

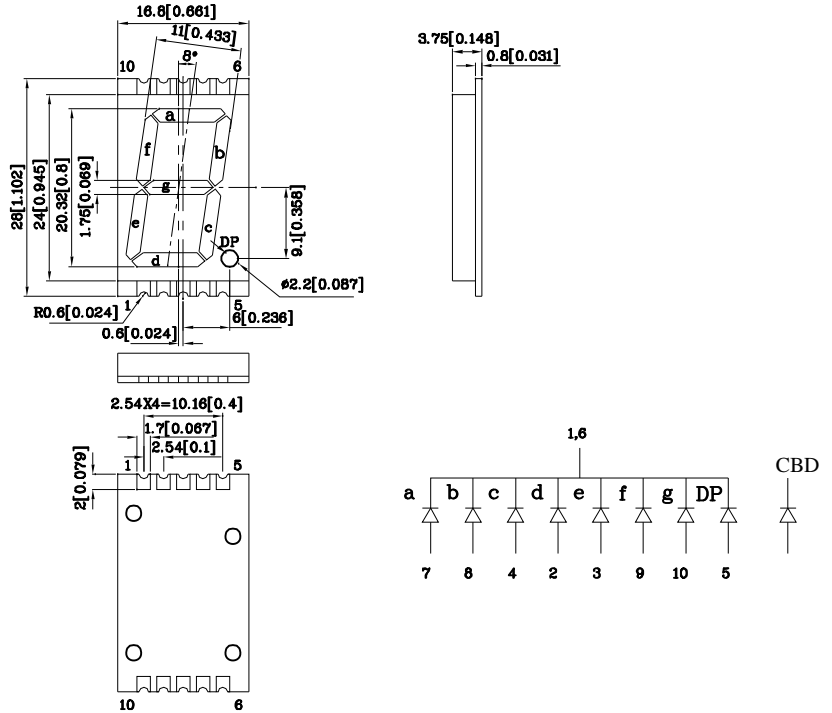
Features

- 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

Package Schematics



Notes:

1. All dimensions are in millimeters (inches), Tolerance is ± 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 _A =25°C)		CBD (InGaN)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	150	mA
Power Dissipation	P _D	120	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		250	V

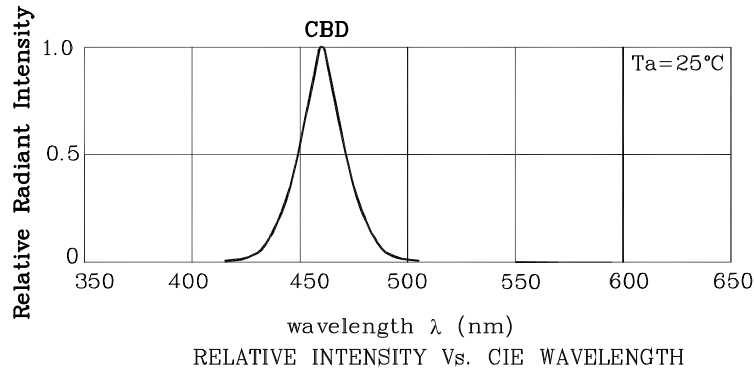
Operating Characteristics (T _A =25°C)		CBD (InGaN)	Unit
Forward Voltage (Typ.) (I _F =10mA)	V _F	3	V
Forward Voltage (Max.) (I _F =10mA)	V _F	4	V
Reverse Current (Max.) (V _R =5V)	I _R	50	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	λ _P	460*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λ _D	465*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	Δλ	25	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I _F =10mA)		Wavelength CIE127-2007* nm λ _P	Description
			min.	typ.		
XZFCBD20C-A	Blue	InGaN	3600*	8690*	460*	Common Cathode, Rt.Hand Decimal.

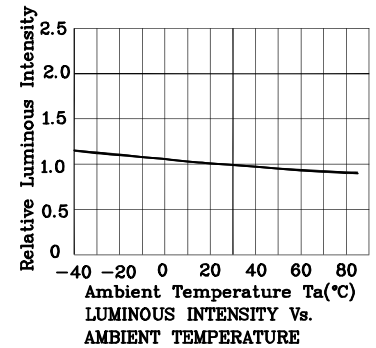
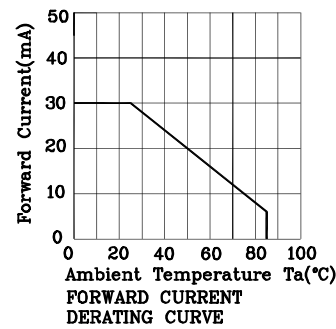
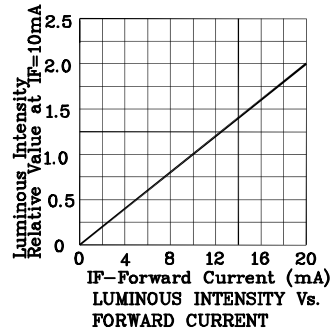
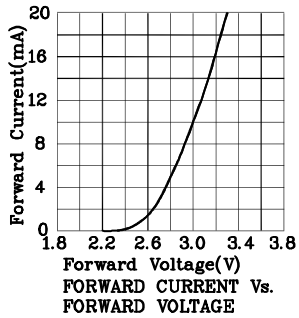
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Jan 10,2014

XDSB5846 V2-Z Layout: Maggie L.

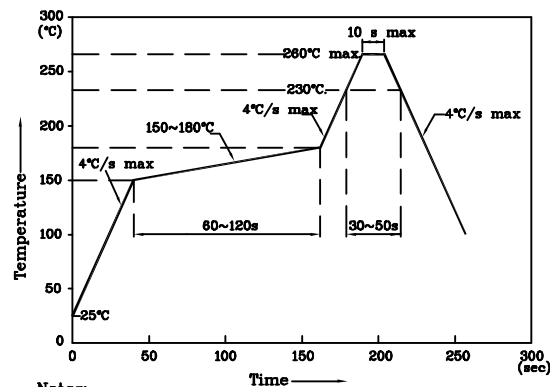


❖ CBD



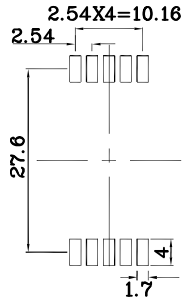
LED is recommended for reflow soldering and soldering profile is shown below.

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

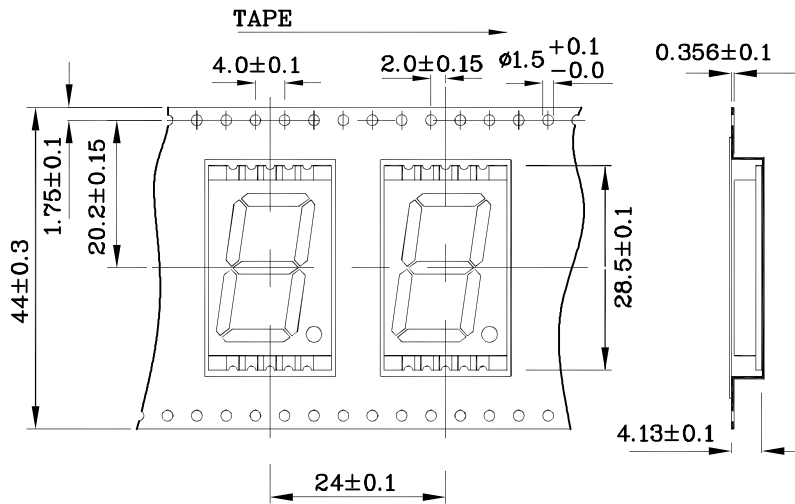


1. Maximum soldering temperature should not exceed 260°C
2. Recommended reflow temperature: 145°C – 260°C
3. Do not put stress to the epoxy resin during high temperatures conditions

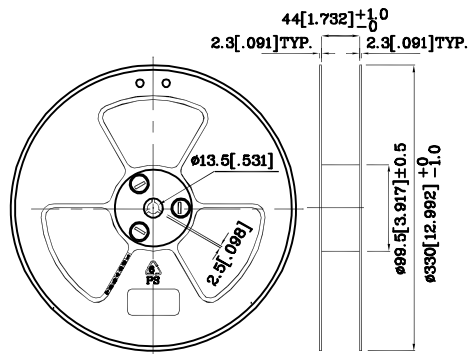
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



❖ Tape Specification (Units : mm)



❖ Reel Dimension



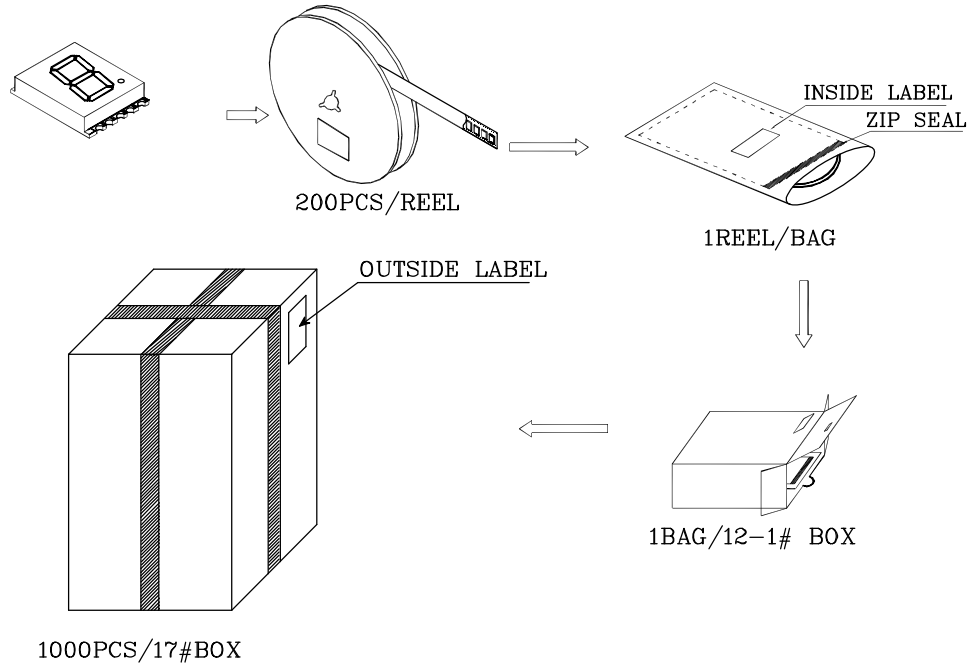
Remarks:

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:

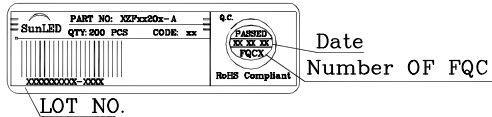
1. Wavelength: $\pm 1\text{nm}$
2. Luminous intensity / luminous flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

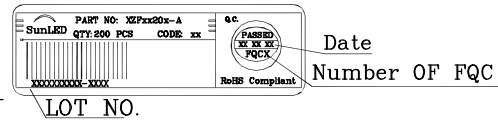
PACKING & LABEL SPECIFICATIONS



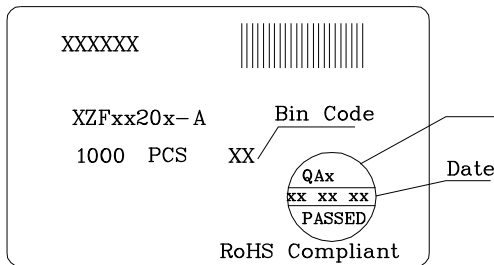
Inside Label On TAPE



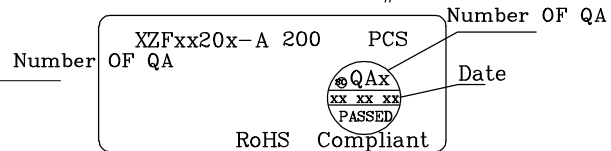
Outside Label On BAG



Outside Label On 19#Box



Outside Label On 12#Box



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