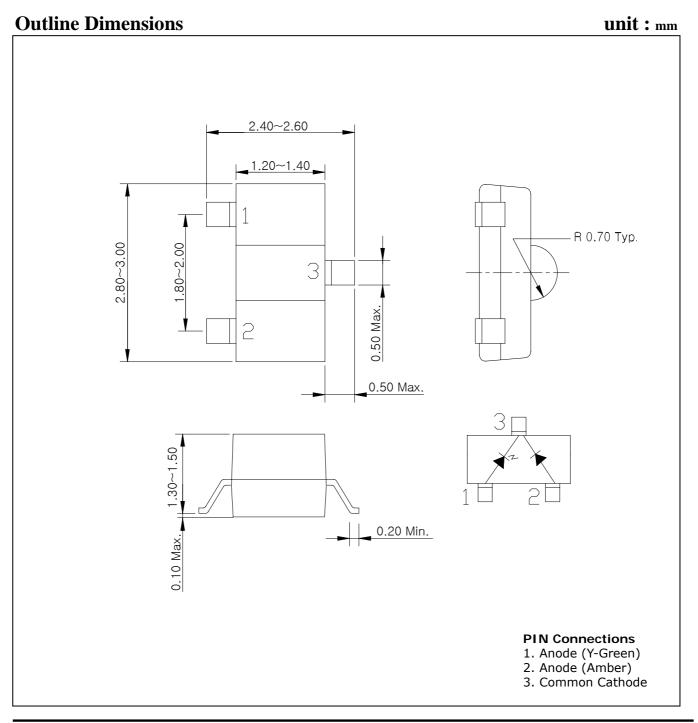


**Dual Chip LED** 

#### Features

- Compact type
- $\bullet$  Radiation size 1.3mm  $\times$  2.9mm
- Radiation color (Amber, Yellow-Green)
- Surface mount lead configuration



# **SAM2331**

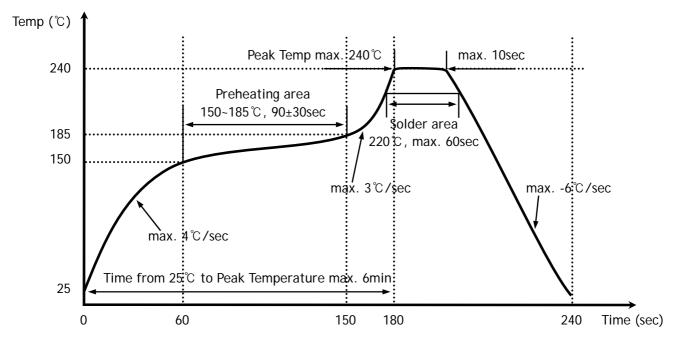
#### **Absolute Maximum Ratings**

Absolute Maximum Ratings	5	(Ta=25°C)				
Characteristic	Symbol	Ra	Unit			
		Amber	Y-Green	Unit		
Power dissipation	P <sub>D</sub>	75	75	mW		
Forward current	I <sub>F</sub>	30	30	mA		
* <sup>1</sup> Peak forward current	$\mathrm{I}_{FP}$	50	50	mA		
Reverse voltage	V <sub>R</sub>	4	4	V		
Operating temperature range	T <sub>opr</sub>	-25	Ĵ			
Storage temperature range	T <sub>stg</sub>	-30~	Ĵ			
* <sup>2</sup> Soldering temperature	T <sub>sol</sub>	240 $^{\circ}$ for 5 seconds				

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

\*2. Recommended reflow soldering temperature profile

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



#### **Electrical / Ontical Characteristics**

Electrical / Optical Characteristics (Ta=25°C)									
Characteristic	Symbol		<b>Test Condition</b>	Min.	Тур.	Max.	Unit		
Forward voltage	V <sub>F</sub>	Amber	I <sub>F</sub> = 20mA	-	2.0	2.5	V		
		Y-Green		-	2.1	2.5			
Luminous intensity	$I_{V}$	Amber	I <sub>F</sub> = 20mA	-	13	-	mcd		
		Y-Green		-	18	-			
Peak wavelength	$\lambda_{P}$	Amber	I <sub>F</sub> = 20mA	-	630	-	nm		
		Y-Green			570				
Spectrum bandwidth	$\Delta_{\lambda}$	Amber	I <sub>F</sub> = 20mA	-	35	-	nm		
		Y-Green		-	30	-			
Reverse current	I <sub>R</sub>		V <sub>R</sub> =4V	-	-	10	uA		
* <sup>3</sup> Half angle	θ1/2		I <sub>F</sub> = 20mA	-	±55	-	deg		

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

## SAM2331

### **Characteristic Diagrams**

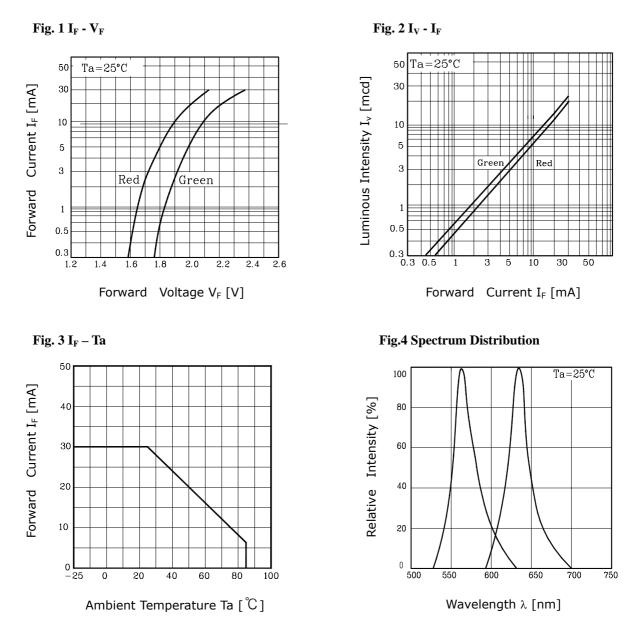
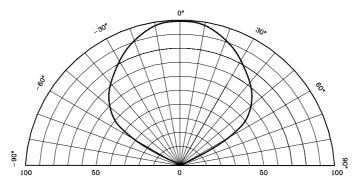


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

KSD-080002-001

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