

# Part Number: XZMDK46W-8

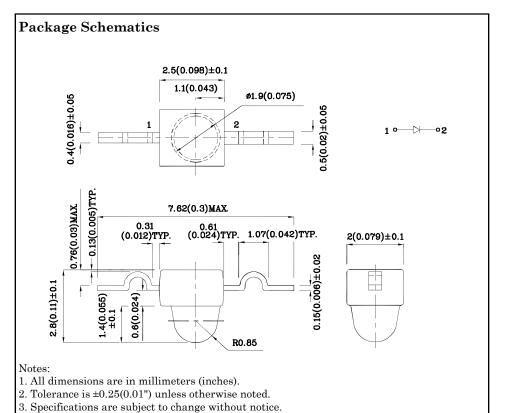
# SUBMINIATURE SOLID STATE LAMP

## **Features**

- $\bullet$  Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- $\bullet$  Moisture sensitivity level : level 3
- Package : 1000pcs / reel
- RoHS compliant







Absolute Maximum Ratings (T <sub>A</sub> =25°C)		MDK (AlGaInP)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	$I_{\mathrm{F}}$	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	C	

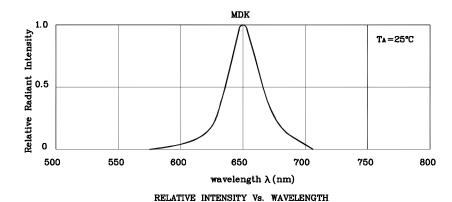
Operating Characteristics (T <sub>A</sub> =25°C)		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	1.95	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{ m F}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λР	650	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	28	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	35	pF

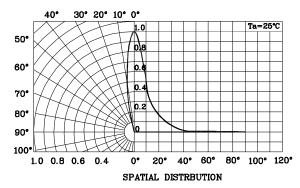
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} \text{Luminous} \\ \text{Intensity} \\ \text{(I}_F=20\text{mA)} \\ \text{mcd} \end{array}$		Wavelength nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
XZMDK46W-8	Red	AlGaInP	Water Clear	1500	2390	650	20°

Feb 01,2011 XDSA1734 V9 Layout: Maggie L.

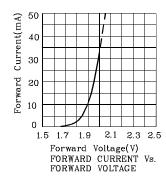


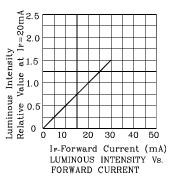


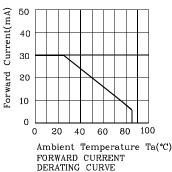


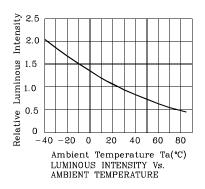


# **❖** MDK



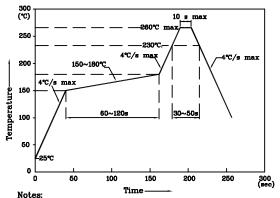






# LED is recommended for reflow soldering and soldering profile is shown below.

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

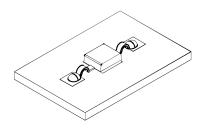


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

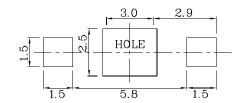




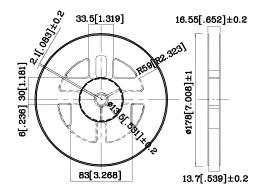
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



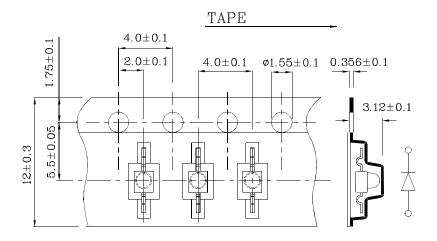
# ❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



# **❖** 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.

Feb 01,2011

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# PACKING & LABEL SPECIFICATIONS

