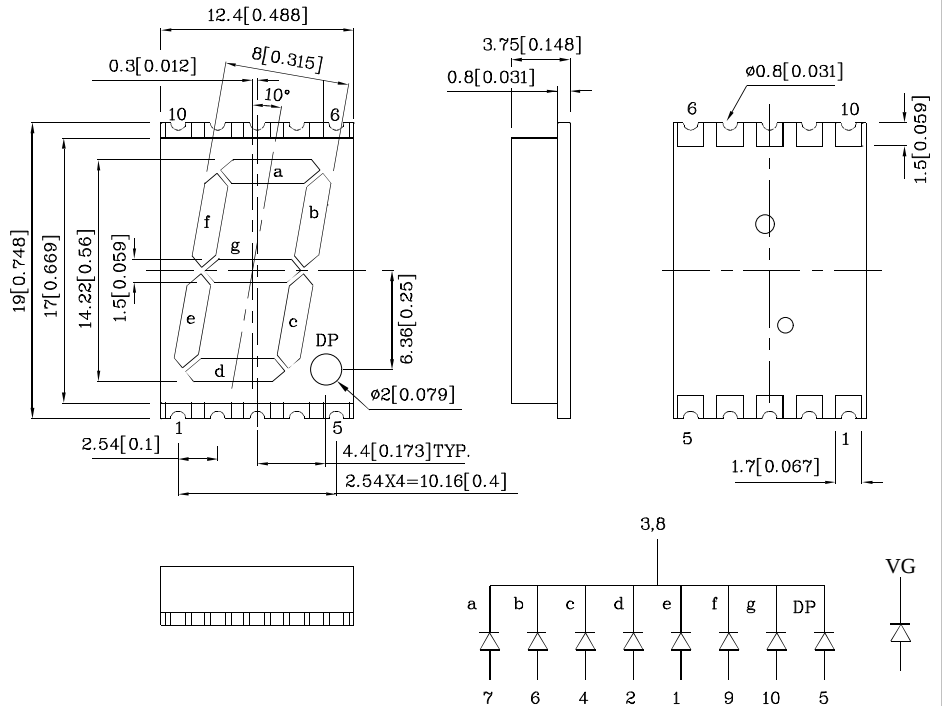


## Features

- 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



## 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<br>(T <sub>A</sub> =25°C)             |                  | VG<br>(AlGaInP) | Unit |
|----------------------------------------------------------------|------------------|-----------------|------|
| Reverse Voltage                                                | V <sub>R</sub>   | 5               | V    |
| Forward Current                                                | I <sub>F</sub>   | 30              | mA   |
| Forward Current (Peak)<br>1/10 Duty Cycle<br>0.1ms Pulse Width | i <sub>FS</sub>  | 150             | mA   |
| Power Dissipation                                              | P <sub>D</sub>   | 75              | mW   |
| Operating Temperature                                          | T <sub>A</sub>   | -40 ~ +85       | °C   |
| Storage Temperature                                            | T <sub>stg</sub> | -40 ~ +85       |      |

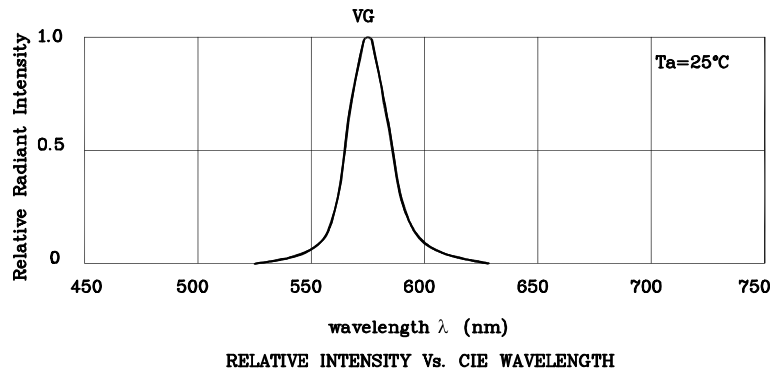
| Operating Characteristics<br>(T <sub>A</sub> =25°C)                              |                | VG<br>(AlGaInP) | Unit |
|----------------------------------------------------------------------------------|----------------|-----------------|------|
| Forward Voltage (Typ.) (I <sub>F</sub> =10mA)                                    | V <sub>F</sub> | 2               | V    |
| Forward Voltage (Max.) (I <sub>F</sub> =10mA)                                    | V <sub>F</sub> | 2.5             | V    |
| Reverse Current (Max.) (V <sub>R</sub> =5V)                                      | I <sub>R</sub> | 10              | μA   |
| Wavelength of Peak<br>Emission CIE127-2007* (Typ.)<br>(I <sub>F</sub> =10mA)     | λP             | 574*            | nm   |
| Wavelength of Dominant<br>Emission CIE127-2007* (Typ.)<br>(I <sub>F</sub> =10mA) | λD             | 570*            | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(I <sub>F</sub> =10mA)     | Δλ             | 20              | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)                               | C              | 15              | pF   |

| Part<br>Number | Emitting<br>Color | Emitting<br>Material | Luminous Intensity<br>CIE127-2007*<br>(If=10mA)<br>ucd | Wavelength<br>CIE127-2007*<br>nm<br>ΔP | Description                                  |
|----------------|-------------------|----------------------|--------------------------------------------------------|----------------------------------------|----------------------------------------------|
|                |                   |                      | min.                                                   | typ.                                   |                                              |
| XZFGV14C       | Green             | AlGaInP              | 9000<br>2200*                                          | 24990<br>4590*                         | 574*<br>Common Cathode, Rt.<br>Hand Decimal. |

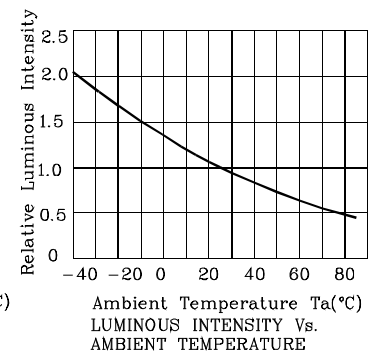
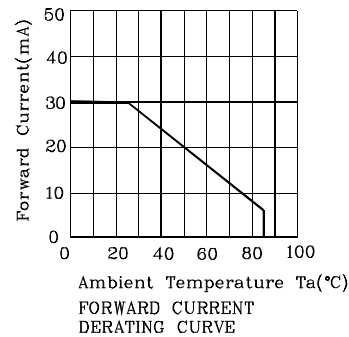
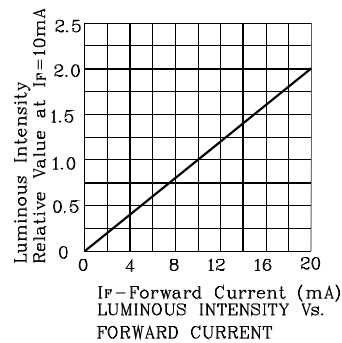
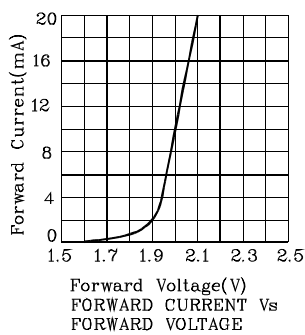
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Jan 13, 2014

XDSA9112 V6-X Layout: Maggie L.

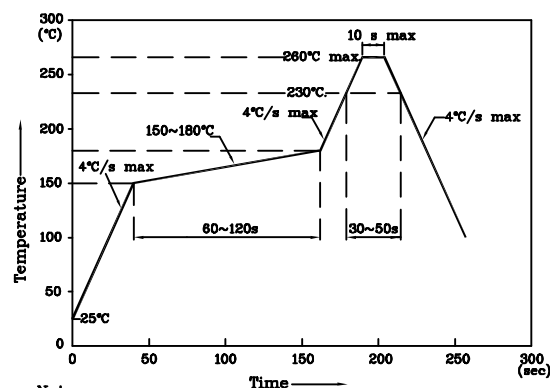


❖ VG



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

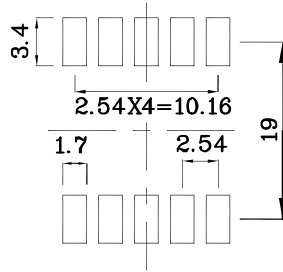
Reflow Soldering Profile for SMD Products (Pb-Free Components)



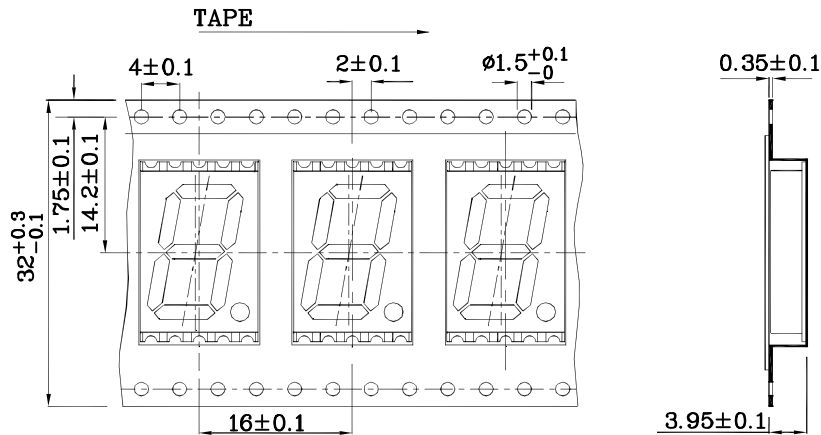
Notes:

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

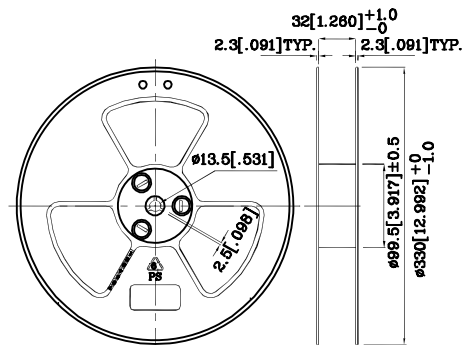
❖ **Recommended Soldering Pattern (Units : mm; Tolerance:  $\pm 0.15$ )**



❖ **Tape Specification (Units : mm)**



❖ **Reel Dimension**



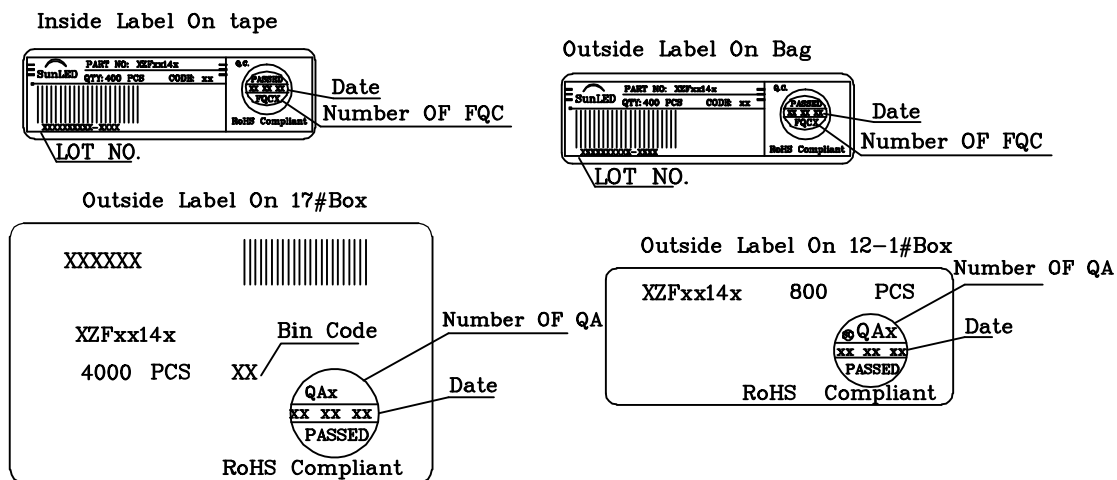
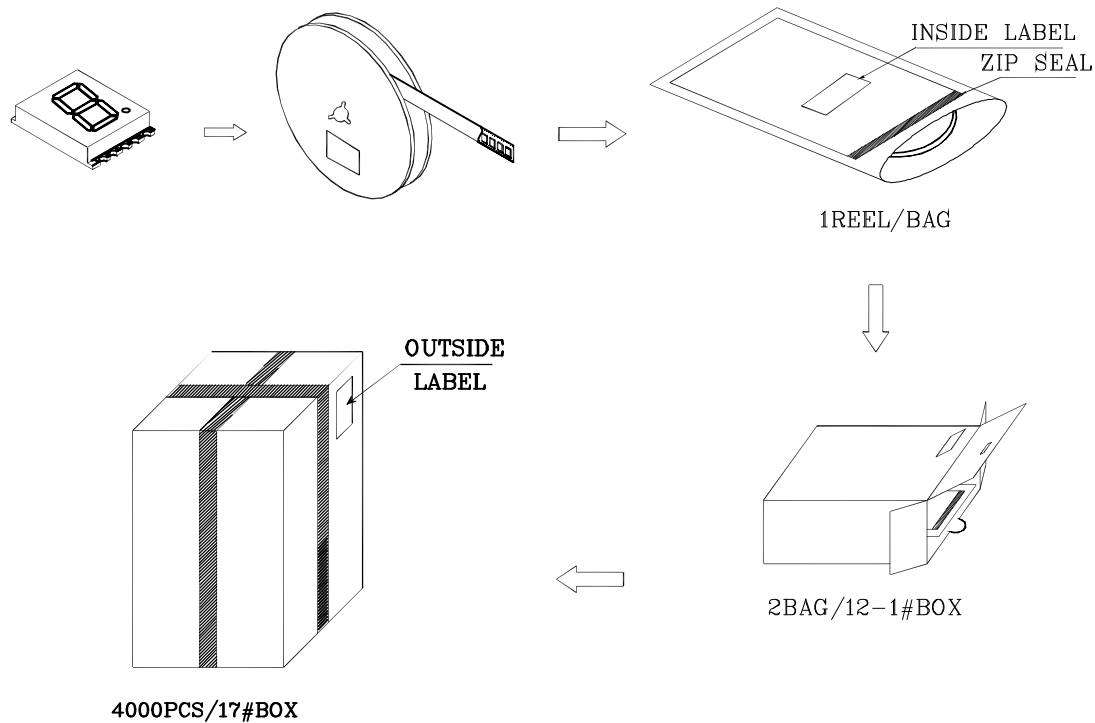
**Remarks:**

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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