

## **Excellent Integrated System Limited**

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

<u>SunLED</u> XZFABBA10C

For any questions, you can email us directly: sales@integrated-circuit.com



### **Distributor of SunLED: Excellent Integrated System Limited**

Datasheet of XZFABBA10C - DISPLAY 0.4" 1DIGIT BLUE CC SMD

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



Part Number: XZFABBA10C

SURFACE MOUNT DISPLAY

#### **Features**

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



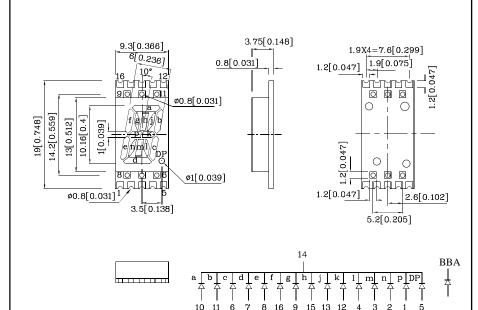




## ATTENTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES





#### Notes:

- 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 0.25mm.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	BBA (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current I <sub>F</sub>		30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	100	mA	
Power Dissipation	$P_{\mathrm{D}}$	120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	Ų	
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)	$V_{\mathrm{F}}$	3.05	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	4	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)	· (Typ.) λΡ 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)	$\triangle \lambda$	21	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	100	pF

 Part Number	Emitting Color	Emitting Material	$\begin{array}{c} Luminous\ Intensity\\ CIE127\text{-}2007*\\ (I_F\text{=}10\text{mA})\\ ucd \end{array}$	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XZFABBA10C	Blue	InGaN	2200* 5790*	468*	Common Cathode, Rt.Hand Decimal.

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

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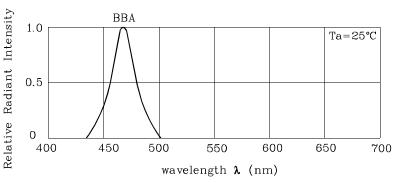
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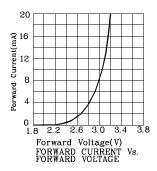
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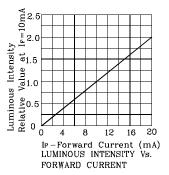
SURFACE MOUNT DISPLAY

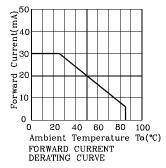


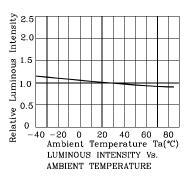
RELATIVE INTENSITY Vs. CIE WAVELENGTH

#### **♦** BBA



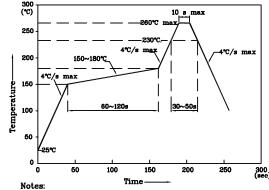






# LED is recommended for reflow soldering and soldering profile is shown below.

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



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

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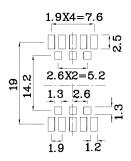
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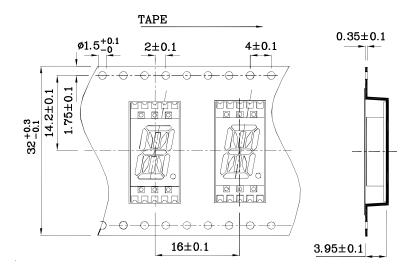
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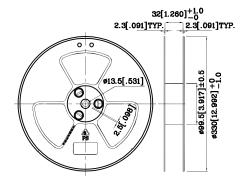
#### **❖** Recommended Soldering Pattern (Units: mm; Tolerance: ±0.15)



#### 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.

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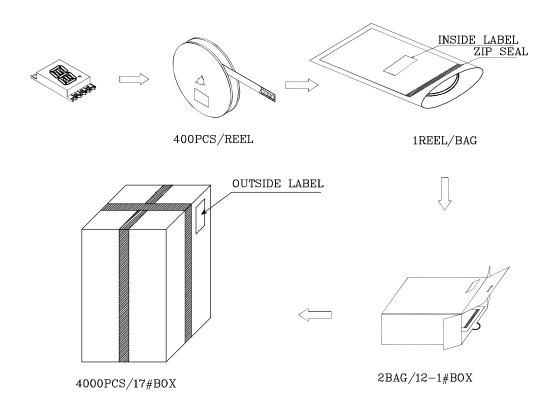
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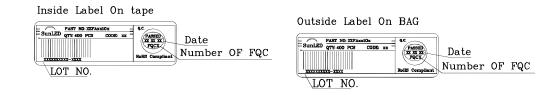


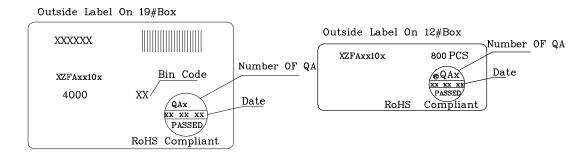
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#### PACKING & LABEL SPECIFICATIONS







#### 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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- 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.
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- 6. Additional technical notes are available at <a href="http://www.SunLEDusa.com/TechnicalNotes.asp">http://www.SunLEDusa.com/TechnicalNotes.asp</a>

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