

Part Number: XZMDKDGCBD61W

3.2mmx3.6mm FULL-COLOR SURFACE MOUNT LED LAMP



Features

• Ideal for indication light on hand held products

• Long life and robust package

• Variety of lens types and color choices available

ullet Package: 1000pcs / reel

• Moisture sensitivity level : level 3

• RoHS compliant

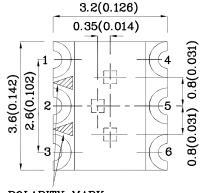


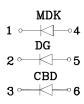




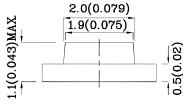
ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

Package Schematics





POLARITY MARK



Notes:

- 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 (AlGaI nP)	AlGaI (InGa		Unit
Reverse Voltage	V_{R}	5	5	5	V
Forward Current	I_{F}	30	25	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	185	150	150	mA
Power Dissipation	P_{D}	75	102.5	120	mW
Electrostatic Discharge Threshold (HBM)		-	450	250	V
Operating Temperature	T_{A}	-40 ~ +85			°C
Storage Temperature	Tstg				

Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	DG (InGaN)	CBD (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V_{F}	1.95	3.3	3.3	V
Forward Voltage (Max.) (I _F =20mA)	V_{F}	2.5	4.1	4	V
Reverse Current (Max.) (V _R =5V)	I_{R}	10	50	50	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λΡ	650	515	468	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λD	630	525	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	28	30	25	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	45	100	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.		
	Red	AlGaInP		120	248	650	
XZMDKDGCBD61W	Green	InGaN	Water Clear	200	347	515	120°
Blue	Blue	InGaN	_	50	79	468	

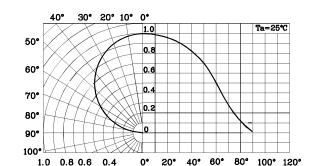
Apr 26,2011 XDSB2473 V3 Layout: Maggie L.



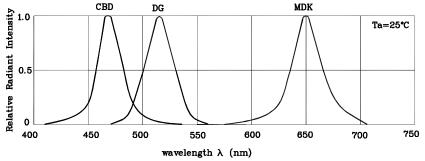
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3.2mmx3.6mm FULL-COLOR SURFACE

MOUNT LED LAMP

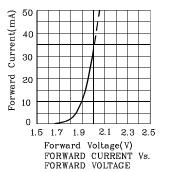


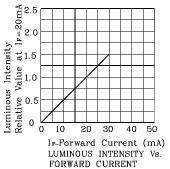
SPATIAL DISTRBUTION

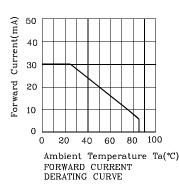


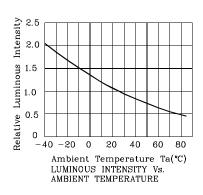
RELATIVE INTENSITY Vs. WAVELENGTH

❖ MDK

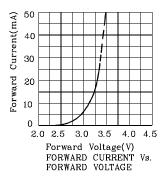


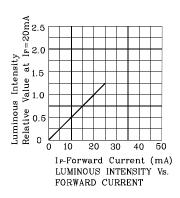


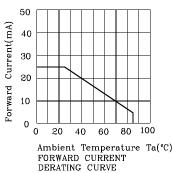


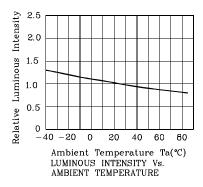


♦ DG

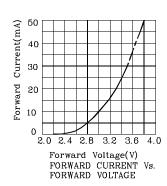


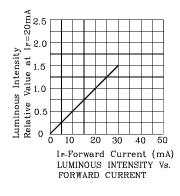


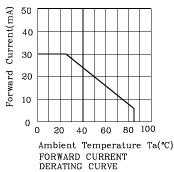


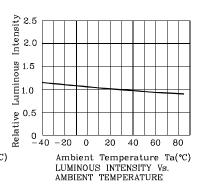


♦ CBD





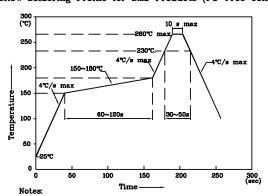




Apr 26,2011 XDSB2473 V3 Layout: Maggie L.

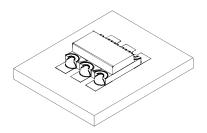
LED is recommended for reflow soldering and soldering profile is shown below.

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

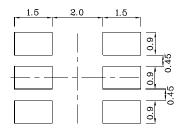


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

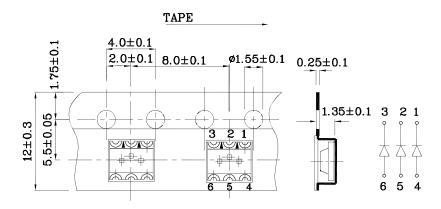
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



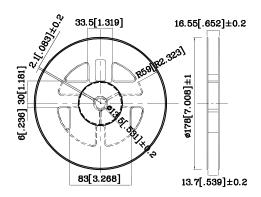
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ Tape Specification (Units:mm)



❖ Reel Dimension



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.

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 $3.2 {\tt mmx3.6mm} \ {\tt FULL\text{-}COLOR} \ {\tt SURFACE}$ ${\tt MOUNT} \ {\tt LED} \ {\tt LAMP}$

PACKING & LABEL SPECIFICATIONS

