

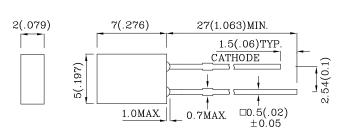
Part Number:

XSMR18D

2mmx5mm RECTANGULAR LED LAMP

Features

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- SUITABLE FOR LEVEL INDICATOR.
- 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.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratin (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	75	mW		
Operating Temperature	TA	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85	J 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 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.) (VR=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.) (VF=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.		
XSMR18D	Red	GaAlAs	Red Diffused	36	79	660	110°
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Published Date : 6	JAN 15, 2008	Drawing	No: XDSA2469	V4	C	hecked : B.L.LIU	P.1/4



Part Number: XSMR18D

ASMICIOD

2mmx5mm RECTANGULAR LED LAMP



MR

1.0

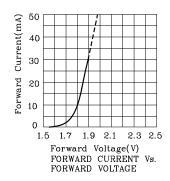
T_A =25°C

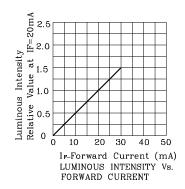
T_A =25°C

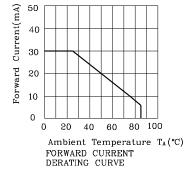
wavelength λ (nm)

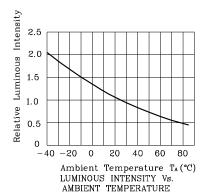
wavelength \(\(\text{nm} \) RELATIVE INTENSITY Vs. WAVELENGTH

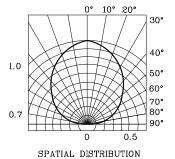
❖ MR











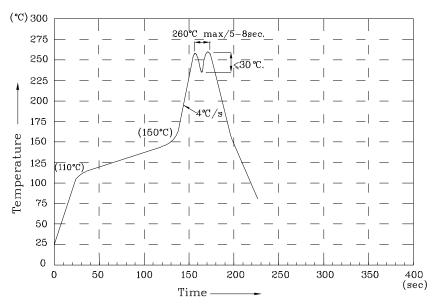


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ASMITTOD

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



NOTES:

- 1.Recommend the wave temperature 245°C \sim 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: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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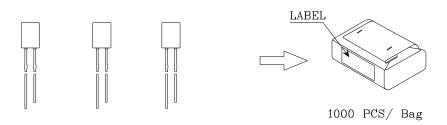
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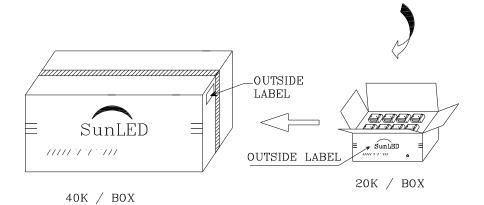
18D

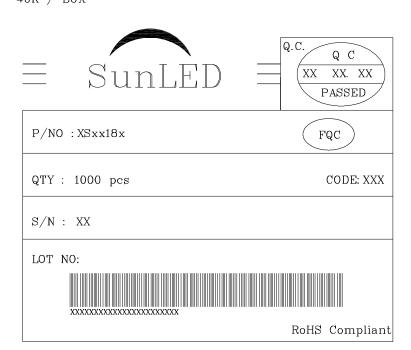
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