



3.2x1.6mm SMD CHIP LED LAMP

Features

• Ideal for indication light on hand held products

• Long life and robust package

• Standard Package: 2,000pcs/ Reel

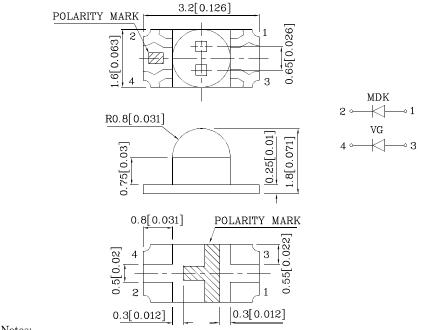
 \bullet MSL (Moisture Sensitivity Level): 3

• RoHS compliant





Package Schematics



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 (AlGaInP)	VG (AlGaInP)	Unit
Reverse Voltage	V_{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	$T_{\rm A}$	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		

Operating Characteristics (T _A =25°C)		MDK (AlGaInP)	VG (AlGaInP)	Unit
Forward Voltage (Typ.) $(I_F=20 \text{mA})$	V_{F}	1.95	2.1	V
Forward Voltage (Max.) $(I_F=20 \text{mA})$	V_{F}	2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	I_R	10	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =20mA)	λΡ	645*	574*	nm
Wavelength of Dominant Emission CIE127-2007* (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

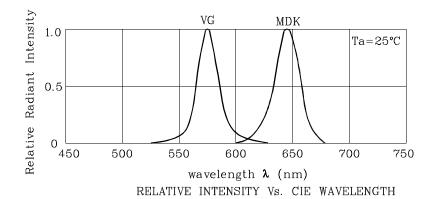
Part Number	Emitting Color	Emitting Material	Lens-color	$\begin{array}{c} Luminous \ Intensity \\ CIE127\text{-}2007* \\ (I_F\text{=}20\text{mA}) \ mcd \end{array}$		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XZMDKVG55W-8	Red	AlGaInP	- Water Clear	500 200*	895 397*	645*	30°
	Green	AlGaInP	water Clear	120 120*	248 248*	574*	

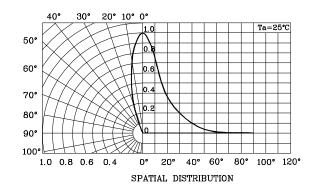
^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 07,2014

XDSA7706 V8-X Layout: Maggie L.

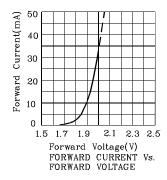


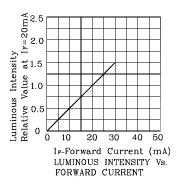


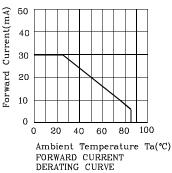


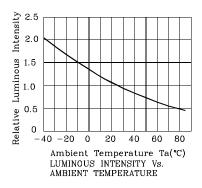


❖ MDK

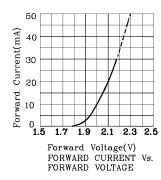


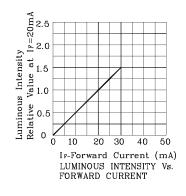


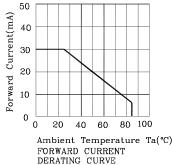


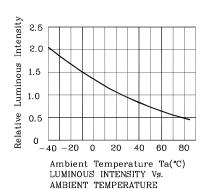


❖ VG







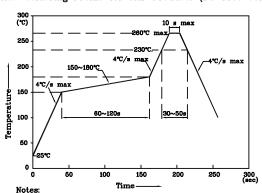






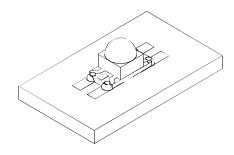
LED is recommended for reflow soldering and soldering profile is shown below.

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

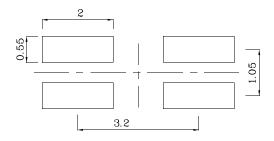


- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- Do not put stress to the epoxy resin during high temperatures conditions

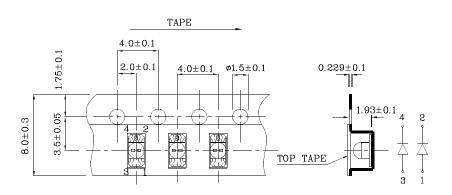
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



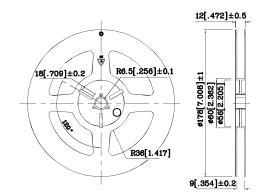
♦ Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



❖ 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

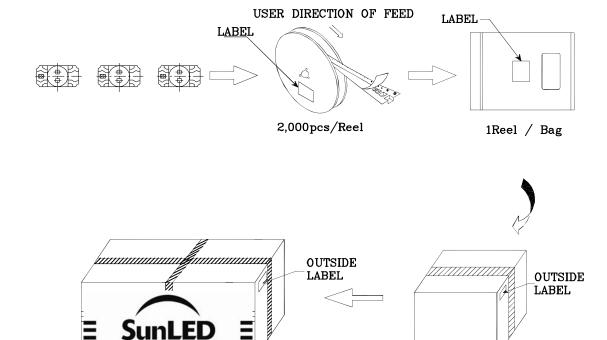
Note: Accuracy may depend on the sorting parameters.

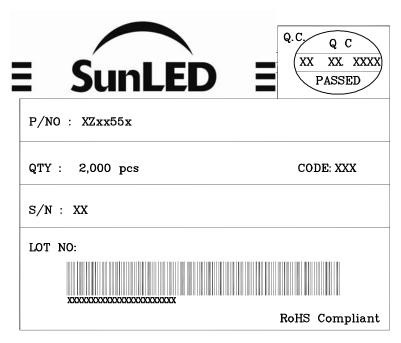
30K/Box





PACKING & LABEL SPECIFICATIONS





TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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60K/Box

6. Additional technical notes are available at http://www.SunLEDusa.com/TechnicalNotes.asp