

#### SURFACE MOUNT DISPLAY

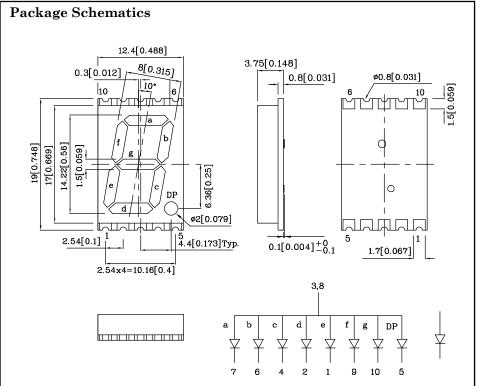
#### Features

- $\bullet~0.56$  inch digit height
- Robust package
- $\bullet$  Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 400pcs/ Reel
- MSL (Moisture Sensitivity Level): 2a
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES





1. All dimensions are in millimeters (inches), Tolerance is  $\pm 0.25 (0.01") unless otherwise noted.$ 

2. Specifications are subject to change without notice.

3. The gap between the reflector and PCB shall not exceed  $0.25 \mathrm{mm}.$ 

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit
Reverse Voltage	$V_{\mathrm{R}}$	5	V
Forward Current	$I_{\rm F}$	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\rm FS}$	175	mA
Power Dissipation	$\mathbf{P}_{\mathrm{D}}$	75	mW
Operating Temperature	TA	$-40 \sim +85$	°C
Storage Temperature	Tstg	$-40 \sim +85$	-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)

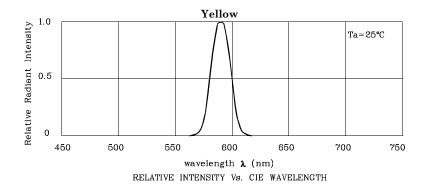
Operating Characteristics (T <sub>A</sub> =25°C)		Yellow (AlGaInP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	1.95	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	590*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)			nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XZFMYK14A	Yellow	AlGaInP	31000 75990 14000* 28990*	590*	Common Anode,Rt. Hand Decimal.

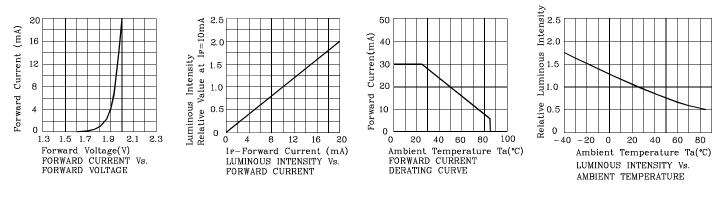
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Oct 13.2016

XDSA9102 V7-X Layout: Maggie L.



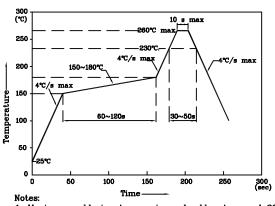


# ✤ Yellow



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

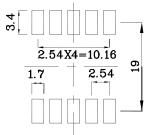
Reflow Soldering Profile for SMD Products (Pb-Free Components)



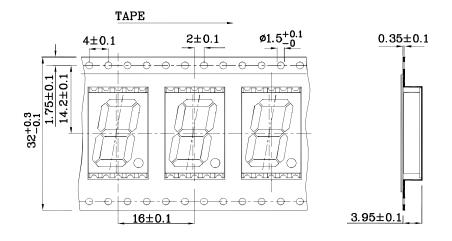
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during
- high temperatures conditions



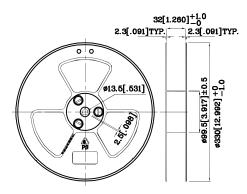
# **Recommended Soldering Pattern (Units : mm; Tolerance: ±0.15)**



# 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

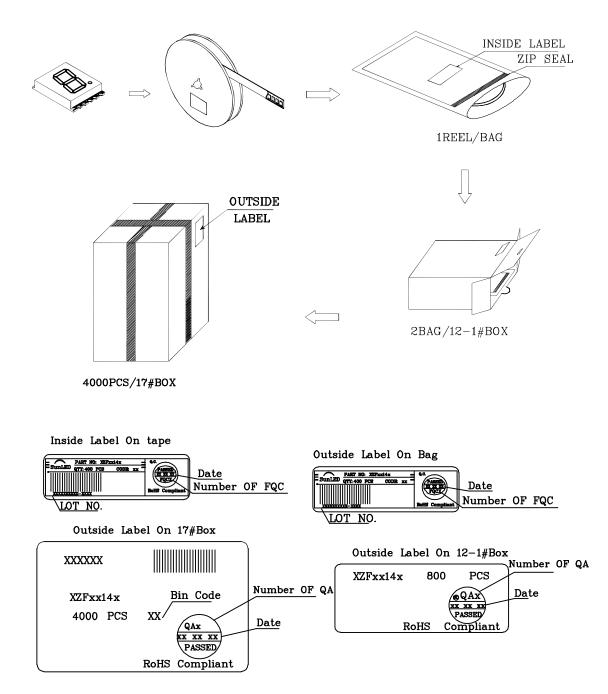
2. Luminous intensity / luminous flux: +/-15\%

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.
- $6. Additional technical notes are available at \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}{}$