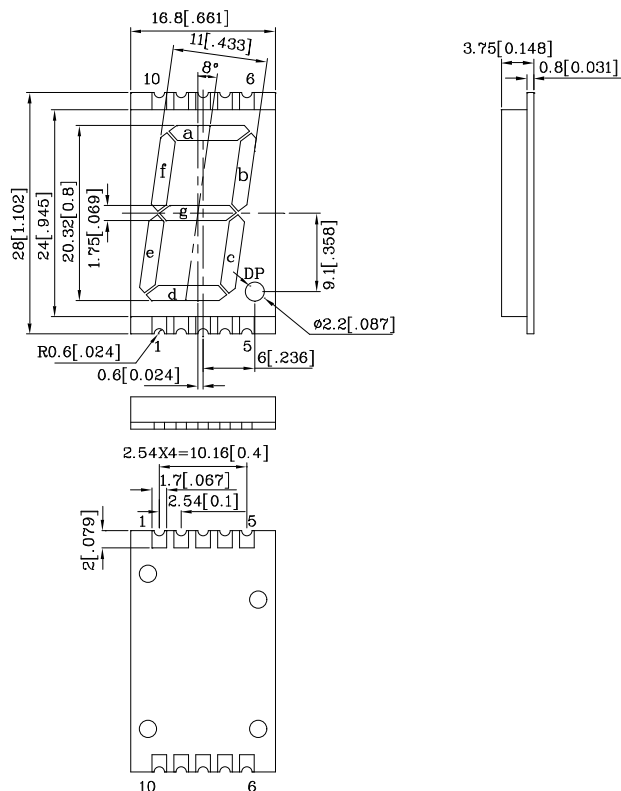
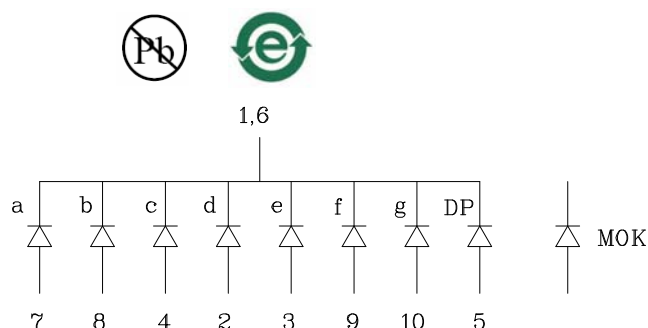


## Features

- 0.8 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 200PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.

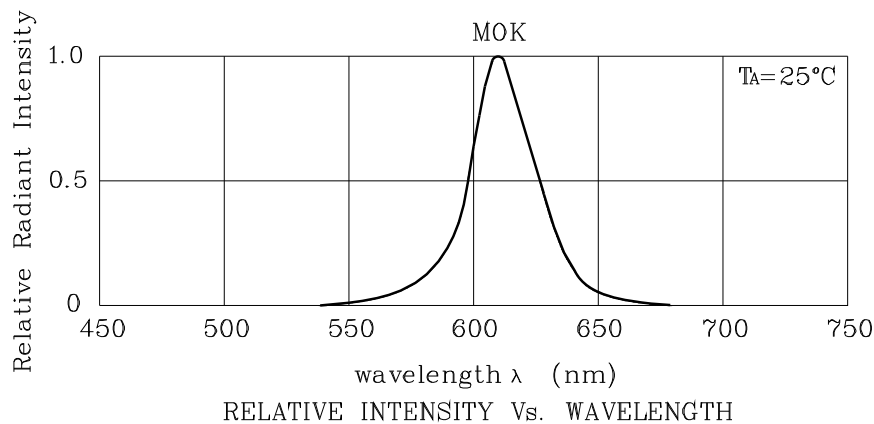


1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. The gap between the reflector and PCB shall not exceed 0.25mm.
- 4.Specifications are subject to change without notice.

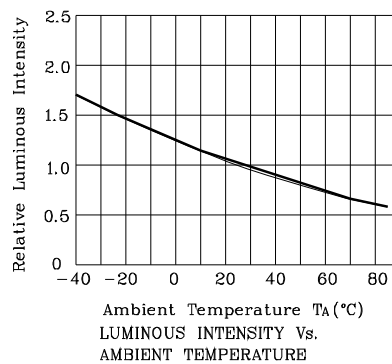
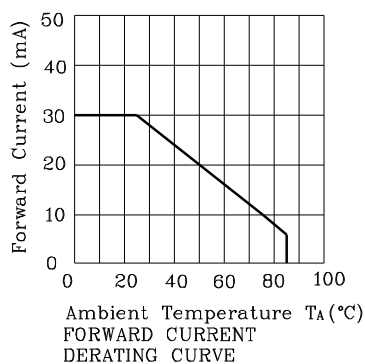
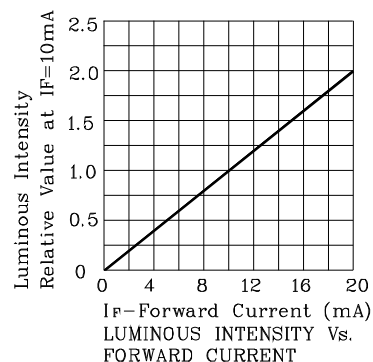
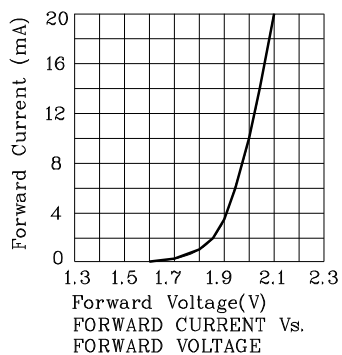
| Absolute Maximum Ratings<br>(TA=25°C)                          |                  | MOK<br>(InGaAlP) | Unit |
|----------------------------------------------------------------|------------------|------------------|------|
| Reverse Voltage                                                | V <sub>R</sub>   | 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>  | 195              | 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)                          |                | MOK<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>(VR=5V)                               | I <sub>R</sub> | 10               | uA   |
| Wavelength of Peak<br>Emission (Typ.)<br>(IF=10mA)              | λ P            | 610              | nm   |
| Wavelength of Dominant<br>Emission (Typ.)<br>(IF=10mA)          | λ D            | 601              | nm   |
| Spectral Line Full Width<br>At Half-Maximum (Typ.)<br>(IF=10mA) | Δλ             | 29               | nm   |
| Capacitance (Typ.)<br>(VF=0V, f=1MHz)                           | C              | 15               | pF   |

| Part Number                   | Emitting Color | Emitting Material     | Luminous Intensity (IF=10mA)<br>ucd |       | Wavelength<br>nm<br>λ P | Description                      |
|-------------------------------|----------------|-----------------------|-------------------------------------|-------|-------------------------|----------------------------------|
|                               |                |                       | min.                                | typ.  |                         |                                  |
| ZFMOK20C-A                    | Orange         | InGaAlP               | 18000                               | 79990 | 610                     | Common Cathode. Rt. Hand Decimal |
|                               |                |                       |                                     |       |                         |                                  |
| Published Date : FEB 28, 2008 |                | Drawing No : SDSA6444 |                                     | V1    | Checked : Shin Chi      | P.1/4                            |



❖ MOK



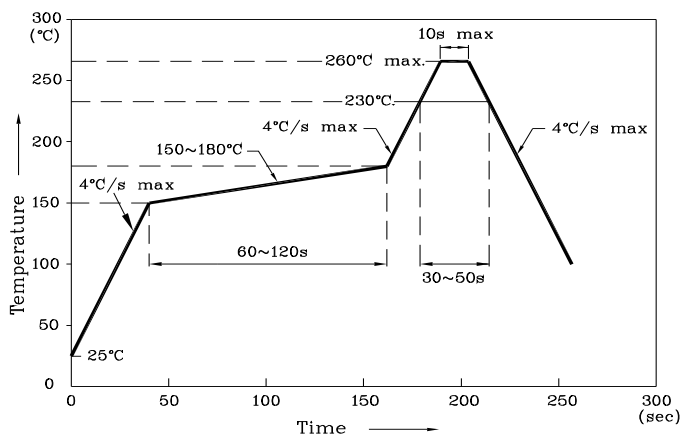
Remarks:

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: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

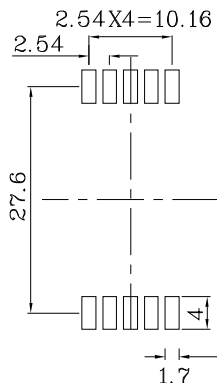
Reflow Soldering Profile For Lead-free SMT Process.



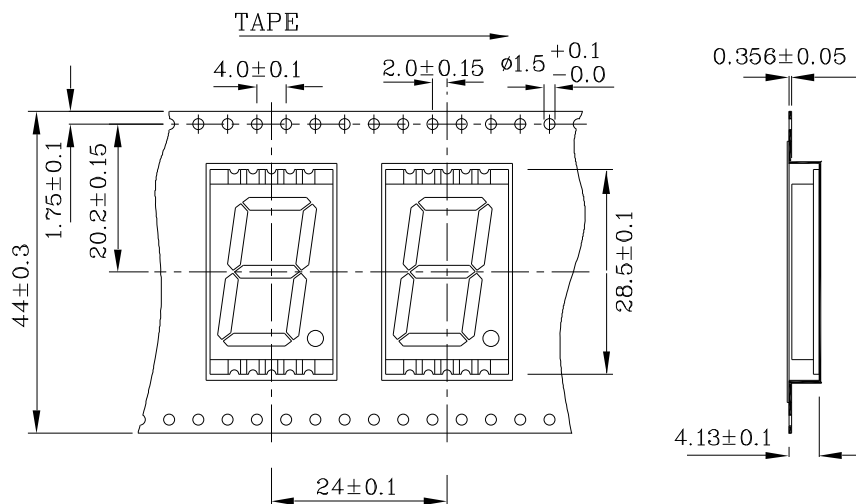
Notes:

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)

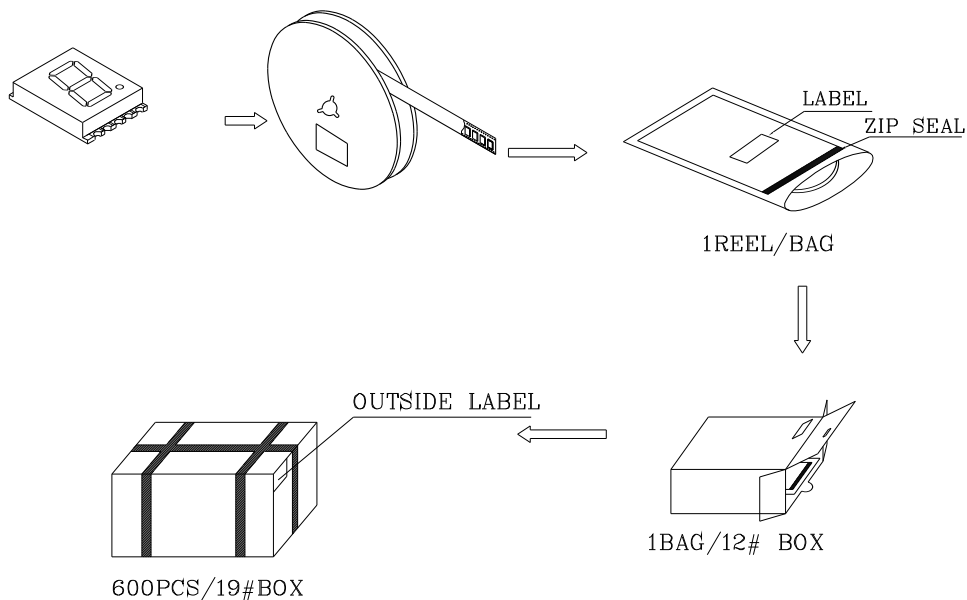


❖ Tape Specification (Units : mm)

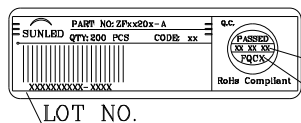


**PACKING & LABEL SPECIFICATIONS**

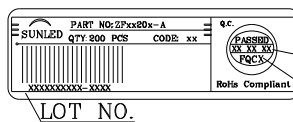
**ZFMOK20C-A**



Inside LABEL Paste On The TAPE



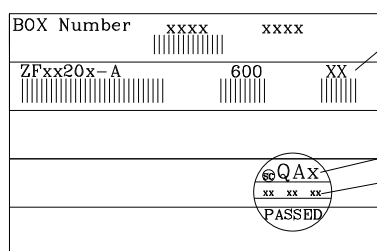
Date  
Number OF FQC



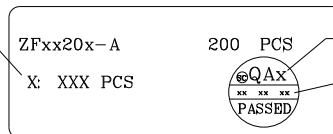
Date  
Number OF FQC

Outside LABEL Paste On The 19#Box

Outside LABEL Paste On The 12#Box



Number OF QA  
Date



Number OF QA  
Date