

# **SRM2331-A**

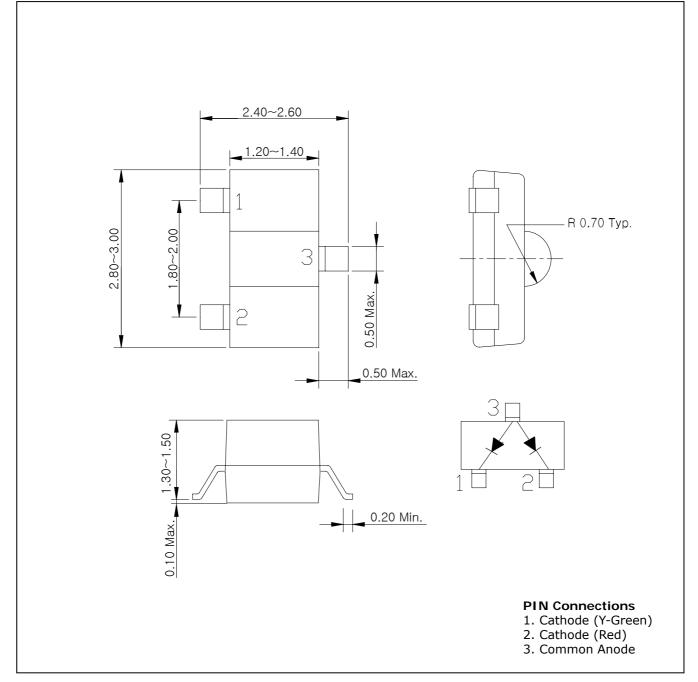
**Dual Chip LED** 

#### **Features**

- Compact type
- Radiation size 1.3mm × 2.9mm
- Radiation color (Y-Green, Red)
- Surface mount lead configuration

### **Outline Dimensions**

unit: mm



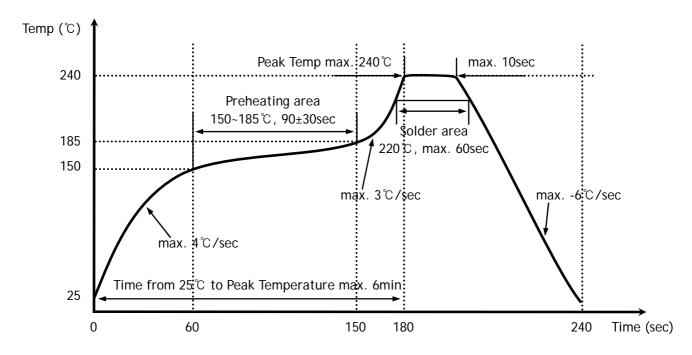
**Absolute Maximum Ratings** 

 $(Ta=25^{\circ}C)$ 

Characteristic	Symbol	Ra	Unit		
Characteristic		Red	Y-Green	Omt	
Power dissipation	P <sub>D</sub>	75	75	mW	
Forward current	${ m I}_{\sf F}$	30	30	mA	
*1Peak forward current	${ m I}_{\sf FP}$	50	50	mA	
Reverse voltage	$V_R$	4	4	V	
Operating temperature range	$T_{opr}$	-25	$^{\circ}$		
Storage temperature range	$T_{stg}$	-30	$^{\circ}$		
*2Soldering temperature	T <sub>sol</sub>	240°C for 5 seconds			

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

<sup>-</sup> Preheating 150  $^\circ$  to 185  $^\circ$  within 120 seconds soldering 240  $^\circ$  within 10 seconds Gradual cooling (Avoid quenching)



## **Electrical / Optical Characteristics**

 $(Ta=25^{\circ}C)$ 

Characteristic	Symbol		<b>Test Condition</b>	Min.	Typ.	Max.	Unit
Forward voltage	V <sub>F</sub>	Red	I <sub>F</sub> = 20mA	-	2.0	2.5	V
		Y-Green		-	2.1	2.5	
Luminous intensity	I <sub>V</sub>	Red	I <sub>F</sub> = 20mA	-	20	-	mcd
		Y-Green		-	15	-	
Peak wavelength	$\lambda_{P}$	Red	I <sub>F</sub> = 20mA	-	660	-	nm
		Y-Green			570		
Spectrum bandwidth	$\Delta_{\lambda}$	Red	I <sub>F</sub> = 20mA	-	20	-	nm
		Y-Green			30		
Reverse current		$I_{R}$	$V_R=4V$	-	-	10	uA
* <sup>3</sup> Half angle	θ1/2		$I_F = 20mA$	-	±55	-	deg

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

KSD-O8O003-001

<sup>\*2.</sup> Recommended reflow soldering temperature profile

#### **Characteristic Diagrams**

Fig. 1  $I_F$  -  $V_F$ 

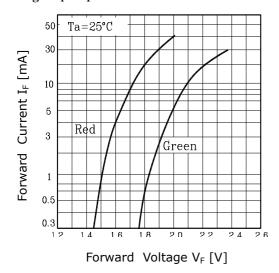


Fig. 2  $I_V$  -  $I_F$ 

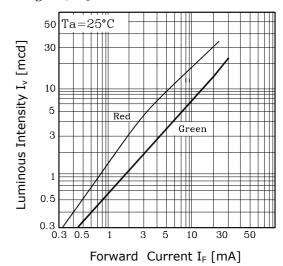
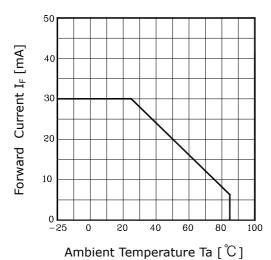


Fig. 3  $I_F$  – Ta



**Fig.4 Spectrum Distribution** 

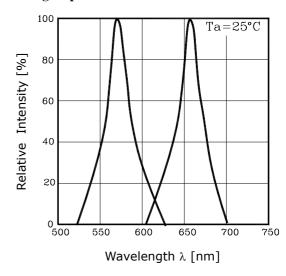
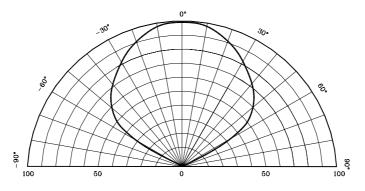


Fig. 5 Radiation Diagram



Relative Luminous Intensity Iv [%]

KSD-080003-001 3

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KSD-080003-001