

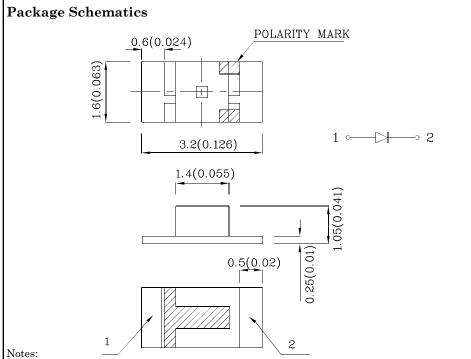
3.2x1.6mm SMD CHIP LED LAMP

Features

- \bullet Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- \bullet MSL (Moisture Sensitivity Level): 3
- RoHS compliant







- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.2(0.008")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	mA	
Power Dissipation	P_{D}	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	V
Forward Voltage (Max.) (I _F =20mA)	$ m V_F$	2.5	V
Reverse Current (Max.) $(V_R=5V)$	${ m I}_{ m R}$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λΡ	645*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$\triangle \lambda$	28	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	pF

Luminous Intensity

Part Number	Emitting Color	Emitting Material	Lens-color	CIE127-2007* (I _F =20mA) mcd		CIE127-2007* nm λP	Angle 20 1/2
				min.	typ.		
ZMDK55W-2	Red	AlGaInP	Water Clear	120 40*	228 79*	645*	120°

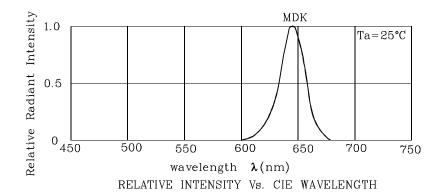
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

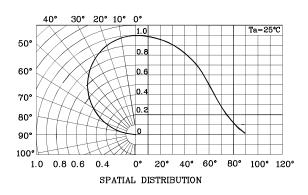
Wavelength



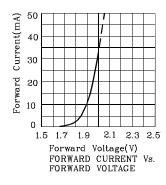


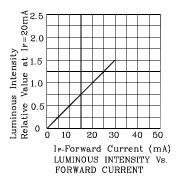


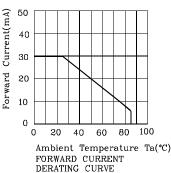


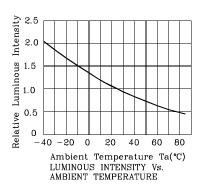


❖ MDK



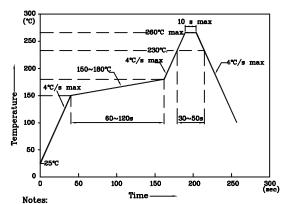






LED is recommended for reflow soldering and soldering profile is shown below.

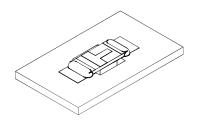
Reflow Soldering Profile for SMD Products (Pb-Free Components)



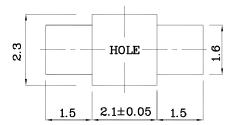
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions



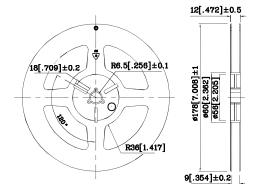
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



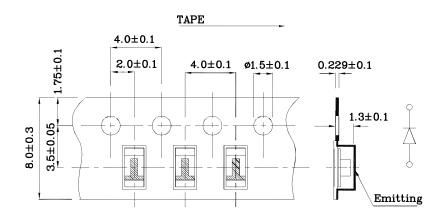
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Reel Dimension



❖ 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

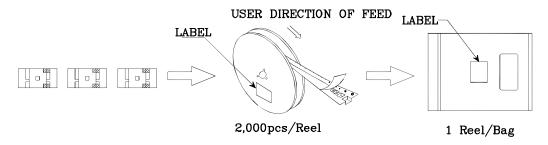
Note: Accuracy may depend on the sorting parameters.

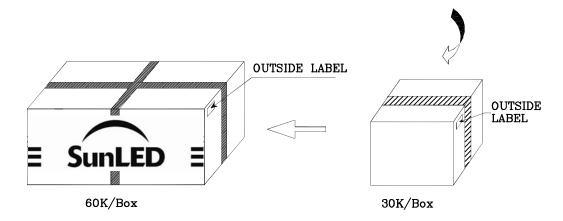


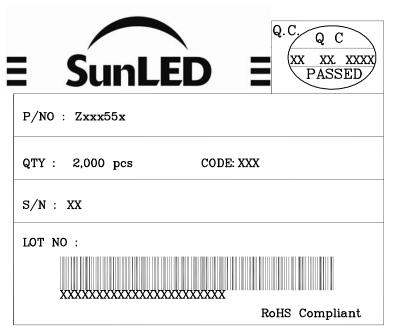
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PACKING & LABEL SPECIFICATIONS

www.SunLED.com







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