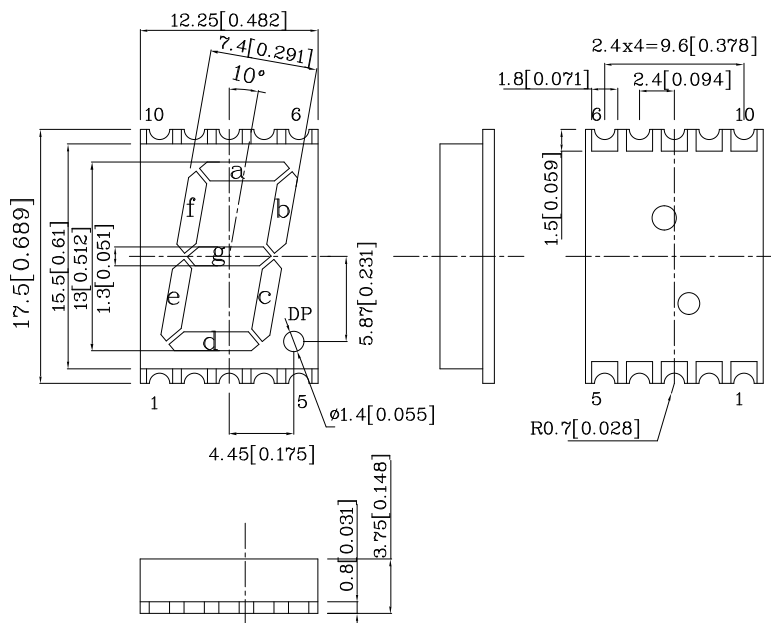
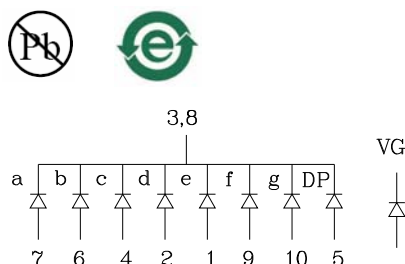


## PRELIMINARY SPEC

## Features

- 0.51 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE: 400PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



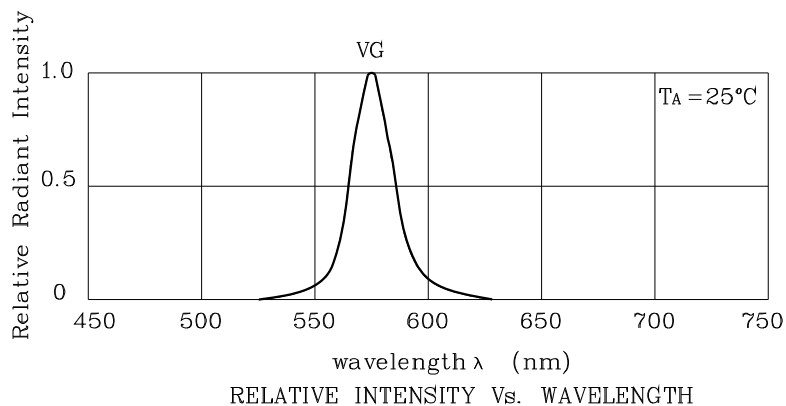
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. The gap between the reflector and PCB shall not exceed 0.25mm.
- 4.Specifications are subject to change without notice.

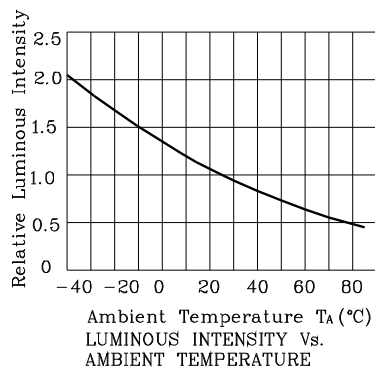
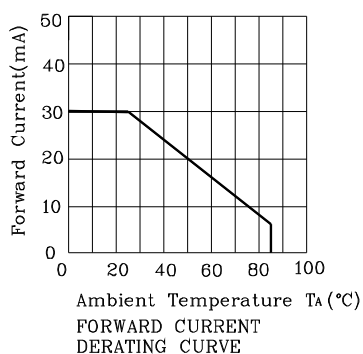
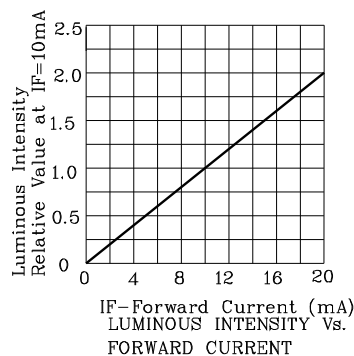
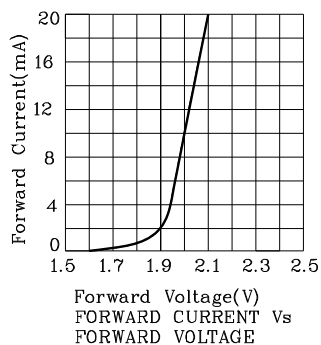
| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | VG<br>(InGaAlP) | Unit |
|----------------------------------------------------------------|------------------|-----------------|------|
| Reverse Voltage                                                | V <sub>R</sub>   | 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>T</sub>   | 75              | mW   |
| Operating Temperature                                          | T <sub>A</sub>   | -40 ~ +85       | °C   |
| Storage Temperature                                            | T <sub>stg</sub> | -40 ~ +85       |      |

| Operating Characteristics<br>(TA=25°C)                          |                | VG<br>(InGaAlP) | Unit |
|-----------------------------------------------------------------|----------------|-----------------|------|
| Forward Voltage (Typ.)<br>(IF=10mA)                             | V <sub>F</sub> | 2.0             | V    |
| Forward Voltage (Max.)<br>(IF=10mA)                             | V <sub>F</sub> | 2.5             | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                  | I <sub>R</sub> | 10              | μA   |
| Wavelength Of Peak<br>Emission (Typ.)<br>(IF=10mA)              | λ <sub>P</sub> | 574             | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(IF=10mA)          | λ <sub>D</sub> | 570             | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=10mA) | Δλ             | 20              | nm   |
| Capacitance (Typ.)<br>(V <sub>F</sub> =0V, f=1MHz)              | C              | 15              | pF   |

| Part Number                   | Emitting Color | Emitting Material     | Luminous Intensity (IF=10mA)<br>ucd |       | Wavelength<br>nm<br>$\lambda$ P | Description                      |
|-------------------------------|----------------|-----------------------|-------------------------------------|-------|---------------------------------|----------------------------------|
|                               |                |                       | min.                                | typ.  |                                 |                                  |
| ZFVG129C                      | Green          | InGaAlP               | 8000                                | 19990 | 574                             | Common Cathode, Rt. Hand Decimal |
| Published Date : FEB 27, 2008 |                | Drawing No : SDSA6468 |                                     | V1    | Checked : Shin Chi              | P.1/4                            |



❖ VG



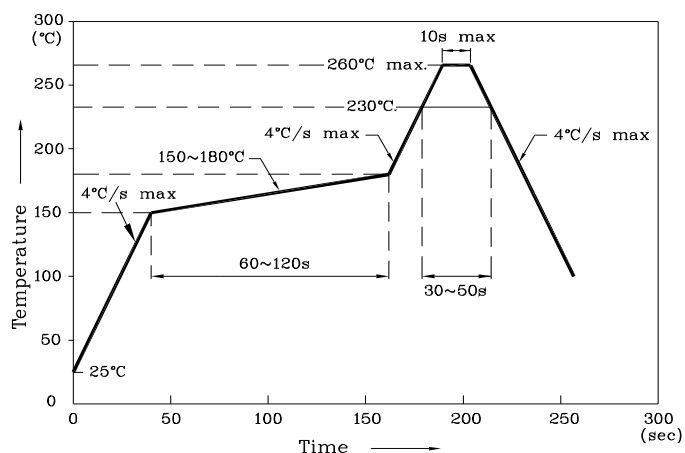
Remarks:

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.

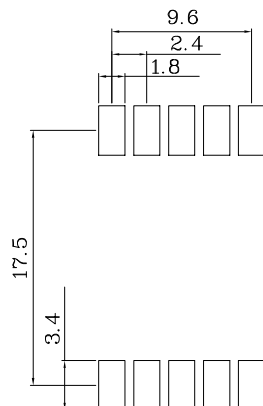
Reflow Soldering Profile For Lead-free SMT Process.



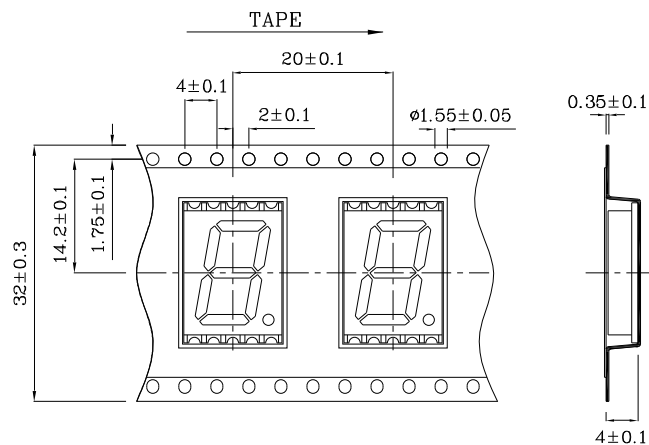
Notes:

- 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:± 0.15)

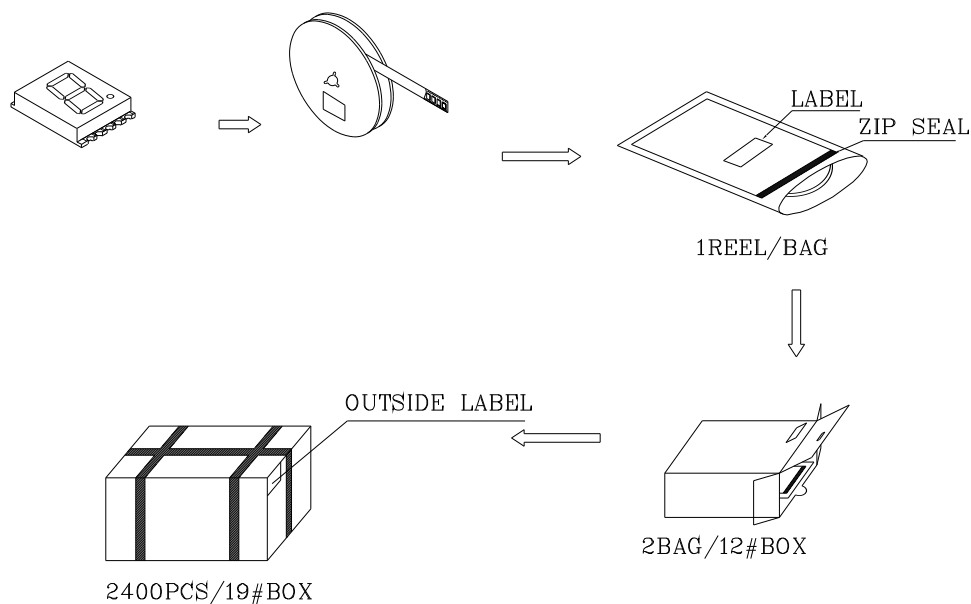


❖ Tape Specification (Units : mm)



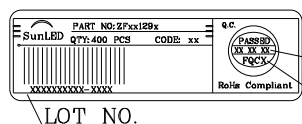
**PACKING & LABEL SPECIFICATIONS**

**ZFVG129C**

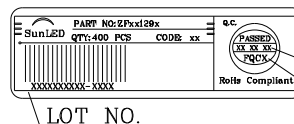


Outside LABEL Paste On The BAG

Inside LABEL Paste On The TAPE



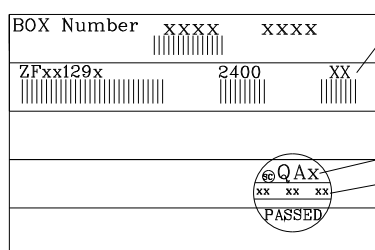
Date  
Number OF FQC



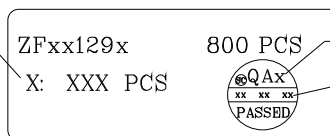
Date  
Number OF FQC

Outside LABEL Paste On The 19#Box

Outside LABEL Paste On The 12#Box



BIN CODE  
ZFxx129x  
X: XXX PCS  
Number OF QA  
Date



Number OF QA  
Date