LED Super Bright SMD





Features

- · RGB LED lamp
- · Low Profile Package
- · All chips can be individually driven to provide required colours

Maximum Ratings at Ta = 25°C

 $\begin{tabular}{lll} Reverse Voltage (<100 \mu A) & : 5V \\ D.C. Forward Current & : 30 mA \\ Pulse Current (Pulse Width od 0.1 ms, 1/10 Duty Cycle) & : 100 mA \\ \end{tabular}$

Operating Temperature Range : -25°C to +85°C
Storage Temperature Range : -40°C to +100°C
Soldering Temperature Reflow Soldering : 260°C for 10 secs

Electrical & Optical Characteristics at Ta = 25°C

LED Chip			Lens Colour	Dominant Wavelength (nm) at	Luminous Intensity (mcd) at 20mA		Forward Voltage (V) at 20mA		Viewing Angle 2 e ½
Material	Emitted Colour	Brightness		20mA	Min.	Тур.	Тур.	Max.	(deg)
InGaN / Sapphire	Blue			470	45	100	3.5	4.2	
InGaN / Sapphire	True Green	Mega	Water Clear	520	200	470	3.2	2.6	120
A1GalnP/Si	Red			625	244	450	2.1		

Storage

Recommended storage environment Temperature: 5°C to 30°C (41°F to 86°F)

Humidity: 60% RH Max.

Use within 7 days after opening of sealed vapor/ESD barrier bags. If unused LEDs remain, they should be stored in moisture proof packages, such as sealed container with packages of moisture absorbent material (silica gel). It is also recommended to return the LEDs to the original moisture proof bag and to reseal the moisture proof bag again. Fold the opened bag firmly and keep in dry environment.

Soldering

	Reflow Soldering	Hand Soldering		
	Lead Solder	Lead - Free Solder		
Pre-heat	120°C to 150°C	180°C to 200°C	Temperature	350°C Max.
Pre-heat time	120 sec. Max.	120 sec. Max.		3 sec. Max.
Peak temperature	240°C Max.	260°C Max.	Soldering time	
Soldering time	10 sec. Max.	10 sec. Max.		(one time only)
Condition	refer to Temperature - profile 1	refer to Temperature - profile 2		

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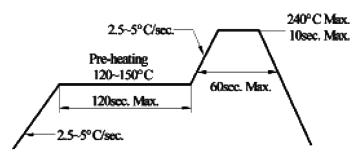


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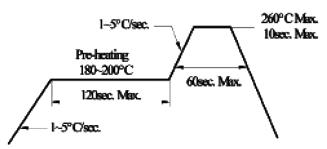


*After reflow soldering rapid cooling should be avoided [Temperature-profile (Surface of circuit board)]
Use the conditions shown to the under figure

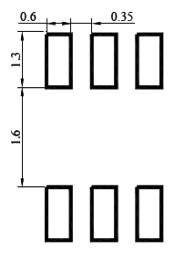
1: Lead Solder



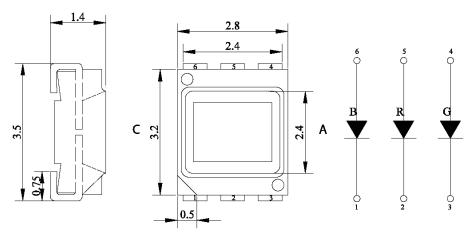
2: Lead-free Solder



Recommended Soldering Pad Design



Diagram



Dimensions : Millimetres

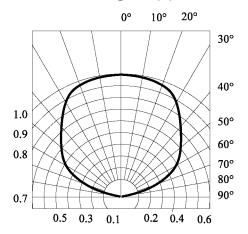
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Radiation Diagram(s)



Part Number Table

Description	Part Number		
LED 3.2mm × 2.8mm × 1.4mm SMD RGB	OVS-3309		

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