

# **Excellent Integrated System Limited**

Stocking Distributor

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

<u>SunLED</u> XZFCBD20C-A

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



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

Datasheet of XZFCBD20C-A - DISPLAY 0.8" 1DIGIT BLUE CC SMD

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



Part Number: XZFCBD20C-A

SURFACE MOUNT DISPLAY

#### **Features**

- 0.8 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 200pcs/ Reel
- MSL (Moisture Sensitivity Level): 2a
- RoHS compliant

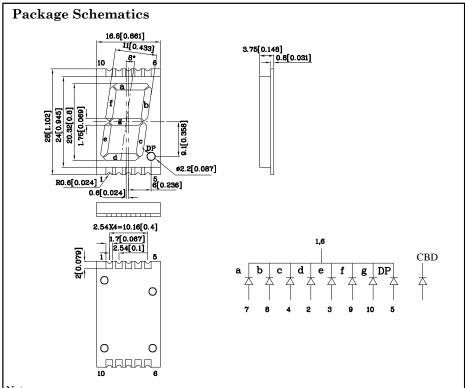






# ATTENTION

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)	CBD (InGaN)	Unit		
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	150	mA	
Power Dissipation	on P <sub>D</sub>		mW	
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	
Electrostatic Discharge Thresho (HBM)	250	V		

Operating Characteristics ( $T_A$ =25°C)		CBD (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	3	V	
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	460*	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)	$\triangle \lambda$	25	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	рF

 Part Number	Emitting Color	Emitting Material	Luminous Intensity $CIE127-2007*$ $(I_F=10\text{mA})$ $ucd$		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XZFCBD20C-A	Blue	InGaN	3600*	8690*	460*	Common Cathode, Rt.Hand Decimal.

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

Jan 10,2014 XDSB5846 V2-Z Layout: Maggie L.



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

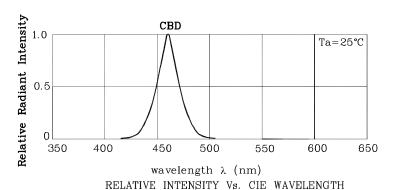
Datasheet of XZFCBD20C-A - DISPLAY 0.8" 1DIGIT BLUE CC SMD

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

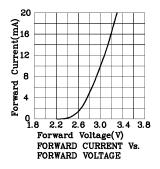


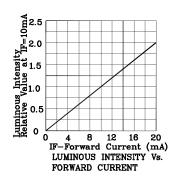
Part Number: XZFCBD20C-A

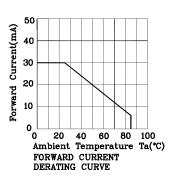
SURFACE MOUNT DISPLAY

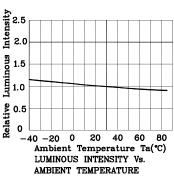


#### **♦** CBD



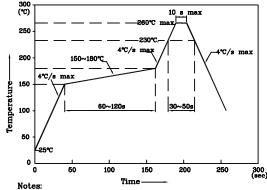






LED is recommended for reflow soldering and soldering profile is shown below.

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



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

Jan 10,2014

XDSB5846 V2-Z Layout: Maggie L.



Datasheet of XZFCBD20C-A - DISPLAY 0.8" 1DIGIT BLUE CC SMD

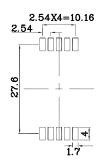
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



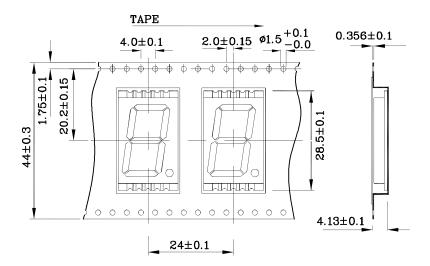
Part Number: XZFCBD20C-A

SURFACE MOUNT DISPLAY

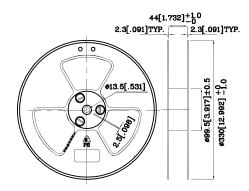
#### **❖** Recommended Soldering Pattern (Units: mm; Tolerance: ±0.15)



### **❖** 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.

Jan 10,2014 XDSB5846 V2-Z Layout: Maggie L.

P. 3/4





# Distributor of SunLED: Excellent Integrated System Limited

Datasheet of XZFCBD20C-A - DISPLAY 0.8" 1DIGIT BLUE CC SMD

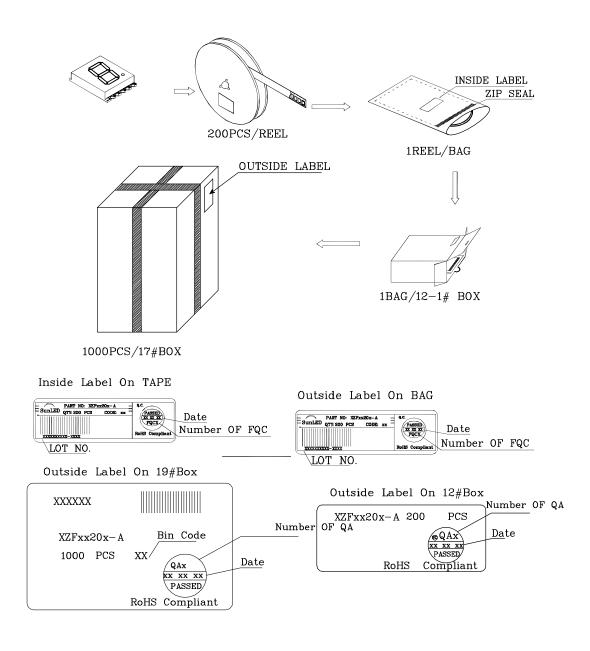
Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



Part Number: XZFCBD20C-A

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 <a href="http://www.SunLEDusa.com/TechnicalNotes.asp">http://www.SunLEDusa.com/TechnicalNotes.asp</a>

XDSB5846 V2-Z Layout: Maggie L.