	I_F= 20mA	3400	-	7400	mcd
Dominant wavelength	λ_D	I_F= 20mA	586	591	597	nm
Spectrum bandwidth	$\Delta\lambda$	I_F= 20mA	-	30	-	nm
Reverse current	I_R	V_R=4V	-	-	10	uA
*3Half angle	$\theta^1/_2$	I_F= 20mA	-	±15	-	deg

*3. θ1/2 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 ±18%

• V_F / I_V / λ_D Grade Classification (Ta=25℃)

Test Condition @I_F = 20mA		
Forward Voltage [V]	Luminous Intensity [mcd]	Dominant Wavelength [nm]
1 : 1.9~2.0	T_2 : 3400~3960	a : 586~591
2 : 2.0~2.1		
3 : 2.1~2.2	U_1 : 3960~4900	
4 : 2.2~2.3	U_2 : 4900~5940	b : 591~597
5 : 2.3~2.4	V_1 : 5940~7400	

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

Characteristic Diagrams

Fig. 1 I_F - V_F

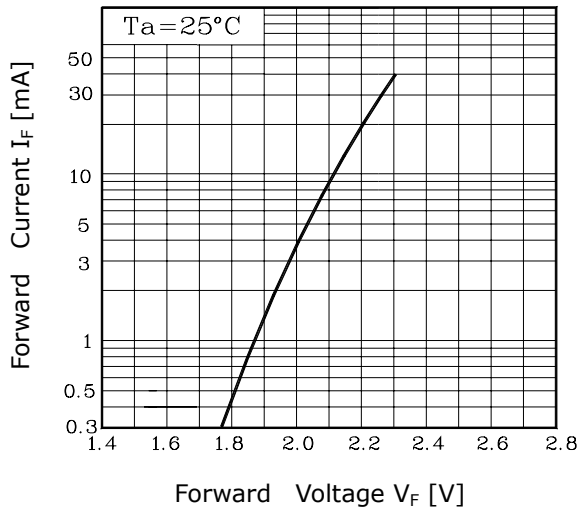


Fig. 2 I_V - I_F

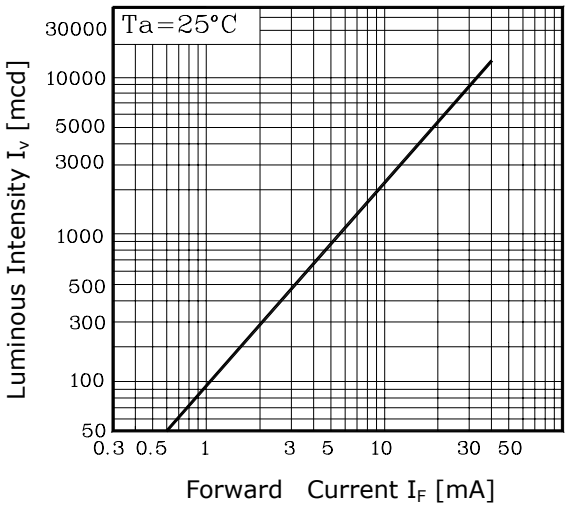


Fig. 3 I_F – Ta

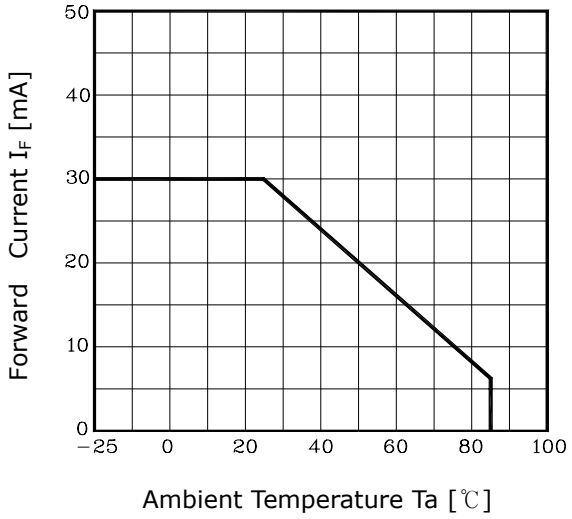


Fig.4 Spectrum Distribution

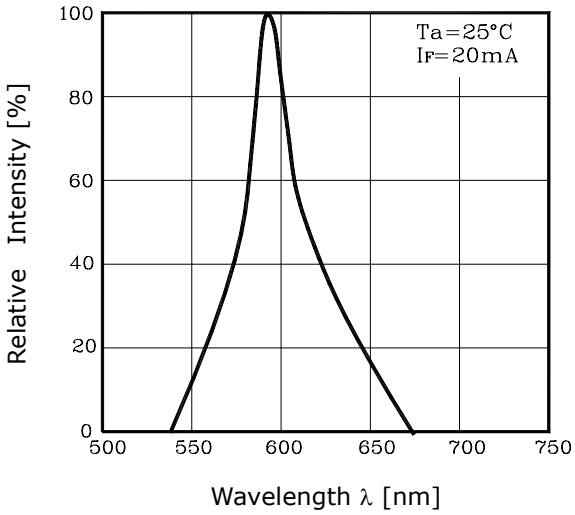
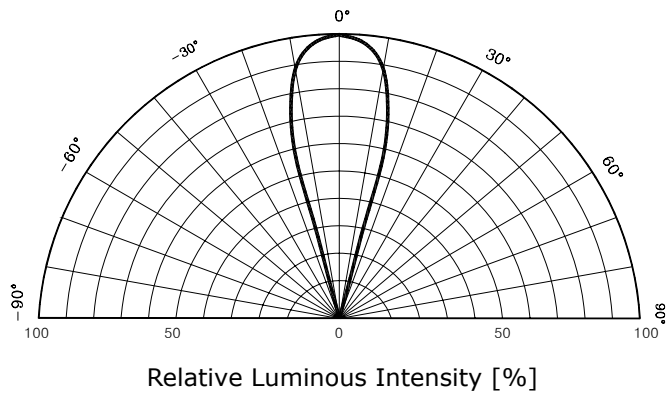


Fig. 5 Radiation Diagram



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