

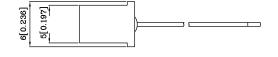


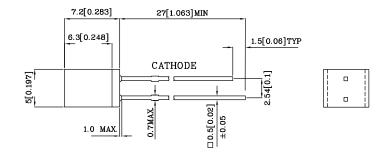
Part Number: XSMR23D

 $5\mathrm{x}5\mathrm{mm}$  SQUARE TOP LED LAMP

# **Features**

- LOW POWER CONSUMPTION.
- ULTRA BRIGHTNESS IS AVAILABLE.
- WIDE VIEWING ANGLE.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- IDEAL AS FLUSH MOUNTED PANEL INDICATORS.
- LONG LIFE SOLID STATE RELIABILITY.
- RoHS COMPLIANT.





### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25(0.01") unless otherwise noted.

Absolute maximum ratings (TA=25°C)	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	100	mW		
Operating Temperature	TA	TA -40 ~ +85			
Storage Temperature	Tstg	-40 ~ +85	-C		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds				
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds				

Operating Characteristic (TA=25°C)	MR (GaAlAs)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	1.85	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.5	V
Reverse Current (VR=5V)	IR	10	uA
Wavelength of Peak Emission (IF=20mA)	λΡ	660	nm
Wavelength of Dominant Emission (IF=20mA)	λ D	640	nm
Spectral Line Full Width At Half-Maximum (IF=20mA)	Δλ	20	nm
Capacitance (VF=0V, f=1MHz)	С	45	рF

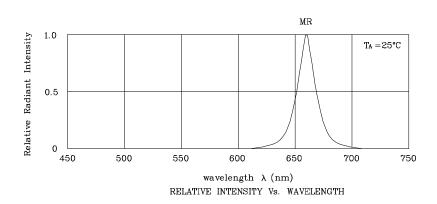
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
XSMR23D	Red	GaAlAs	Red Diffused	36	79	660	110°
Published Date :	MAY 26,2005	Drawin	g No : XDSA2522	V3	Che	cked : B.L.LIU	P.1/3



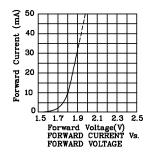


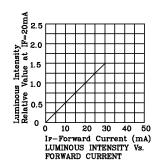
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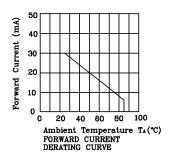
 $5\mathrm{x}5\mathrm{mm}$  SQUARE TOP LED LAMP

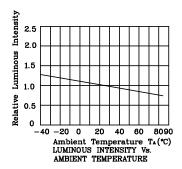


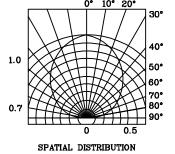
#### **♦** MR











### Remarks:

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

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

Published Date : MAY 26,2005 Drawing No : XDSA2522 V3 Checked : B.L.LIU P.2/3



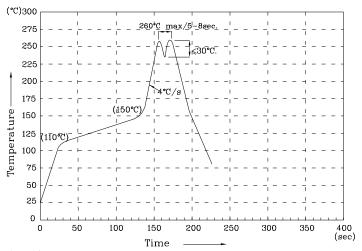


Part Number: XSMR23D

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# XSMR23D

Wave Soldering Profile For Lead-free Through-hole LED.



- 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 °C.
  - 3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
  - 4. No more than once.