AUK Semiconductor

SAM2333

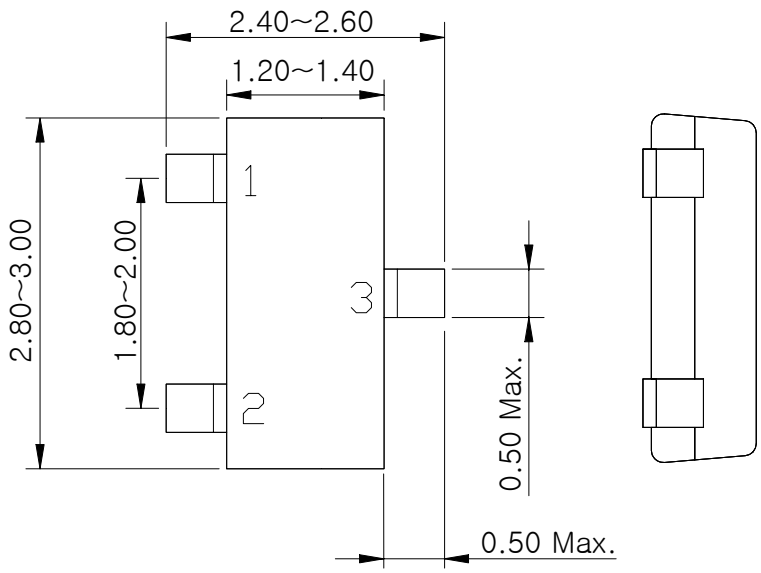
Dual Chip LED

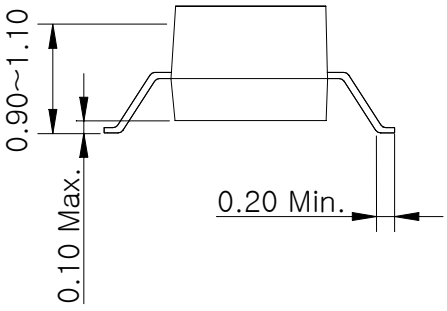
Features

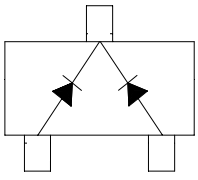
- Colorless diffusion lens type
- Compact type
- Radiation size 2.9mm(L)×1.3mm(W) surface mount type.
- Radiation color (Amber, Y-Green)

Outline Dimensions

unit : mm







PIN Connections

1. Anode (Y-Green)
2. Anode (Amber)
3. Common Cathode

Absolute Maximum Ratings

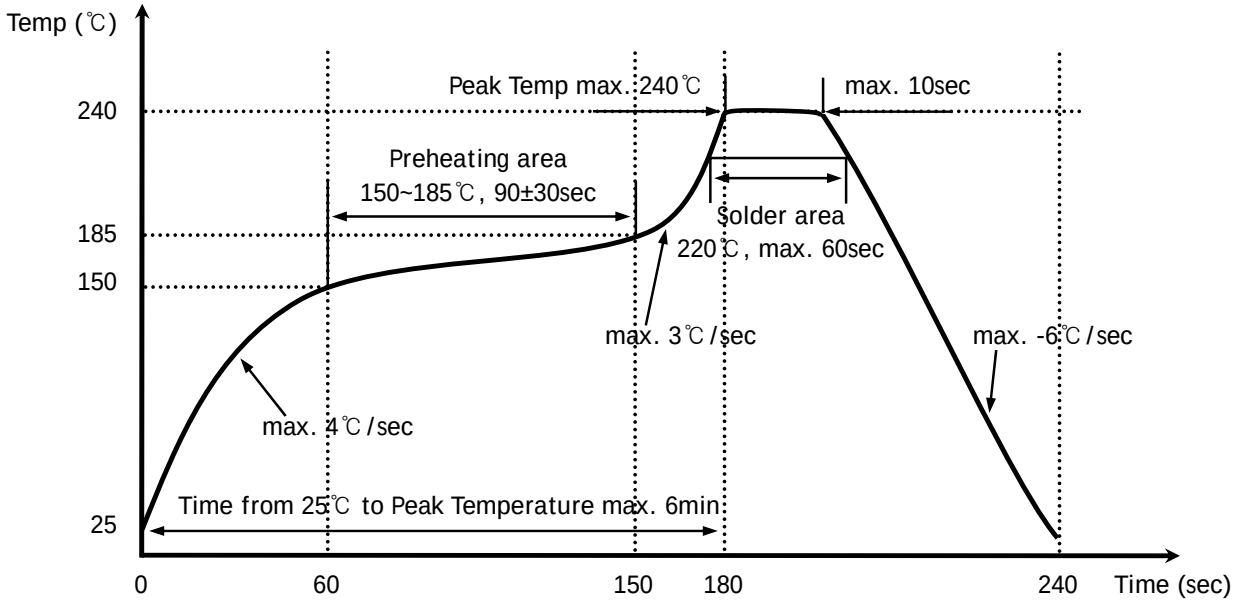
(Ta=25°C)

Characteristic	Symbol	Rating		Unit
		Amber	Y-Green	
Power dissipation	P_D	75	75	mW
Forward current	I_F	30	30	mA
*[1]Peak forward Current	I_{FP}	50	50	mA
Reverse voltage	V_R	4	4	V
Operating temperature range	T_{opr}	-25~85		℃
Storage temperature range	T_{stg}	-30~100		℃
*[2]Soldering temperature	T_{sol}	240℃ for 10 seconds		

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

*2. Recommended reflow soldering temperature profile

- Preheating 150℃ to 185℃ within 120 seconds soldering 240℃ within 10 seconds
  Gradual cooling (Avoid quenching)



Electrical Optical Characteristics

(Ta=25°C)

Characteristic	Symbol		Test Condition	Min.	Typ.	Max.	Unit
Forward voltage	V_F	Amber	I_F= 20mA	-	2.0	2.5	V
		Y-Green		-	2.2	2.5	
Luminous intensity	I_V	Amber	I_F= 20mA	-	6	-	mcd
		Y-Green		-	10	-	
Peak wavelength	λ_P	Amber	I_F= 20mA	-	630	-	nm
		Y-Green			570		
Spectrum bandwidth	$\Delta\lambda$	Amber	I_F= 20mA	-	35	-	nm
		Y-Green			30		
Reverse current	I_R		V_R=4V	-	-	10	uA
*[3]Half angle	θ1/2	X	I_F= 20mA	-	±55	-	deg
		Y			±70		

*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

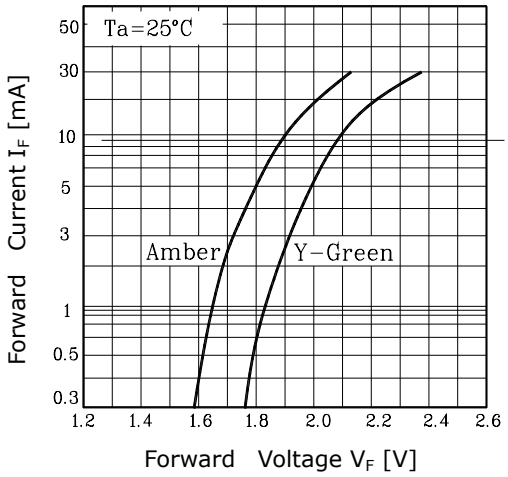


Fig. 2 I_V - I_F

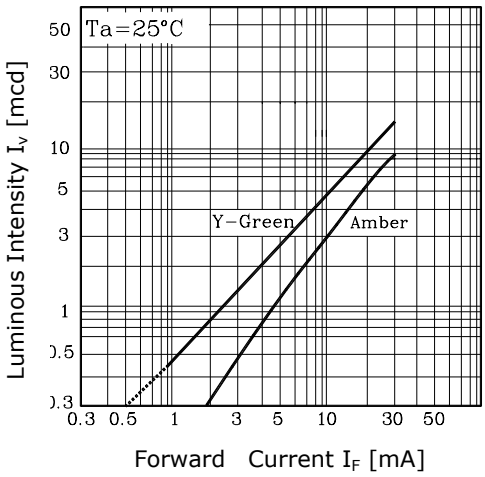


Fig. 3 I_F – Ta

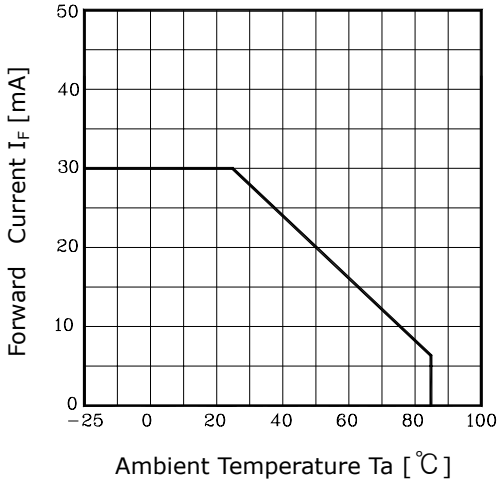


Fig.4 Spectrum Distribution

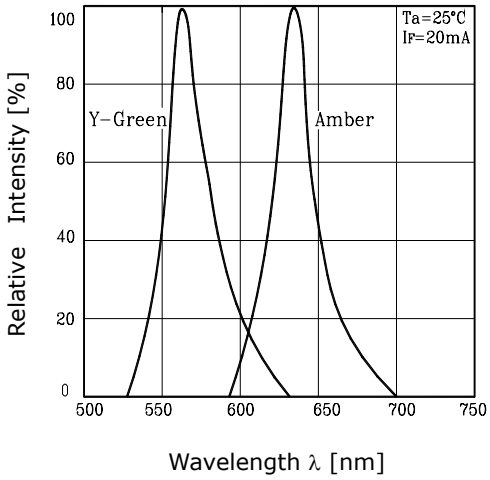


Fig. 5-1 Radiation Diagram(X)

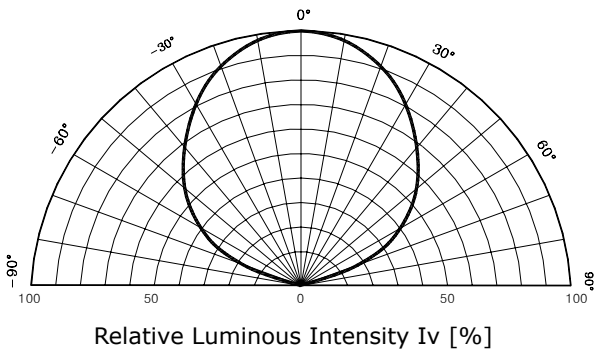
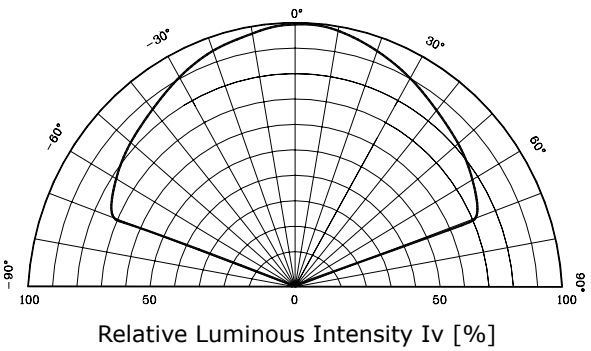


Fig. 5-2 Radiation Diagram(Y)



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