

# Part Number: XZURMG48W

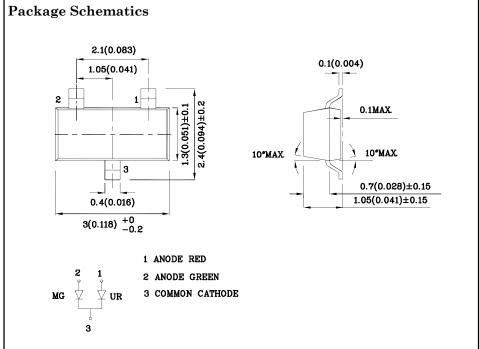
SOT-23 SURFACE MOUNT LED LAMP

# **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







#### Notes:

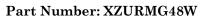
- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

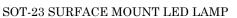
Absolute Maximum Ratings ( $T_A$ =25°C)		UR (GaAsP/ GaP)	MG (GaP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	5	V
Forward Current	$I_{\mathrm{F}}$	30	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	160	140	mA
Power Dissipation	$P_D$	75	62.5	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics (T <sub>A</sub> =25°C)		UR (GaAsP/ GaP)	MG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_{\mathrm{R}}$	10	10	uA
Wavelength of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λP	627	565	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λD	625	568	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	45	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	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.		
XZURMG48W	Red GaAsP/GaP	5	11	627	1.409		
	Green	GaP	Water Clear -	4	9	565	140°

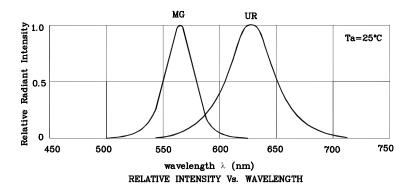
Apr 22,2011 XDSA1685 V7 Layout: Maggie L.

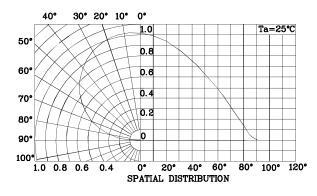




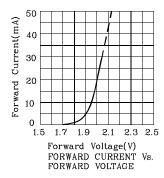


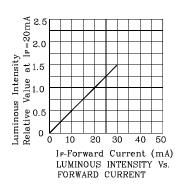


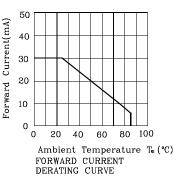


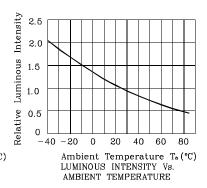


# ❖ UR

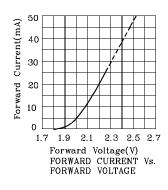


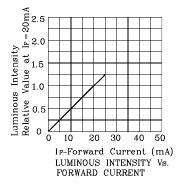


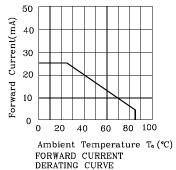


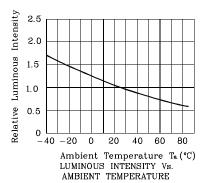


# ❖ MG







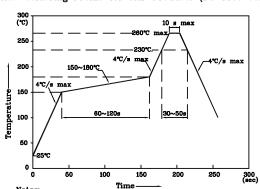






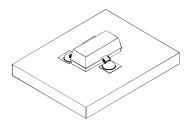
LED is recommended for reflow soldering and soldering profile is shown below.

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

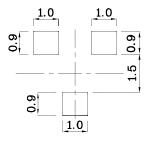


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

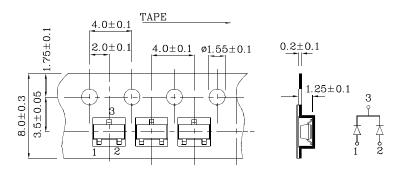
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



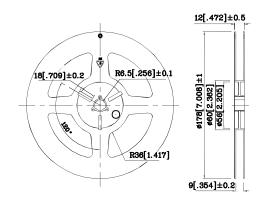
**❖** Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



# **❖** 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:

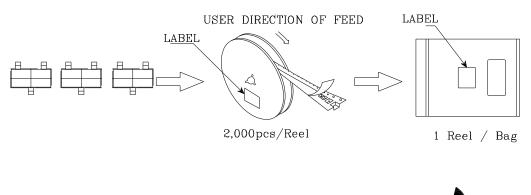
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

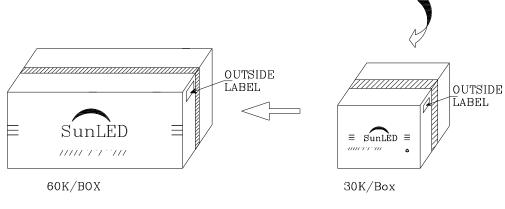
Note: Accuracy may depend on the sorting parameters.

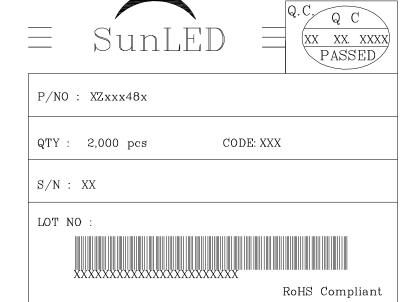




# PACKING & LABEL SPECIFICATIONS







Apr 22,2011