

Part Number: XZMDKCBD57W-1 $3.0 \mathrm{x} 2.5 \mathrm{mm}$ SURFACE MOUNT LED LAMP

Features

- $\bullet~3.0 \text{mmx} 2.5 \text{mm}$ SMT LED, 1.4 mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for back light and indicator.
- Various colors and lens types available.
- Inner lens type.
- Moisture sensitivity level : level 3.
- ullet Package: 2000pcs / reel.
- RoHS compliant.





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 (TA=25°C)		MDK (AlGaInP)	CBD (InGaN)	Unit
Reverse Voltage	$V_{\rm R}$	5	5	V
Forward Current	IF	30	30	mA
Forward Current (Peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	185	150	mA
Power Dissipation	PD	75	120	mW
Operating Temperature	TA	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		C

3(.118) POLARITY MARK (000)	MDK 2 ∘ < 1
2(.079) 1.8(.071) 1.5(.059) R0.45(.018) 1.1(.043) Q Q Q Q Q Q Q Q Q Q Q	CBD 4 ∘— < 3
1(.039) (600) (1000)	

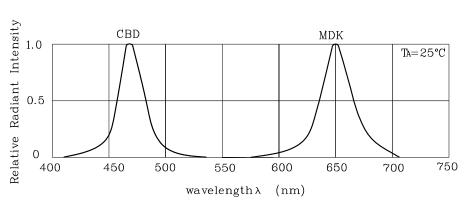
Operating Characteristics (TA=25°C)		MDK (AlGaInP)	CBD (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.95	3.3	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	4.0	V
Reverse Current (Max.) (VR=5V)	IR	10	50	uA
Wavelength of Peak Emission (Typ.) (IF=20mA)	λΡ	650	468	nm
Wavelength of Dominant Emission (Typ.) (IF=20mA)	λ D	630	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	Δλ	28	25	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	С	35	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 0 1/2
				min.	typ.		
VZMDIZODDEZW 1	Red	AlGaInP	Water Clear -	400	597	650	100°
XZMDKCBD57W-1	Blue	InGaN		120	248	468	

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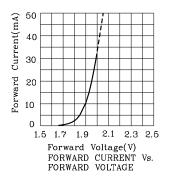


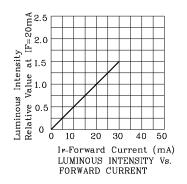
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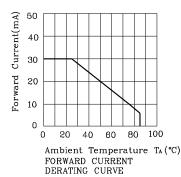


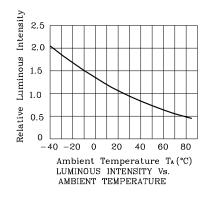
RELATIVE INTENSITY Vs. WAVELENGTH

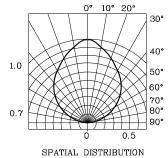
♦ MDK











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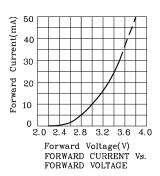


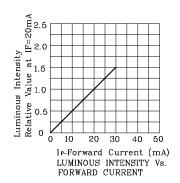
Part Number: XZMDKCBD57W-1

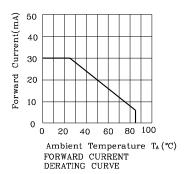
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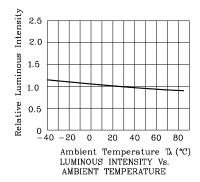


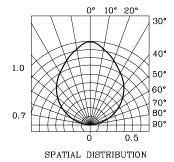
❖ CBD







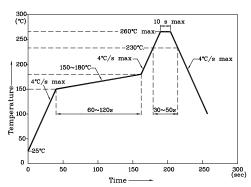




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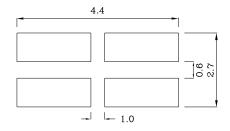
Reflow soldering is recommended and the soldering profile is shown below. Other soldering methods are not recommended as they might cause damage to the product.

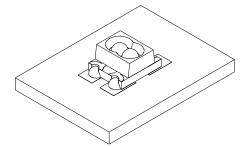
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

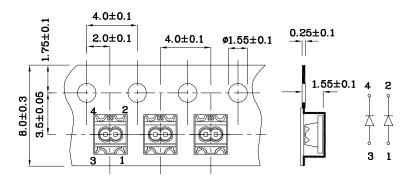
- 1. Maximum soldering temperature should not exceed 260°c.
- 2. Recommended reflow temperature: 145°c-260°c.
- 3. Do not put stress to the epoxy resin during high temperatures conditions.
- ❖ Recommended Soldering Pattern (Units: mm; Tolerance: ±0.1)
- **❖** The device has a single mounting surface. The device must be mounted according to the specifications.





* Tape Specification (Units:mm)

TAPE



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.

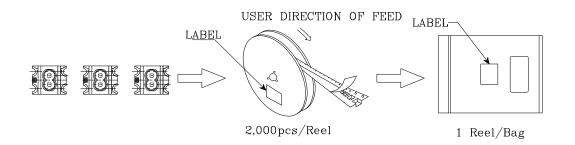


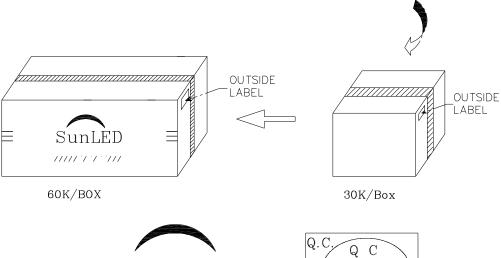
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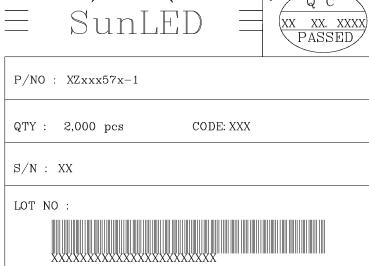
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PACKING & LABEL SPECIFICATIONS

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RoHS Compliant

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