

# Part Number: XNZSMDK52W14V02

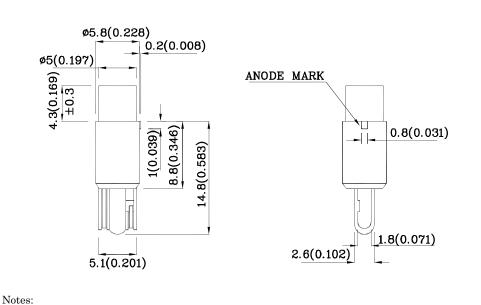
T-1 3/4 (5mm) LED LAMP WITH WEDGE BASE

#### Features

- Housing material: Type 66 Nylon
- Housing UL rating: 94V-0
- $\bullet$  Reliable & robust
- $\bullet$  14V internal resistor
- $\bullet$  RoHS Compliant



Package	Schematics
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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 Ratings (T <sub>A</sub> =25°C)	MDK (AlGaInP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Voltage	$V_{\rm F}$	16	V	
Power Dissipation	$P_{D}$	160	mW	
Operating Temperature	$T_{\rm A}$	$T_{\rm A}$ -40 ~ +70		
Storage Temperature	Tstg	$-40 \sim +85$	°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 (T <sub>A</sub> =25°C)	MDK (AlGaInP)	Unit	
Forward Current (Typ.) (V <sub>F</sub> =14V)	$I_{\rm F}$	10.5	mA
Forward Current (Max.) (V <sub>F</sub> =14V)	$I_{\rm F}$	13.5	mA
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (V <sub>F</sub> =14V)	λP	$650 \\ 645^{*}$	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (V <sub>F</sub> =14V)	λD	630 630*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (V <sub>F</sub> =14V)	$ riangle \lambda$	28	nm

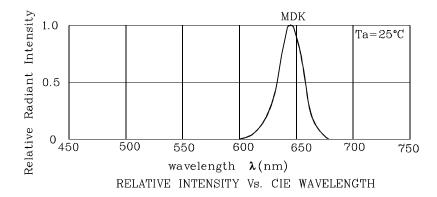
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (V <sub>F</sub> =14V) mcd		Wavelength CIE127-2007* λP nm	Viewing Angle 20 1/2
				min.	typ.		
XNZSMDK52W14V02	Red	AlGaInP	Water Clear	50 20*	118 40*	650 645*	70°

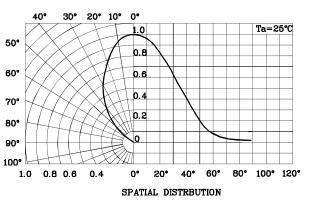
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Apr 29,2012

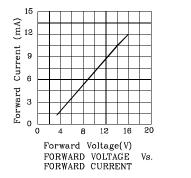
XDSA9755 V6-X Layout: Maggie L.

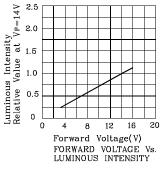


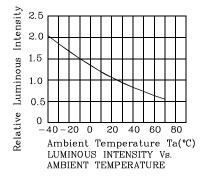




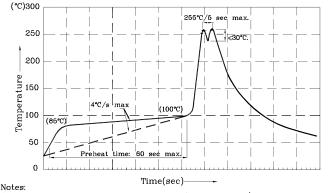
# ♦ MDK







Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



I.Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2.Peak wave soldering temperature between 245°C ~ 255°C for 3 sec

(5 sec max).

3.Do not apply stress to the epoxy resin while the temperature is above  $85^{\circ}$ C. 4.Fixtures should not incur stress on the component when mounting and

during soldering process. 5.SAC 305 solder alloy is recommended.

6.No more than one wave soldering pass

### Remarks:

If special sorting is required (e.g. binning based on 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%

Note: Accuracy may depend on the sorting parameters.



# PACKING & LABEL SPECIFICATIONS

