

Part Number: XZMDKVG48W

 ${\bf SOT\text{-}23~SURFACE~MOUNT~LED~LAMP}$

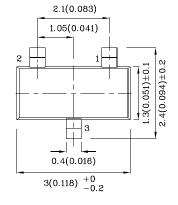
Features

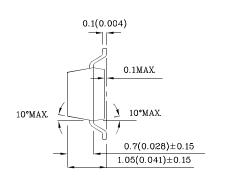
- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- ullet Package: 2000pcs / reel
- Moisture sensitivity level : level 3
- RoHS compliant

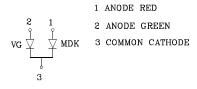




Package Schematics







Notes:

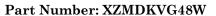
- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

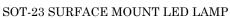
Absolute Maximum Ratings (T _A =25°C)		MDK (AlGaInP)	VG (AlGaInP)	Unit
Reverse Voltage	$V_{\rm R}$	5	5	V
Forward Current	I_{F}	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	185	150	mA
Power Dissipation	P_{D}	75	75	mW
Operating Temperature	T_{A}	-40 ~ +85		°C
Storage Temperature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

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

Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous\\ Intensity\\ (I_F=20mA)\\ mcd \end{array}$		Wavelength nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZMDKVG48W	Red	AlGaInP	W Cl	120	198	650	140°
AZMDKVG48W	Green	AlGaInP	- Water Clear	30	49	574	

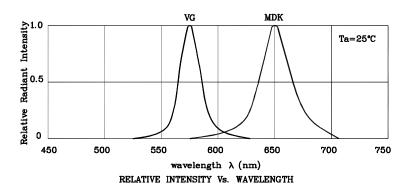
Apr 22,2011 XDSB1842 V2 Layout: Maggie L.

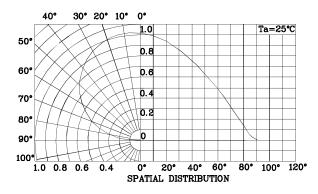




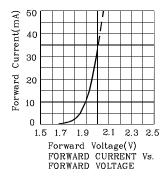


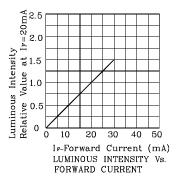


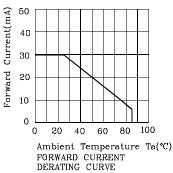


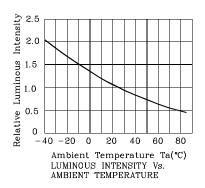


❖ MDK

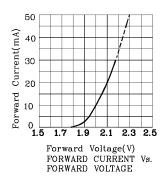


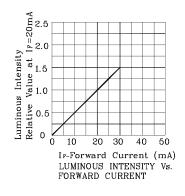


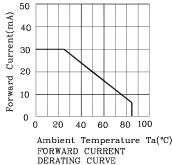


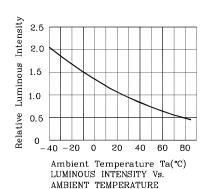


* VG









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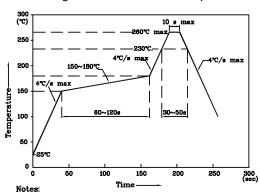


SOT-23 SURFACE MOUNT LED LAMP

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

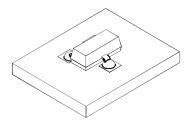
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Reflow Soldering Profile for SMD Products (Pb-Free Components)

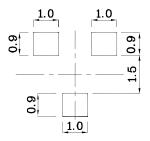


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

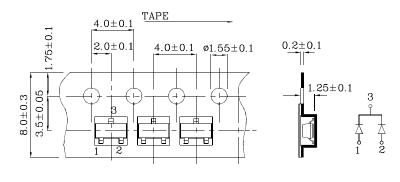
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



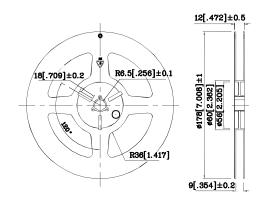
❖ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ 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:

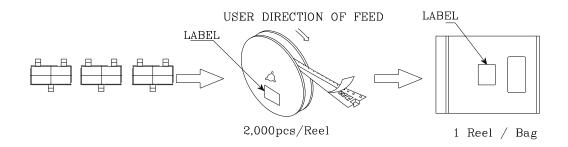
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

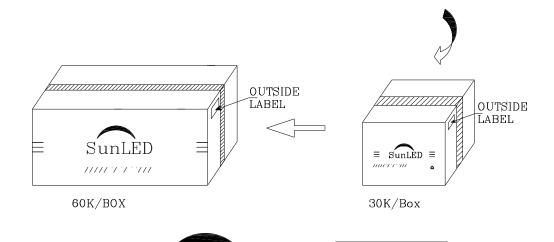
Note: Accuracy may depend on the sorting parameters.

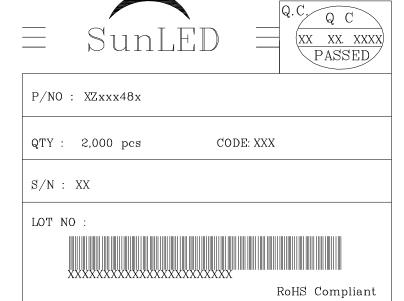


PACKING & LABEL SPECIFICATIONS

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