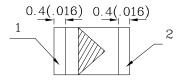


Part Number: XZMDK54W

2.0x1.25mm SMD CHIP LED LAMP

0.13(.005) POLARITY MARK



Operating Characteristic (TA=25°C)	MDK (InGaAlP)	Unit	
Forward Voltage (Typ.) (IF=20mA)	$V_{\rm F}$	1.95	V
Forward Voltage (Max.) (IF=20mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λр	650	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	635	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	28	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	35	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.		
XMDK54W	Red	InGaAlP	Water Clear	50	148	650	120°
Published Date : J	JAN 21,2008	Drawing	g No : XDSA1255	V5	Che	ecked : B.L.LIU	P.1/4

Features

- 2.0mmx1.25mm SMT LED,1.1mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.





Notes:

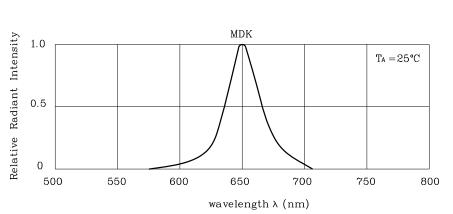
- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)		MDK (InGaAlP)	Unit		
Reverse Voltage	VR	5	V		
Forward Current	IF	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	185	mA		
Power Dissipation	Рт	75	mW		
Operating Temperature	TA	-40 ~ +85	°C		
Storage Temperature	Tstg	-40 ~ +85			



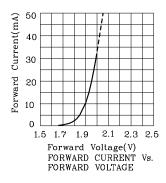
Part Number: XZMDK54W

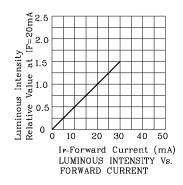
2.0x1.25mm SMD CHIP LED LAMP

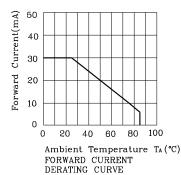


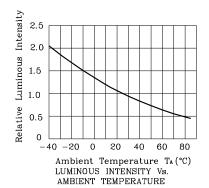
RELATIVE INTENSITY Vs. WAVELENGTH

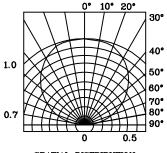
♦ MDK











SPATIAL DISTRIBUTION

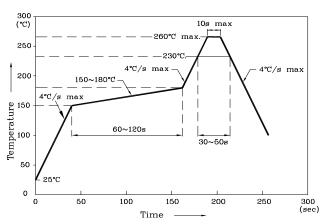
 $Published \ Date: JAN\ 21,2008 \qquad \qquad Drawing \ No: XDSA1255 \qquad \qquad V5 \qquad \qquad Checked: B.L.LIU \qquad \qquad P.2/4$



Part Number: XZMDK54W

2.0x1.25mm SMD CHIP LED LAMP

Reflow Soldering Profile For Lead-free SMT Process.



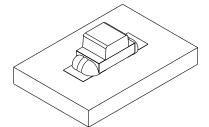
Notes:

- 1. Maximum soldering temperature should not exceed $260 \, ^{\circ} \text{C}$.
- 2. Recommended reflow temperature: 145°c-260°C.
- 3.Do not put stress to the epoxy resin during high temperatures conditions.

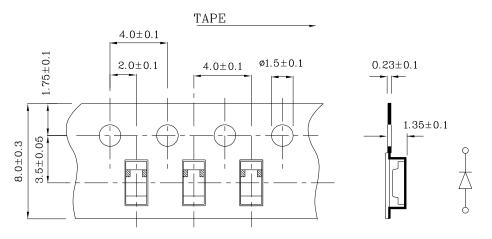
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)

❖ The device has a single mounting surface. The device must be mounted according to the specifications.





* Tape Specification (Units:mm)



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.

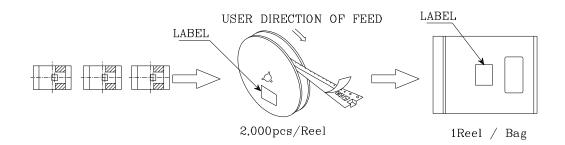


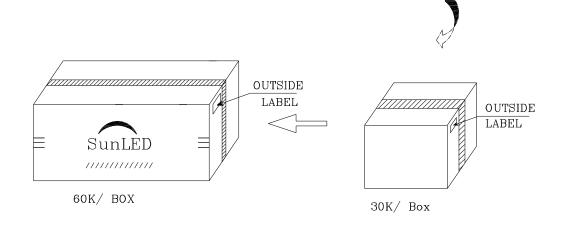
Part Number: XZMDK54W

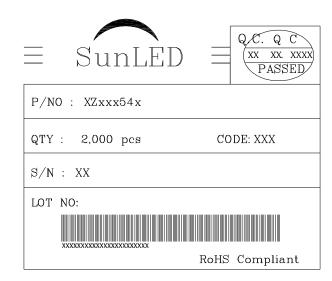
2.0x1.25mm SMD CHIP LED LAMP

PACKING & LABEL SPECIFICATIONS

XZMDK54W







V5 Published Date: JAN 21,2008 Drawing No : XDSA1255 Checked: B.L.LIUP.4/4