

Excellent Integrated System Limited

Stocking Distributor

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[SunLED](#)

[XZFCBD14A](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

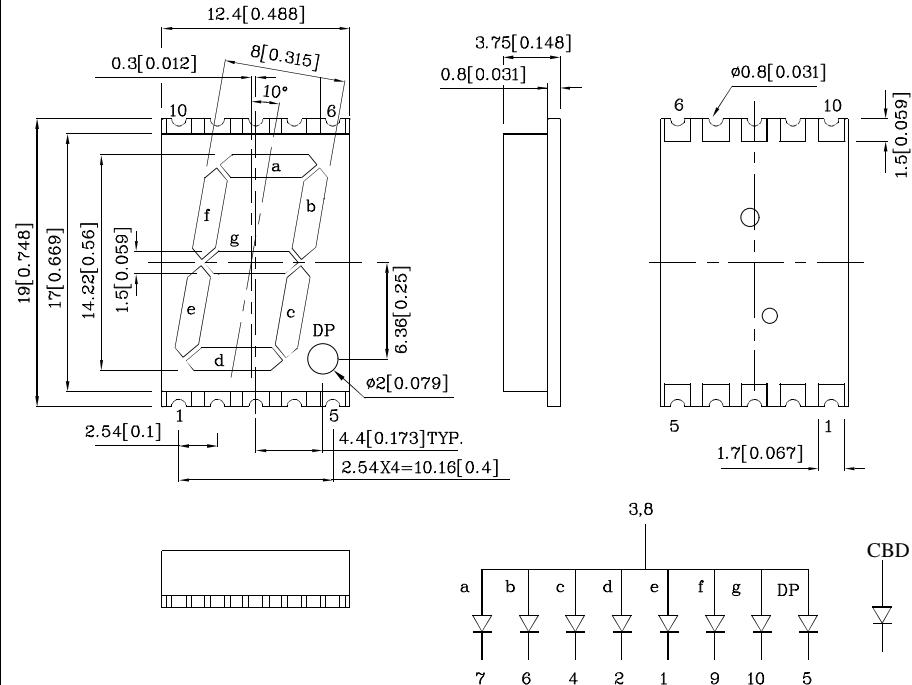
Features

- 0.56 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

Package Schematics



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 ($T_A=25^\circ\text{C}$) | | 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 | $^\circ\text{C}$ |
| Storage Temperature | T_{STG} | -40 ~ +85 | |
| Electrostatic Discharge Threshold (HBM) | | 250 | V |

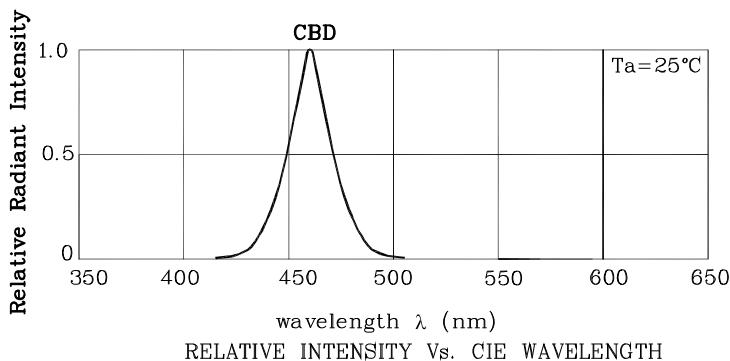
| Operating Characteristics ($T_A=25^\circ\text{C}$) | | CBD (InGaN) | Unit |
|---|-----------------|-----------------------|-------------|
| Forward Voltage (Typ.) ($I_F=10\text{mA}$) | V_F | 3 | V |
| Forward Voltage (Max.) ($I_F=10\text{mA}$) | V_F | 4 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$) | I_R | 50 | uA |
| Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_P | 460* | nm |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_D | 465* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=10\text{mA}$) | $\Delta\lambda$ | 25 | nm |
| Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 100 | pF |

| Part Number | Emitting Color | Emitting Material | Luminous Intensity CIE127-2007* ($I_F=10\text{mA}$) ucd | Wavelength CIE127-2007* nm AP | Description |
|------------------------|---------------------------|------------------------------|---|--|---|
| min. typ. | | | | | |
| XZFCBD14A | Blue | InGaN | 5600* | 14990* | 460* Common Anode,Rt. Hand Decimal. |

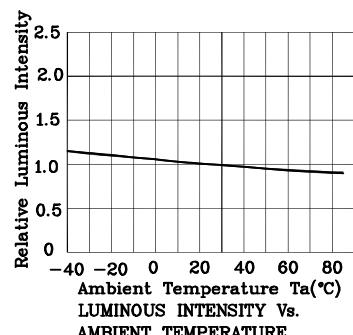
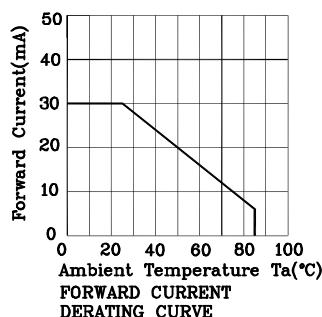
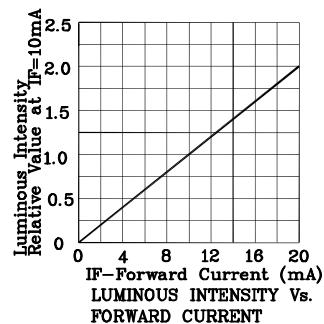
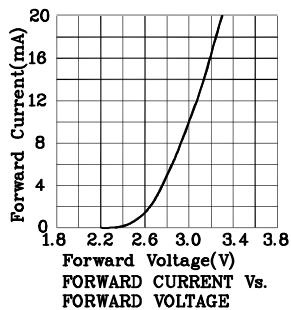
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Jan 13,2014

XDSB5542 V3-Z Layout: Maggie L.

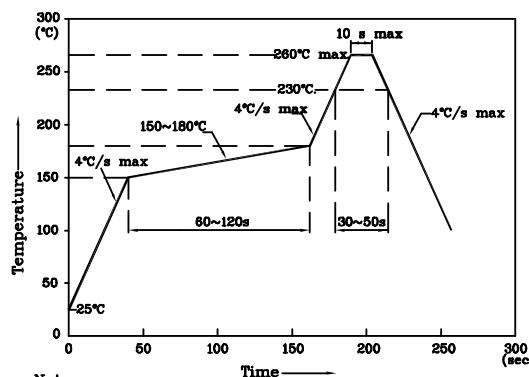


❖ CBD

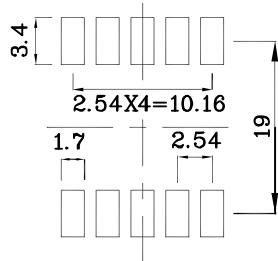


LED is recommended for reflow soldering and soldering profile is shown below.

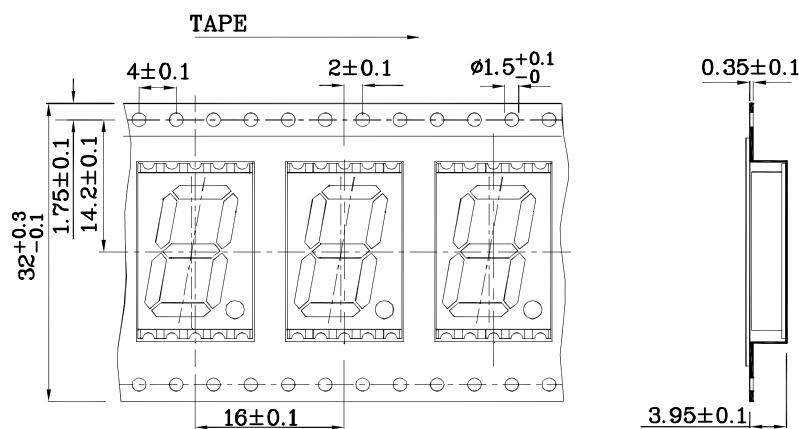
Reflow Soldering Profile for SMD Products (Pb-Free Components)



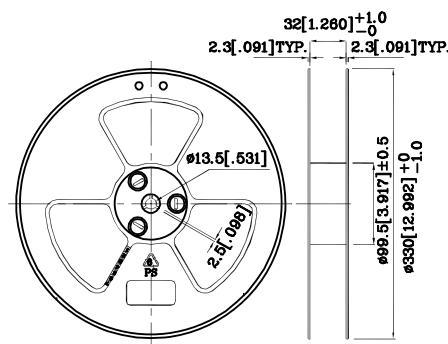
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



❖ Tape Specification (Units : mm)



❖ Reel Dimension



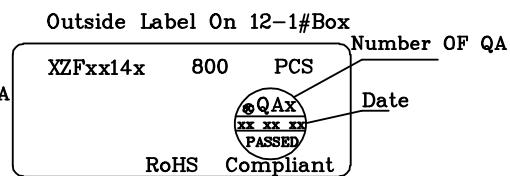
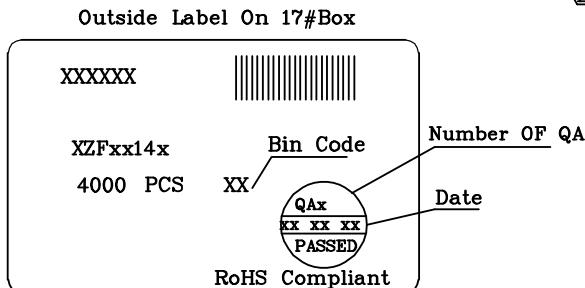
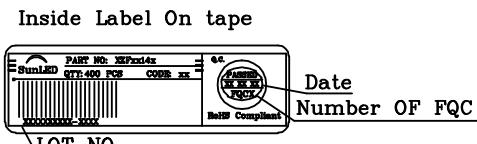
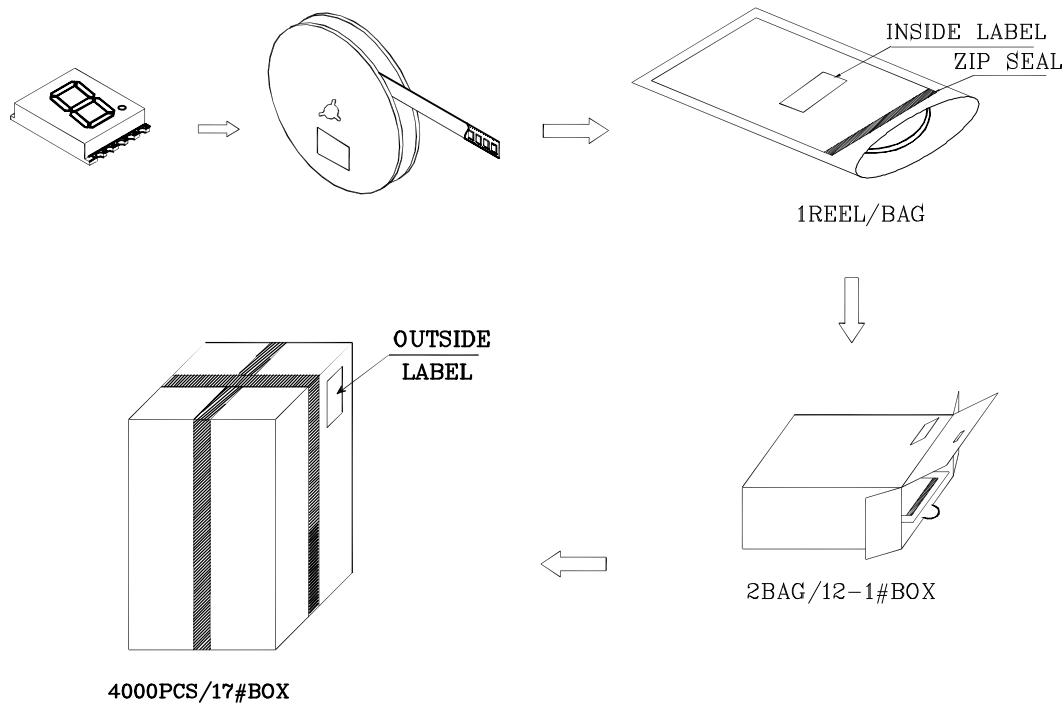
Remarks:

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



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2. Contents within this document are subject to improvement and enhancement changes without notice.
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