3.5x2.8mm SMD CHIP LED LAMP



#### **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 500pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant

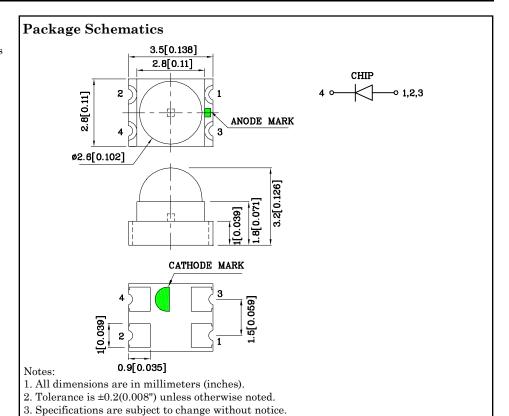






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#### ATTENTION OBSERVE PRECAUTIONS FOR HANDLING $\begin{array}{c} \text{ELECTROSTATIC} \\ \text{DISCHARGE} \end{array}$ SENSITIVE DEVICES



Absolute Maximum Ratings (T <sub>A</sub> =25°C)	Red (AlGaInP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	$I_{\mathrm{F}}$	50	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	mA	
Power Dissipation	$P_{D}$	160	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T <sub>A</sub> =25°C)	Red (AlGaInP)	Unit		
Forward Voltage (Typ.) (I <sub>F</sub> =50mA)		2.5	V	
Forward Voltage (Max.) (I <sub>F</sub> =50mA)	$V_{\mathrm{F}}$	3.2	V	
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA	
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =50mA)	λР	640*	nm	
Wavelength of Dominant Emission CIE127-2007*(Typ.) $(I_F=50 \text{mA})$	λD	625*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =50mA)		20	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	27	pF	

2700\*

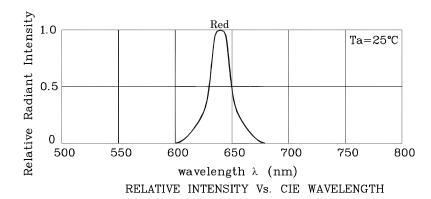
4790\*

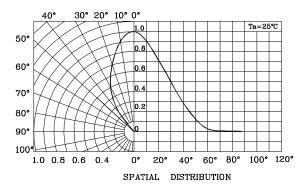
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I <sub>F</sub> =50mA) mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZM2CRK45W50MAV-6	Red	AlGaInP	Water Clear	7000	10990	640*	60°

<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

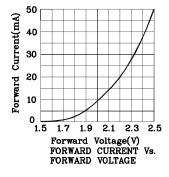


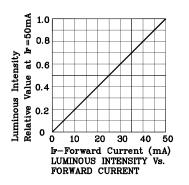


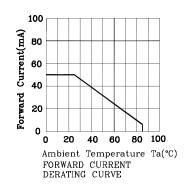


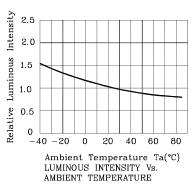


## **❖** Red



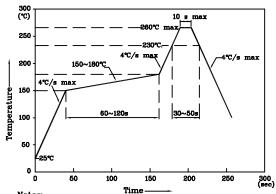






# LED is recommended for reflow soldering and soldering profile is shown below.

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

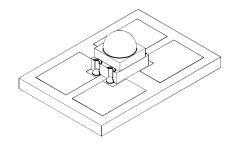


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

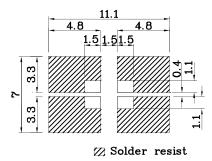




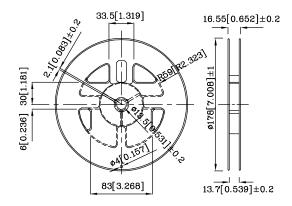
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



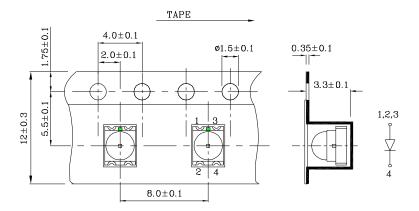
# **❖** Recommended Soldering Pattern (Units:mm; Tolerance: ± 0.1)



## **❖** 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:

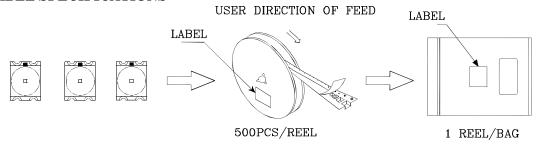
- 1. Wavelength: +/-1nm
- 2. Luminous intensity / luminous flux: +/-15%
- 3. Forward Voltage: +/-0.1V

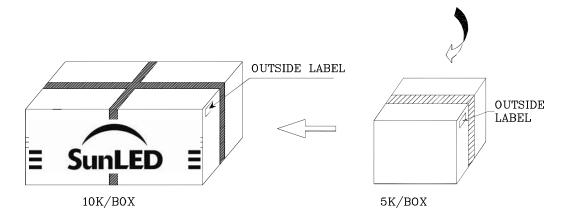
Note: Accuracy may depend on the sorting parameters.

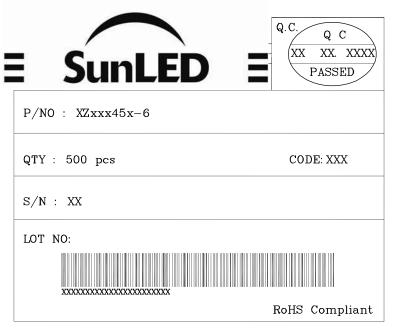




#### PACKING & LABEL SPECIFICATIONS







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