AUK Semiconductor

SAW5670

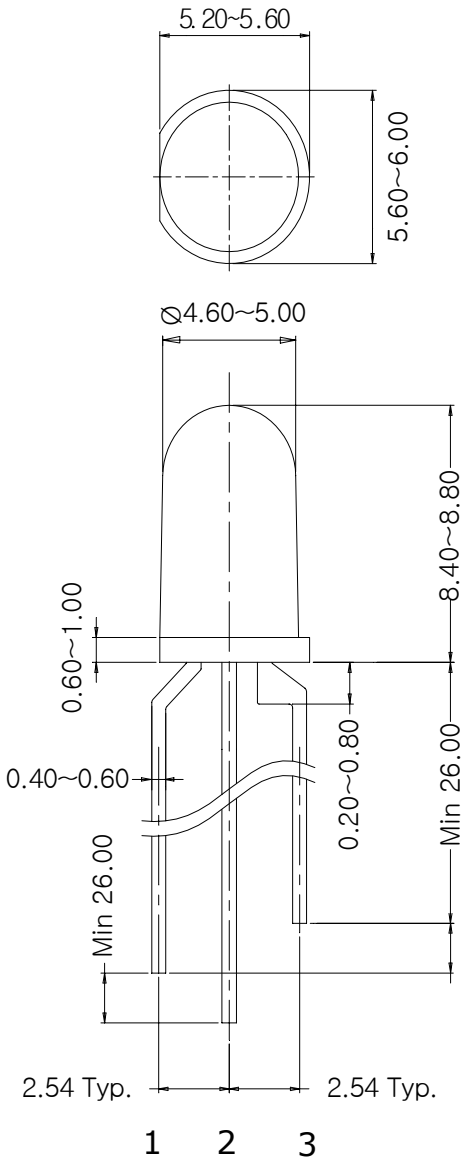
Dual Color LED Lamp

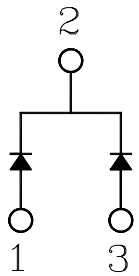
Features

- Milky diffusion lens type
- ϕ5mm(T-1 3/4) all plastic mold type
- Radiation color (Amber, White)
- Low power consumption

Outline Dimensions

unit : mm





PIN Connections

1. Anode (White)
2. Common Cathode
3. Anode (Amber)

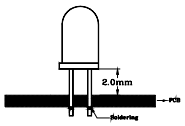
Absolute Maximum Ratings

(Ta=25°C)

Characteristic	Symbol	Rating		Unit
		White	Amber	
Power dissipation	P_D	125	75	mW
Forward current	I_F	30	30	mA
*[1]Peak forward current	I_{FP}	50	50	mA
Reverse voltage	V_R	10	16	V
Operating temperature range	T_{opr}	-25～85		℃
Storage temperature range	T_{stg}	-30～100		℃
*[2]Soldering 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	White	I_F= 20mA	-	3.5	4.2	V
		Amber		-	2.0	2.5	
Luminous intensity	I_V	White	I_F= 20mA	-	200	-	mcd
		Amber		-	100	-	
*[4]Chromaticity coordinates	X	White	I_F= 20mA	0.25	-	0.33	-
	Y			0.24	-	0.38	-
Peak wavelength	λ_P	Amber	I_F= 20mA	-	630	-	nm
Reverse current	I_R	White	V_R=10V	-	-	10	uA
		Amber	V_R=16V	-	-	10	
*[3]Half angle	θ1/2		I_F= 20mA	-	±20	-	deg

*3. θ1/2 is the off-axis angle where the luminous intensity is 1/2 the peak intensity

Characteristic Diagrams

Fig. 1 I_F - V_F

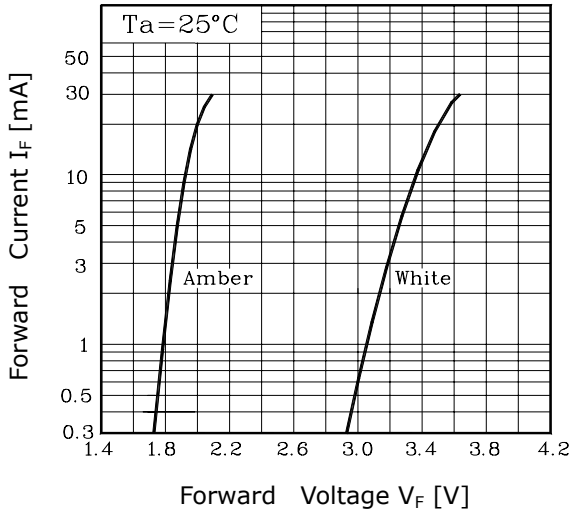


Fig. 2 I_V - I_F

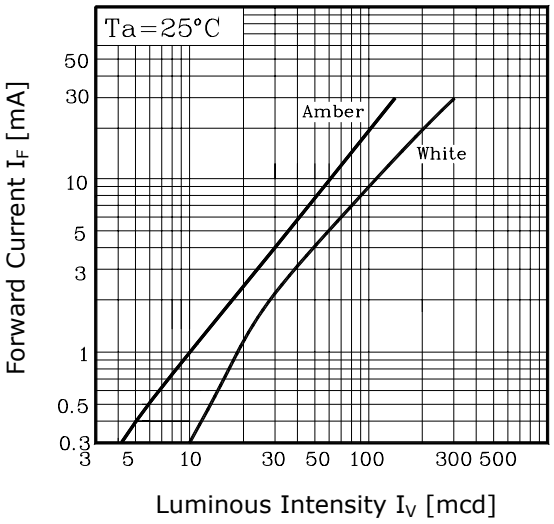


Fig. 3 I_F – Ta

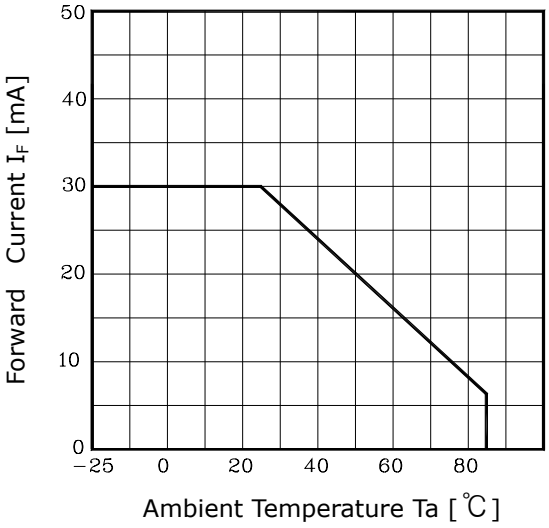


Fig.4 Spectrum Distribution

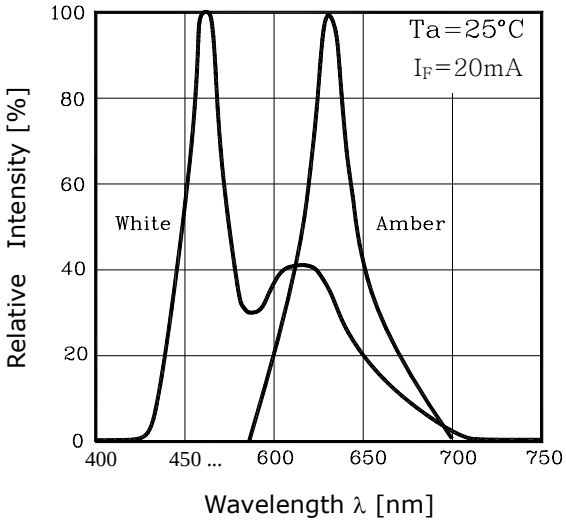
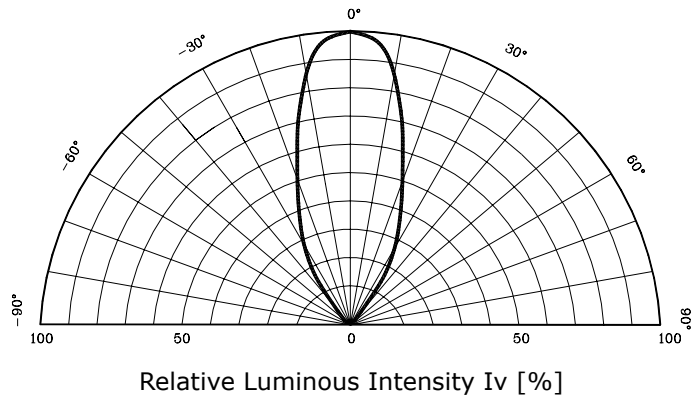
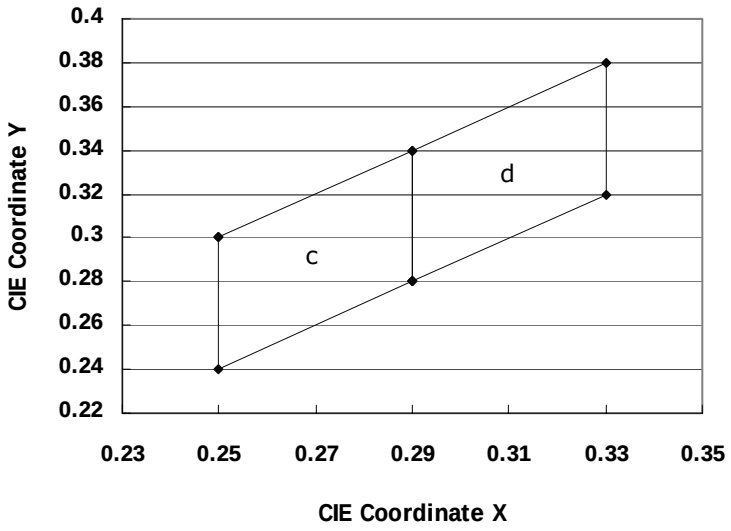
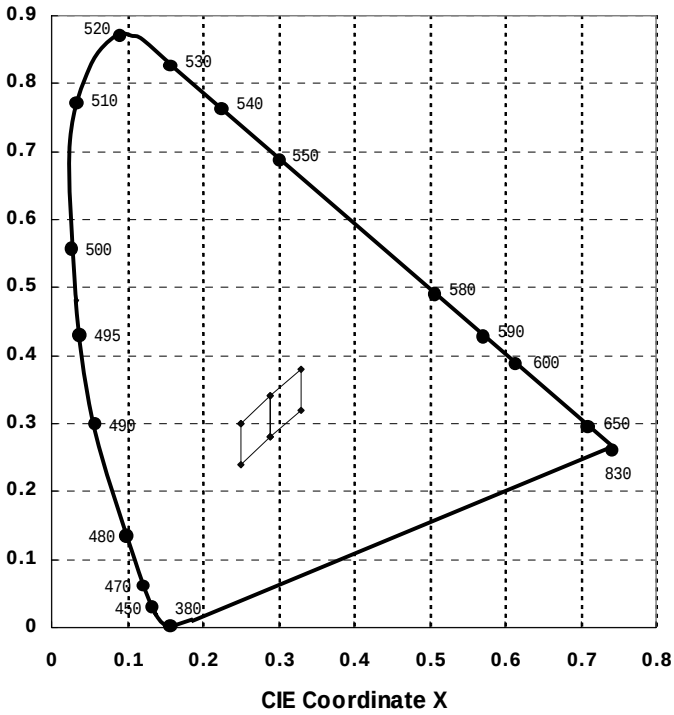


Fig. 5 Radiation Diagram



♦ CIE 1931 UCS Diagram





● CIE Coordinates Grade Classification (I_F=20mA, Ta=25℃)

Color Bin	CIE Coodinates		Color Bin	CIE Coodinates	
	X	Y		X	Y
c	0.25	0.30	d	0.29	0.28
	0.25	0.24		0.29	0.34
	0.29	0.28		0.33	0.38
	0.29	0.34		0.33	0.32

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