

### Part Number: ZMDK74W

2.1x0.6mm RIGHT ANGLE SURFACE LED LAMP

## **Features**

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



Package Schematics	
R0.6[0.024]	1 0
0.3[0.012] 0.3[0.012] 0.3[0.012] 0.3[0.012] 0.3[0.012] 0.3[0.012] 0.3[0.012] 0.3[0.012]	
Notes:	

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 (T <sub>A</sub> =25°C)		MDK (AlGaInP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$\mathbf{I}_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$	C	

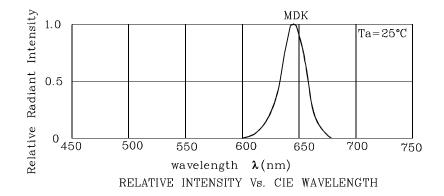
Operating Characteristics (T <sub>A</sub> =25°C)		MDK (AlGaInP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	1.95	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	645*	nm	
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	630*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle \lambda$	28	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	35	$\mathrm{pF}$	

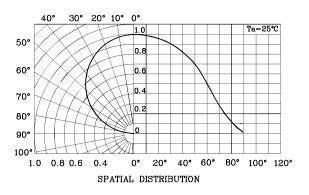
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
ZMDK74W	Red	AlGaInP	Water Clear	120 40*	218 79*	645*	120°

\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

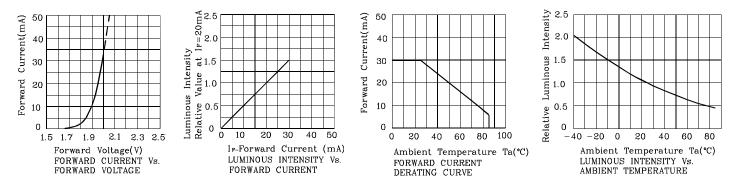
SDSA2538 V9-X Layout: Maggie L.







✤ MDK



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

300 (°C) 10 s max 250 4°C/s C/s max 200 150~180 4°C/s max 150 Temperature 30~50s 80~120: 100 50 0 150 0 50 100 200 250 300 (sec) Time Notes:

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

1. Maximum soldering temperature should not exceed 260°C

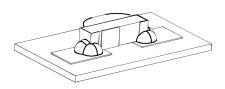
2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during

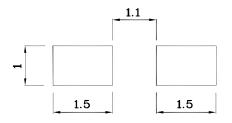
high temperatures conditions



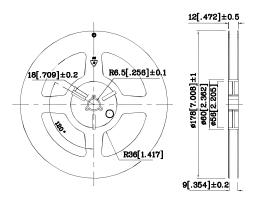
The device has a single mounting surface. The device must be mounted according to the specifications.

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

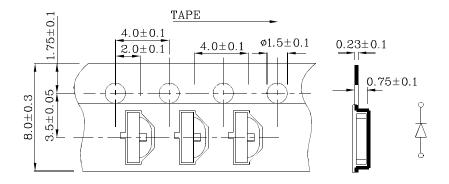




Reel Dimension



## 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

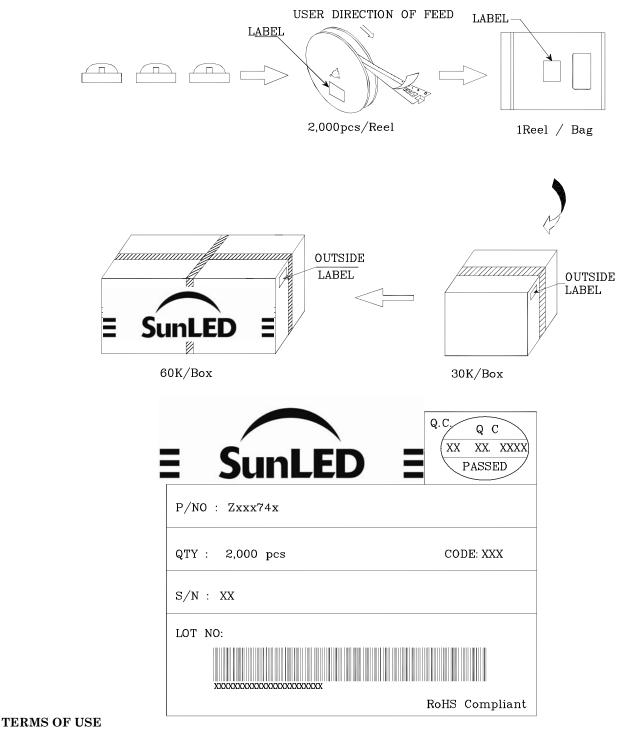
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V  $\,$ 

Note: Accuracy may depend on the sorting parameters.



#### PACKING & LABEL SPECIFICATIONS



- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at <a href="http://www.SunLED.com/TechnicalNotes">http://www.SunLED.com/TechnicalNotes</a>

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