

Part Number: XSMR43D 3x3mm SQUARE TOP LED LAMP



## **Features**

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS AVAILABLE.
- WIDE VIEWING ANGLE.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- IDEAL FOR FLUSH MOUNTED PANEL INDICATORS.
- RoHS COMPLIANT.





### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25(0.01") unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratin (TA=25°C)	gs	MR (GaAlAs)	Unit	
Reverse Voltage	VR	5	V	
Forward Current	IF	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	155	mA	
Power Dissipation	Рт	75	mW	
Operating Temperature	TA -40 ~ +85		°C	
Storage Temperature	Tstg	-40 ~ +85	30	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds			
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds			

	<u>C0.3</u>			
2(.079)	0.15)	4.8(0.189)	27(1.063)MIN.  CATHODE	 1.5(.06)TYP.

5.5(.217)

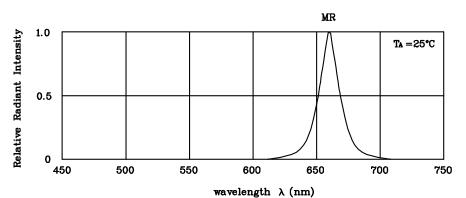
Operating Characteristics (TA=25°C)	MR (GaAlAs)	Unit	
Forward Voltage (Typ.) (IF=20mA)	VF	1.85	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λΡ	660	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λ D	640	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XSMR43D	Red	GaAlAs	Red Diffused	36	69	660	110°
Published Date :	: JAN 21, 2008	Drawin	g No: XDSA2511	V5	Check	ed : B.L.LIU	P.1/4



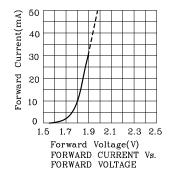


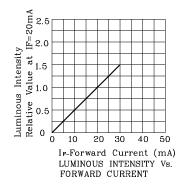
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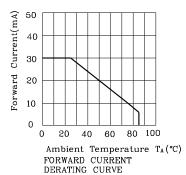


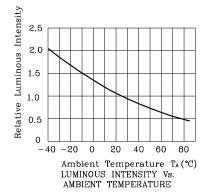
## RELATIVE INTENSITY Vs. WAVELENGTH

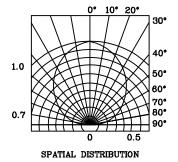
## ❖ MR







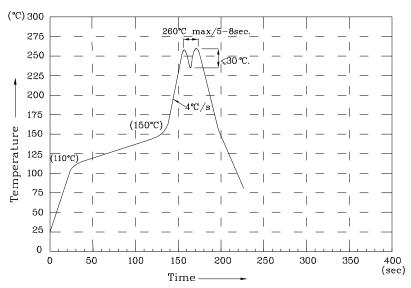




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### NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree  $^{\circ}\text{C}.$
- 3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4. No more than once.

#### Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous intensity/ luminous flux: +/-15%
- 3. Forward Voltage:  $\pm -0.1$ V

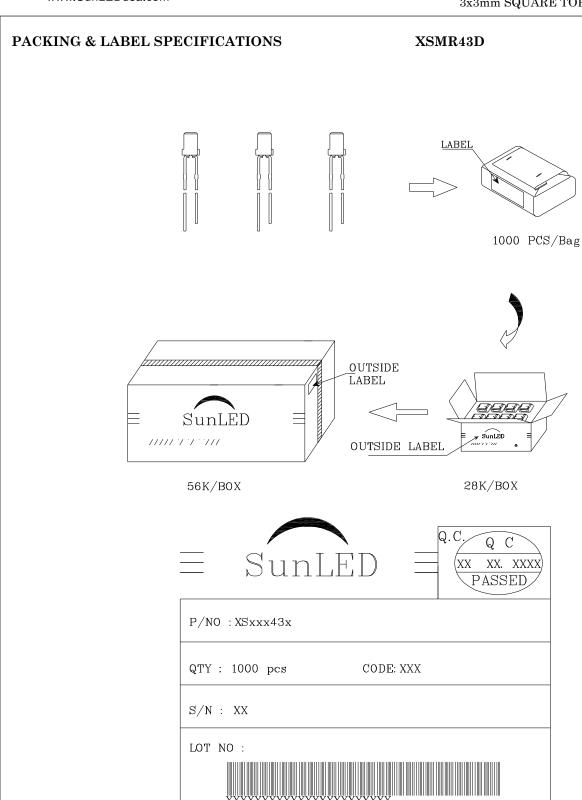
Note: Accuracy may depend on the sorting parameters.

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RoHS Compliant