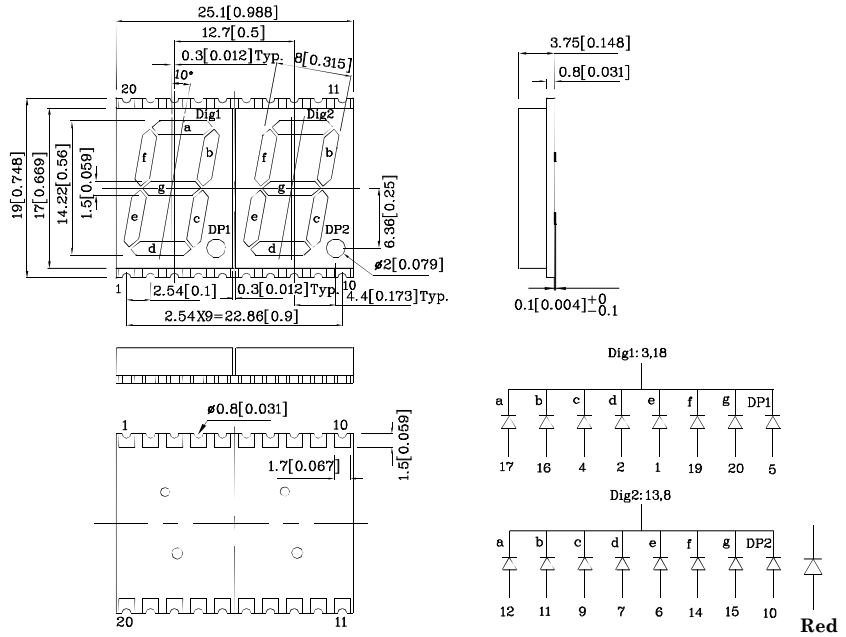


Features

- 0.56 inch digit height
- Robust package
- Low power consumption
- Standard configuration: Gray face w/ white segments
- Standard Package: 200pcs/ 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.

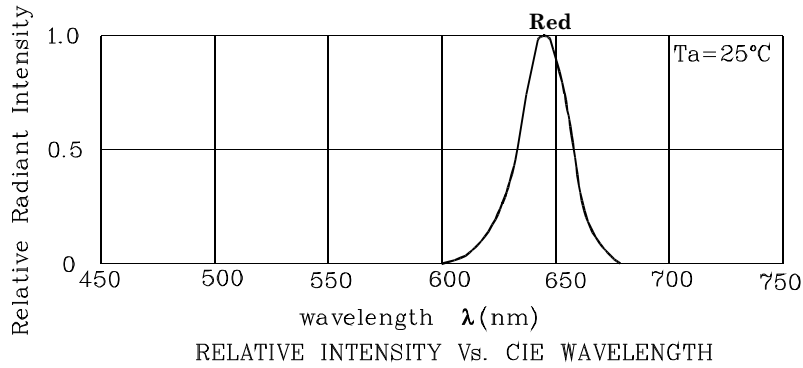
| Absolute Maximum Ratings ($T_A=25^\circ\text{C}$) | | Red (AlGaInP) | Unit |
|--|-----------|------------------|------|
| Reverse Voltage | V_R | 5 | V |
| Forward Current | I_F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i_{FS} | 185 | mA |
| Power Dissipation | P_D | 75 | mW |
| Operating Temperature | T_A | -40 ~ +85 | °C |
| Storage Temperature | T_{stg} | -40 ~ +85 | |

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

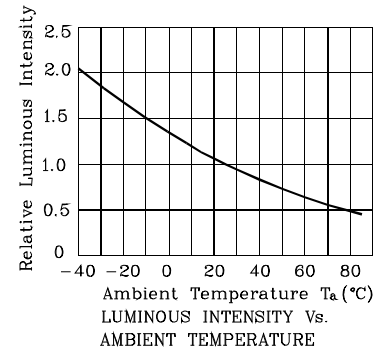
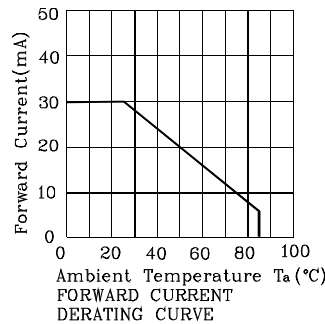
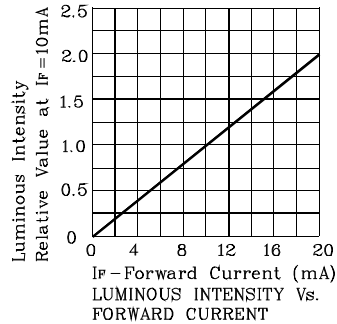
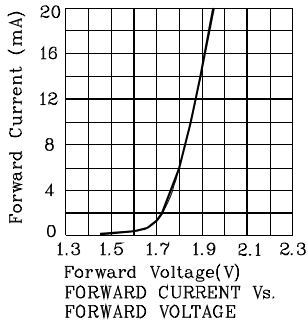
| Operating Characteristics ($T_A=25^\circ\text{C}$) | | Red (AlGaInP) | Unit |
|---|-----------------|------------------|------|
| Forward Voltage (Typ.) ($I_F=10\text{mA}$) | V_F | 1.85 | V |
| Forward Voltage (Max.) ($I_F=10\text{mA}$) | V_F | 2.5 | V |
| Reverse Current (Max.) ($V_R=5\text{V}$) | I_R | 10 | uA |
| Wavelength of Peak Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_P | 645* | nm |
| Wavelength of Dominant Emission CIE127-2007* (Typ.) ($I_F=10\text{mA}$) | λ_D | 630* | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) ($I_F=10\text{mA}$) | $\Delta\lambda$ | 28 | nm |
| Capacitance (Typ.) ($V_F=0\text{V}$, $f=1\text{MHz}$) | C | 35 | pF |

| Part Number | Emitting Color | Emitting Material | Luminous Intensity CIE127-2007* ($I_F=10\text{mA}$) ucd | | Wavelength CIE127-2007* nm λ_P | Description |
|-------------|----------------|-------------------|--|-----------------|---|-------------------------------------|
| | | | min. | typ. | | |
| XZFMDK14C2 | Red | AlGaInP | 31000 14000* | 79990 28990* | 645* | Common Cathode, Rt. Hand Decimal |

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



❖ Red



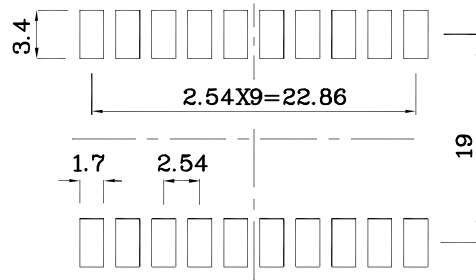
LED is recommended for reflow soldering and soldering profile is shown below.

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

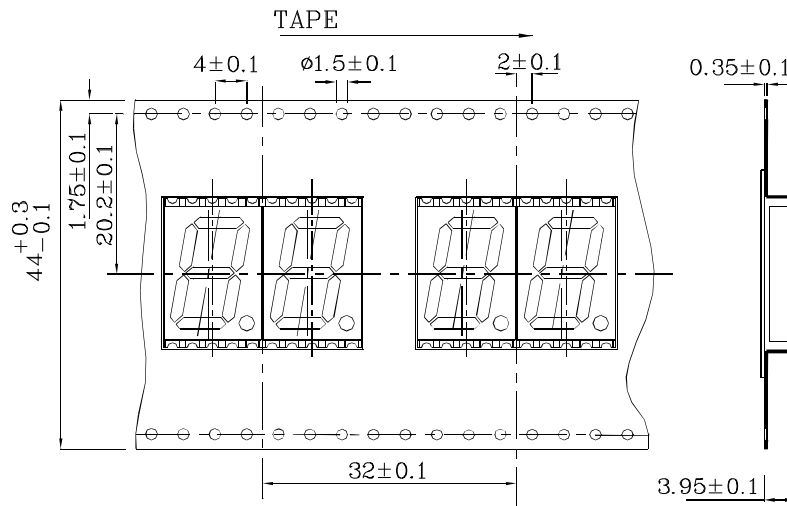




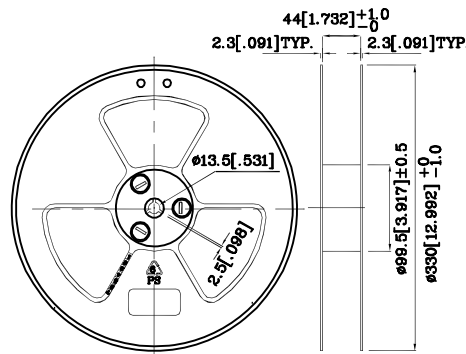
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.15)



❖ Tape Specification (Units : mm)



❖ Reel Dimension



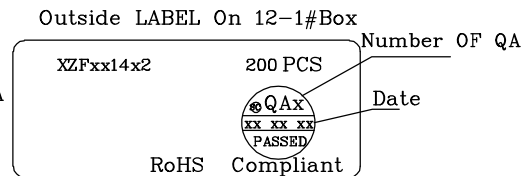
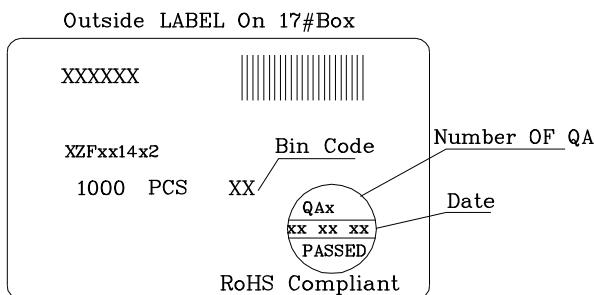
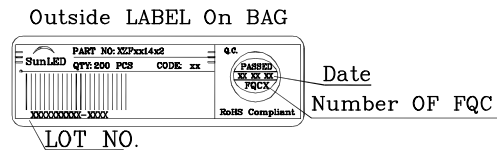
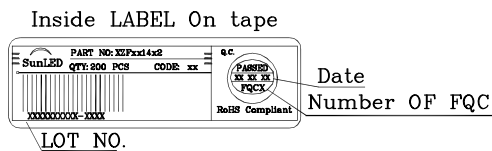
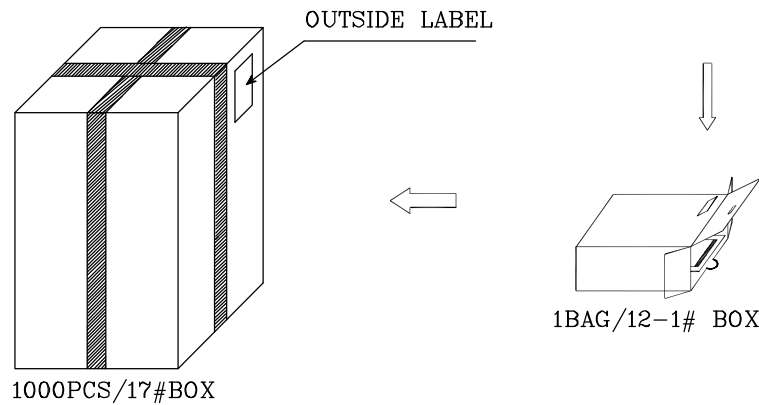
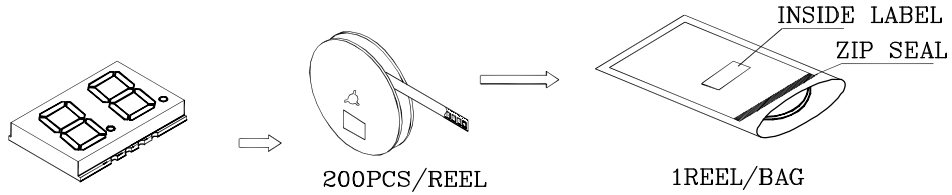
Remarks:

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: ± 1 nm
2. Luminous intensity / luminous flux: $\pm 15\%$
3. Forward Voltage: ± 0.1 V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



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1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
2. Contents within this document are subject to improvement and enhancement changes without notice.
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