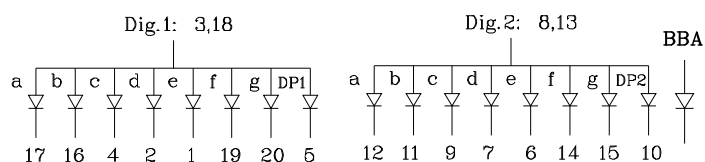


## PRELIMINARY SPEC

## Features

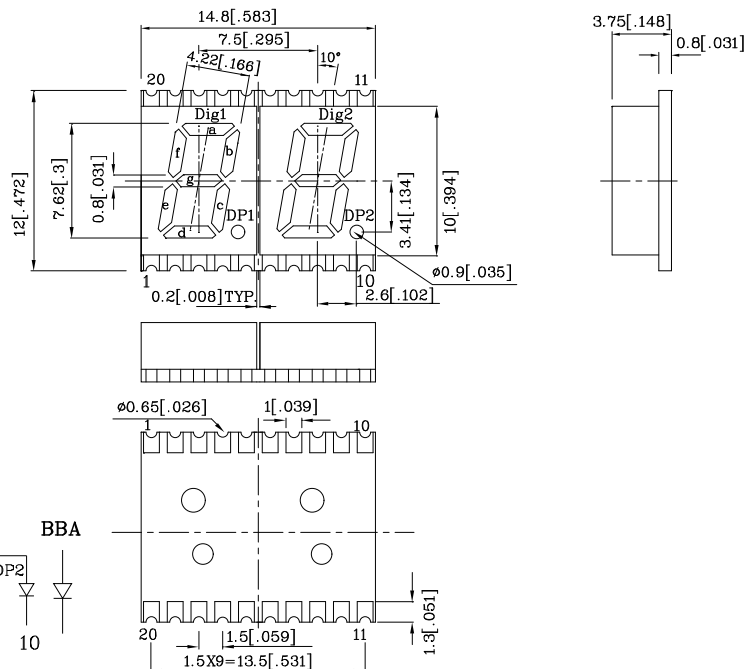
- 0.3 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 300PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



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.

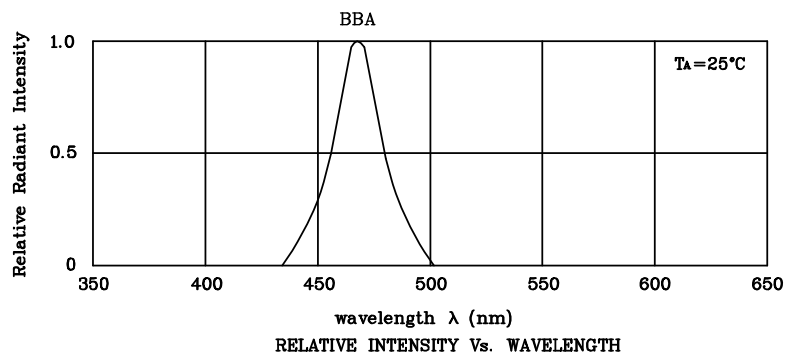
| Absolute Maximum Ratings<br>(T <sub>A</sub> =25°C)             |                  | BBA<br>(InGaN) | Unit |
|----------------------------------------------------------------|------------------|----------------|------|
| Reverse Voltage                                                | V <sub>R</sub>   | 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>  | 100            | mA   |
| Power Dissipation                                              | P <sub>T</sub>   | 120            | mW   |
| Operating Temperature                                          | T <sub>A</sub>   | -40 ~ +85      | °C   |
| Storage Temperature                                            | T <sub>stg</sub> | -40 ~ +85      |      |
| Electrostatic Discharge Threshold (HBM)                        |                  | 1000           | V    |



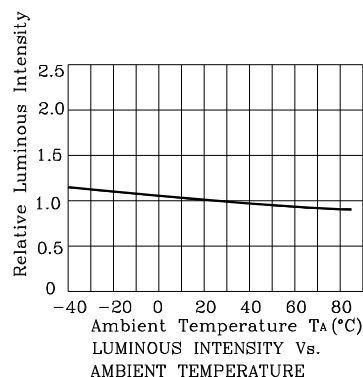
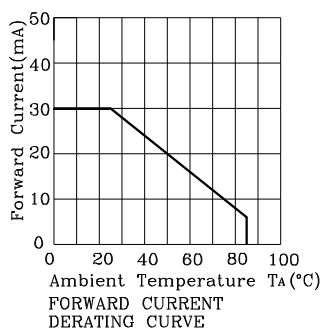
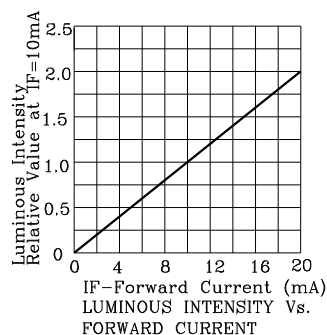
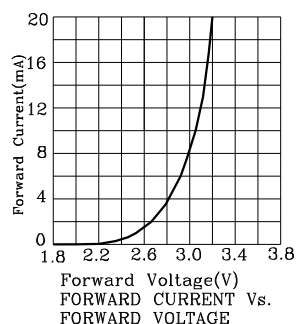
**ATTENTION**  
**OBSERVE PRECAUTIONS**  
**FOR HANDLING**  
**ELECTROSTATIC**  
**DISCHARGE**  
**SENSITIVE**  
**DEVICES**

| Operating Characteristics<br>(TA=25°C)                          |                | BBA<br>(InGaN) | Unit |
|-----------------------------------------------------------------|----------------|----------------|------|
| Forward Voltage (Typ.)<br>(IF=10mA)                             | V <sub>F</sub> | 3.05           | V    |
| Forward Voltage (Max.)<br>(IF=10mA)                             | V <sub>F</sub> | 4.0            | V    |
| Reverse Current (Max.)<br>(V <sub>R</sub> =5V)                  | I <sub>R</sub> | 10             | uA   |
| Wavelength Of Peak<br>Emission (Typ.)<br>(IF=10mA)              | λ P            | 468            | nm   |
| Wavelength Of Dominant<br>Emission (Typ.)<br>(IF=10mA)          | λ D            | 470            | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=10mA) | Δλ             | 21             | nm   |
| Capacitance<br>(V <sub>F</sub> =0V, f=1MHz)                     | C              | 100            | pF   |

| Part Number                  | Emitting Color | Emitting Material     | Luminous Intensity (IF=10mA)<br>ucd |      | Wavelength<br>nm<br>λ P | Description                    |
|------------------------------|----------------|-----------------------|-------------------------------------|------|-------------------------|--------------------------------|
|                              |                |                       | min.                                | typ. |                         |                                |
| ZFBBA07A2                    | Blue           | InGaN                 | 1200                                | 5990 | 468                     | Common Anode. Rt. Hand Decimal |
|                              |                |                       |                                     |      |                         |                                |
| Published Date : MAR 04,2008 |                | Drawing No : SDSA5338 |                                     |      | V4                      | Checked : Shin Chi P.1/4       |



# ❖ BBA



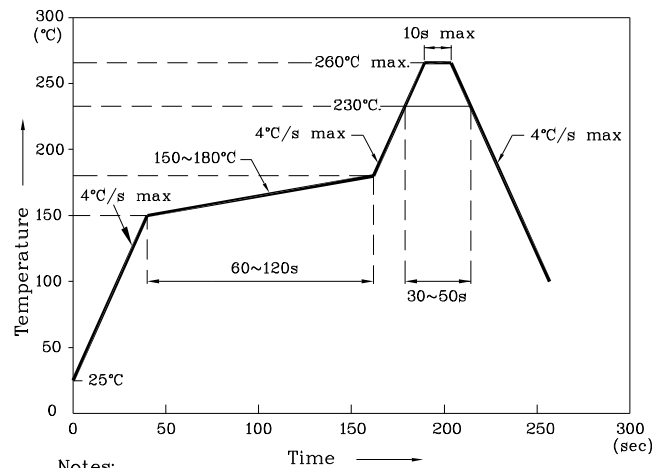
## Remarks:

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.

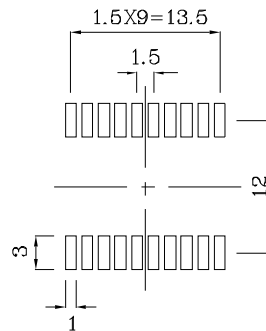
Reflow Soldering Profile For Lead-free SMT Process.



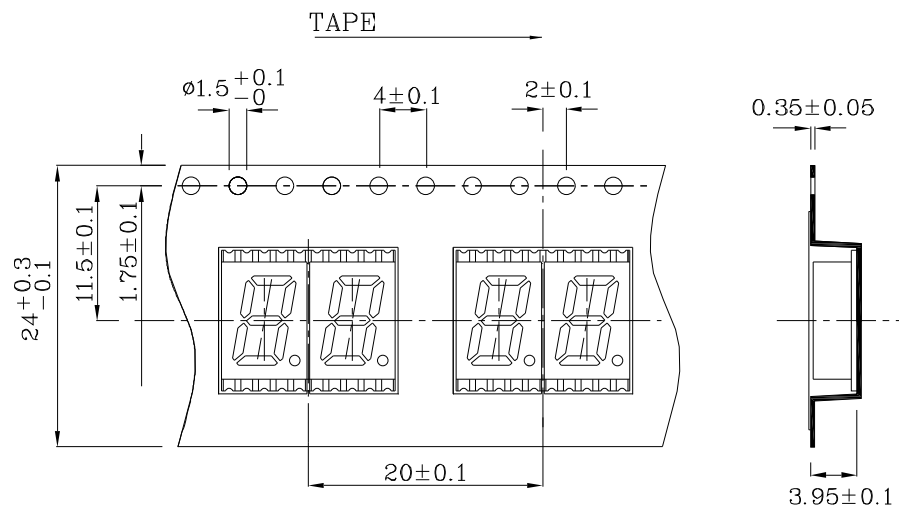
Notes:

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)

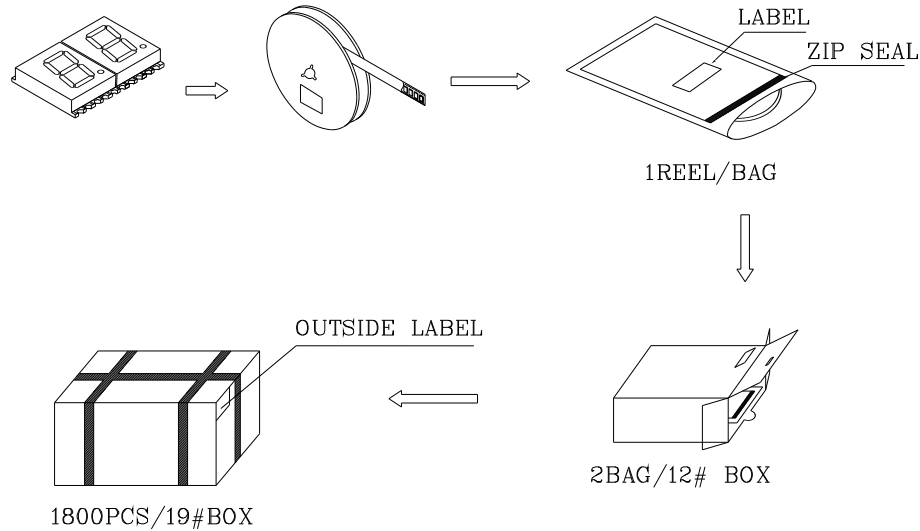


❖ Tape Specification (Units : mm)



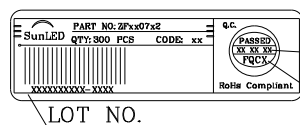
**PACKING & LABEL SPECIFICATIONS**

**ZFBBA07A2**

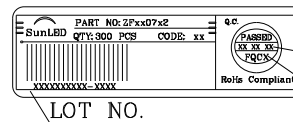


Outside LABEL Paste On The BAG

Inside LABEL Paste On The TAPE



Date  
Number OF FQC

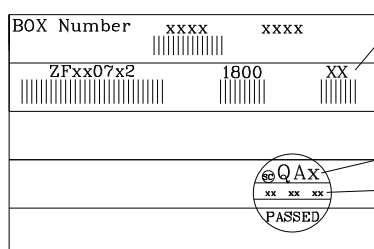


LOT NO.

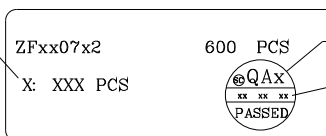
Date  
Number OF FQC

Outside LABEL Paste On The 19#Box

Outside LABEL Paste On The 12#Box



BIN CODE  
Date  
Number OF QA



Number OF QA  
Date