

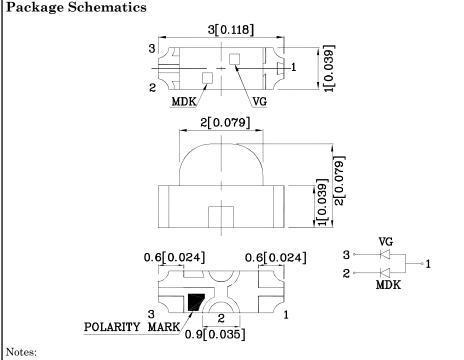
### Part Number: XZMDKVG56WT-5

3.0mmx1.0mm RIGHT ANGLE SMD CHIP LED LAMP

### Features

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Package : 2000 pcs / reel
- $\bullet$  Moisture sensitivity level : level 3
- $\bullet$  RoHS compliant





1. All dimensions are in millimeters (inches).

2. Tolerance is  $\pm 0.15 (0.006")$  unless otherwise noted.

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		MDK (AlGaInP)	VG (AlGaInP)	Unit
Reverse Voltage	$V_{R}$	5	5	V
Forward Current	$I_{\rm F}$	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	150	mA
Power Dissipation	$P_{D}$	75	75	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		1-0

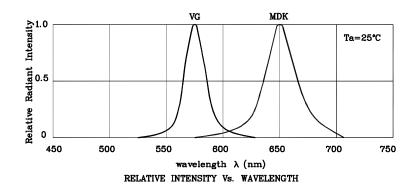
Operating Characteristics (T <sub>A</sub> =25°C)		MDK (AlGaInP)	VG (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	1.95	2.1	v
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\rm F}$	2.5	2.5	v
Reverse Current (Max.) $(V_R=5V)$	$I_{R}$	10	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λP	650	574	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	630	570	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	28	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	35	15	pF

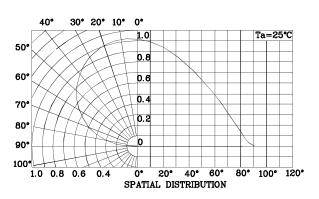
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZMDKVG56WT-5 —	Red	AlGaInP	Water Clear -	120	297	650	- 140°
	Green	AlGaInP		40	69	574	

XDSB4969 V2 Layout: Maggie L.

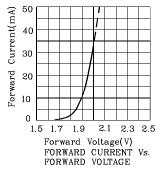


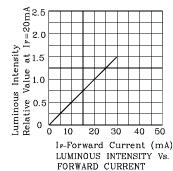
# Part Number: XZMDKVG56WT-5 3.0mmx1.0mm RIGHT ANGLE SMD CHIP LED LAMP

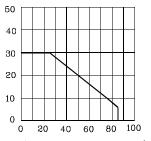




♦ MDK

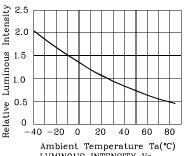






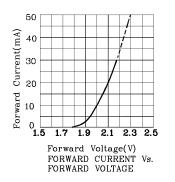
Forward Current(mA)

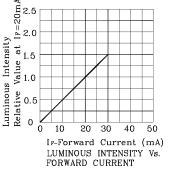
Ambient Temperature Ta(°C) FORWARD CURRENT DERATING CURVE

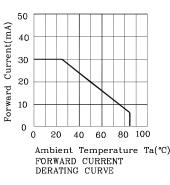


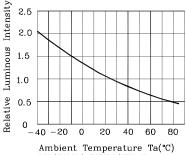


♦ VG









LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



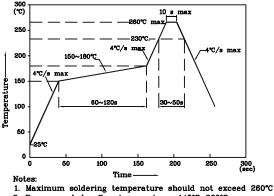
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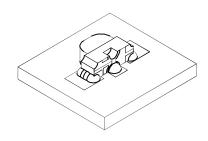
### LED is recommended for reflow soldering and soldering profile is shown below.

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

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

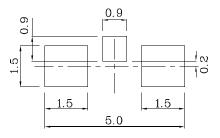


- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

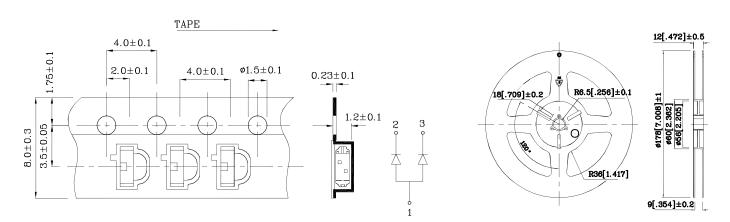


### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)

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 25,2011



## PACKING & LABEL SPECIFICATIONS

