

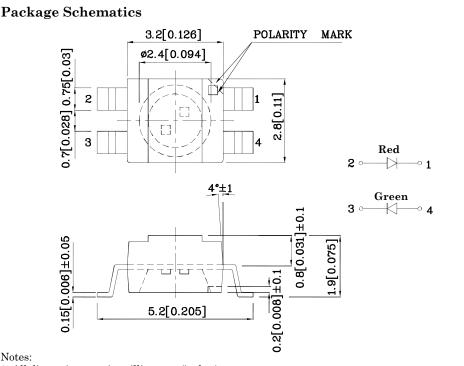
Part Number: XZMDKVG45WT-9

3.2x2.8mm PLCC4 SMD LED

Features

- Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2,000pcs/ Reel
- MSL (Moisture Sensitivity Level): 3
- RoHS compliant.





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)		Red (AlGaInP)	Green (AlGaInP)	Unit
Reverse Voltage	V_{R}	5	5	v
Forward Current	$I_{\rm F}$	30	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	185	150	mA
Power Dissipation	\mathbf{P}_{D}	75	75	mW
Operating Temperature	$T_{\rm A}$	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		-0

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)

Part

Number

Operating Characteristics (T _A =25°C)		Red (AlGaInP)	Green (AlGaInP)	Unit	
Forward Voltage (Typ.) (I _F =20mA)	$V_{\rm F}$	1.95	2.1	v	
Forward Voltage (Max.) (I _F =20mA)	$V_{\rm F}$	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)	λP	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)	$ riangle \lambda$	28	20	nm	
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	35	15	$_{\rm pF}$	
Lens-color CIE127-200	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		0'/* Ang	Viewing Angle 20 1/2	

				min.	typ.		
XZMDKVG45WT-9	Red	AlGaInP	Watan Class	200 55*	317 98*	645*	- 120°
	Green	AlGaInP	Water Clear	40 40*	79 79*	574*	

Emitting

Material

*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 30,2016

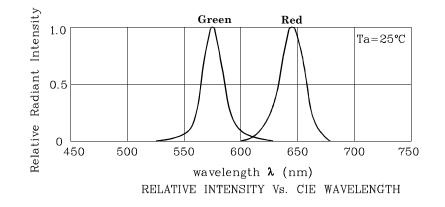
Emitting

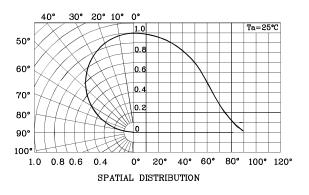
Color

XDSB8625 V1-X Layout: Maggie L.

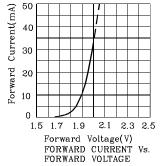


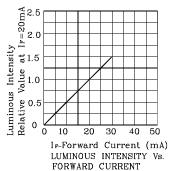
3.2x2.8mm PLCC4 SMD LED

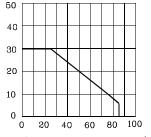




Red

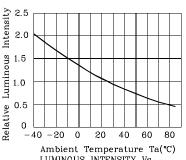






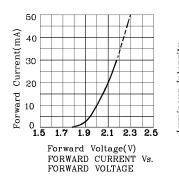
Forward Current(mA)

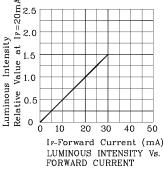
Ambient Temperature Ta(°C) FORWARD CURRENT DERATING CURVE

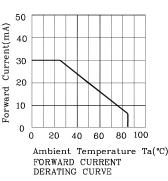


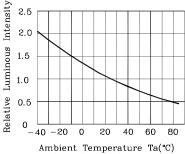
LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

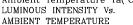
Green













300 (°C)

250

200

150

100

50

Notes

Temperature

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

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

4°C/s

80~120

100

high temperatures conditions

Tim

2. Recommended reflow temperature: 145°C-260°C

3. Do not put stress to the epoxy resin during

150

Maximum soldering temperature should not exceed 260°C

200

150~180°C

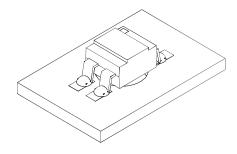
4℃/s max

10 8

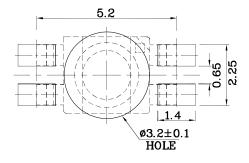
C/s r

250

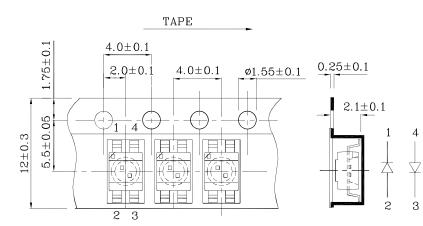
300 (sec) The device has a single mounting surface. The device must be mounted according to the specifications.



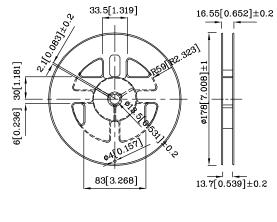
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



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

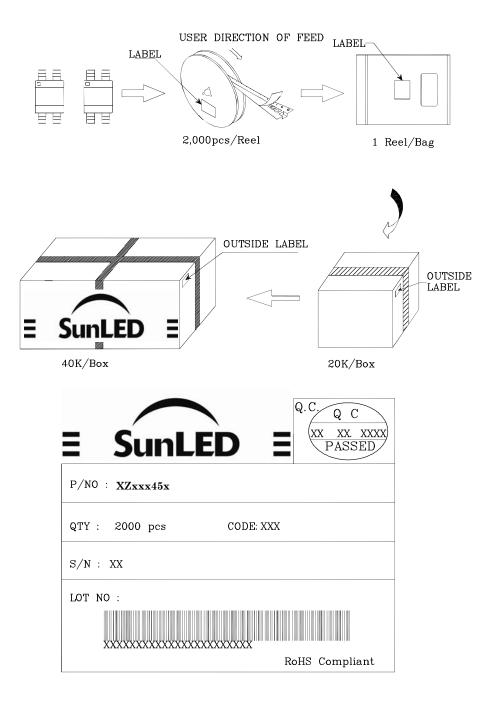
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS



TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet. User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>