

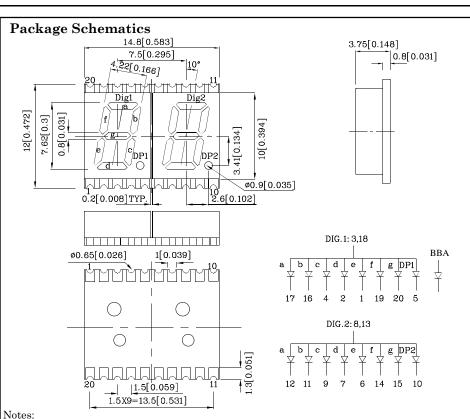
## Part Number: XZFBBA07A2

SURFACE MOUNT DISPLAY

#### Features

- $\bullet~0.3$  inch digit height
- $\bullet$  Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 300pcs/ 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.

 $3. The gap between the reflector and PCB shall not exceed <math display="inline">0.25 \mathrm{mm}.$ 

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		BBA (InGaN)	Unit	
Reverse Voltage		5	V	
Forward Current	I <sub>F</sub> 30		mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	100	mA	
Power Dissipation	$P_{D}$	120	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$		
Electrostatic Discharge Threshold (HBM)		1000	V	

Operating Characteristics (T <sub>A</sub> =25°C)		BBA (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	3.05	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\rm F}$	4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	IR	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	468*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle\lambda$	21	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF

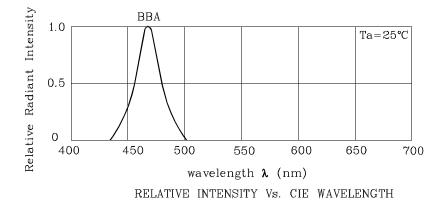
Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XZFBBA07A2	Blue	InGaN	1400* 2490*	468*	Common Anode, Rt.Hand Decimal.

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

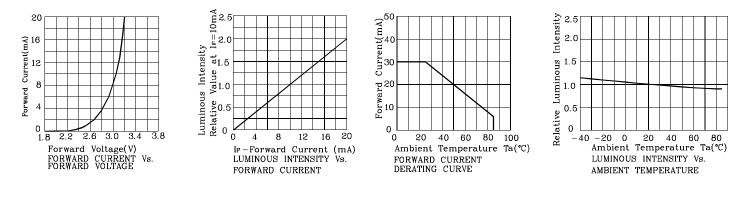
Jan 08,2014

XDSA9181 V7-Z Layout: Maggie L.



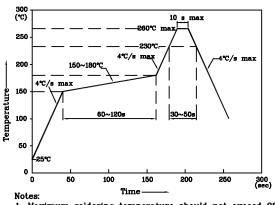


✤ BBA



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

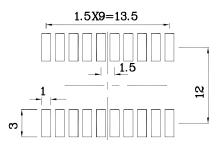
Reflow Soldering Profile for SMD Products (Pb-Free Components)



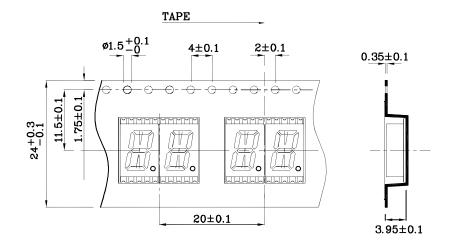
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during
- high temperatures conditions



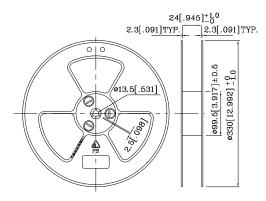
# **Recommended Soldering Pattern (Units : mm; Tolerance: ±0.15)**



# 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%

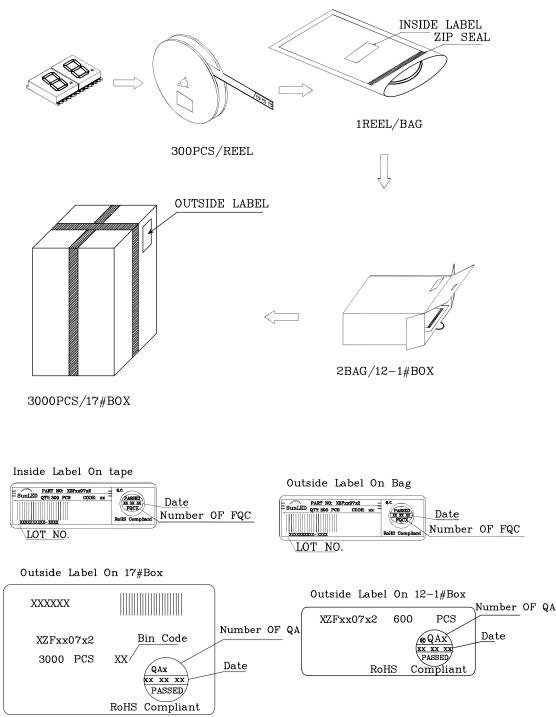
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



SURFACE MOUNT DISPLAY

### **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 http://www.SunLEDusa.com/TechnicalNotes.asp