

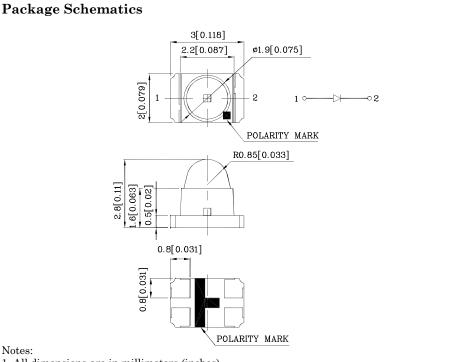
Part Number: XZMDK50WT-2

3.0x2.0mm RIGHT ANGLE SMD LED

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Tinned pads for improved solderability
- Package : 2000pcs / reel
- Moisture sensitivity level : 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.

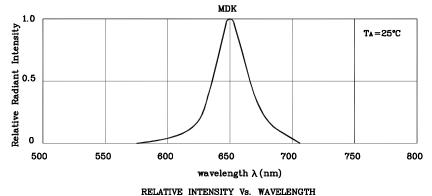
Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	\mathbf{I}_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	mA	
Power Dissipation	PD	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	

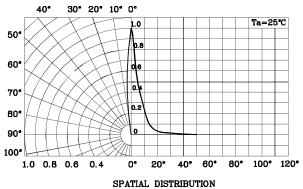
Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	V
Reverse Current (Max.) (V _R =5V)	I_R	10	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λP	650	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λD	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	$ riangle\lambda$	28	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	$_{\rm pF}$

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I _F =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZMDK50WT-2	Red	AlGaInP	Water Clear	1000	1590	650	10°

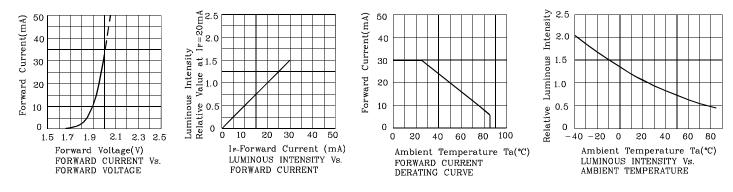
XDSB4111 V2 Layout: Maggie L.







♦ MDK



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

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

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: 1. Maximum soldering temperature should not exceed 260°C

2. Recommended reflow temperature: 145°C-260°C

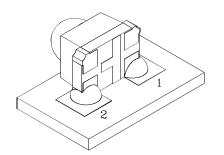
3. Do not put stress to the epoxy resin during

high temperatures conditions

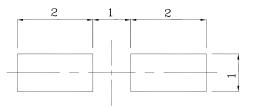
P. 2/4



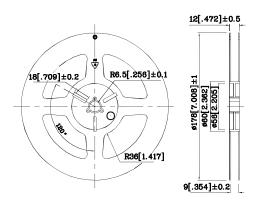
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



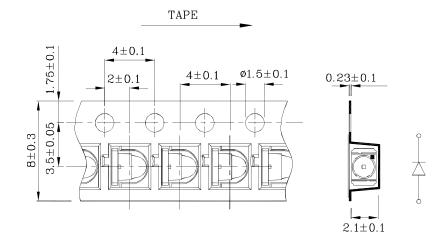
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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.

Apr 12,2011



PACKING & LABEL SPECIFICATIONS

