



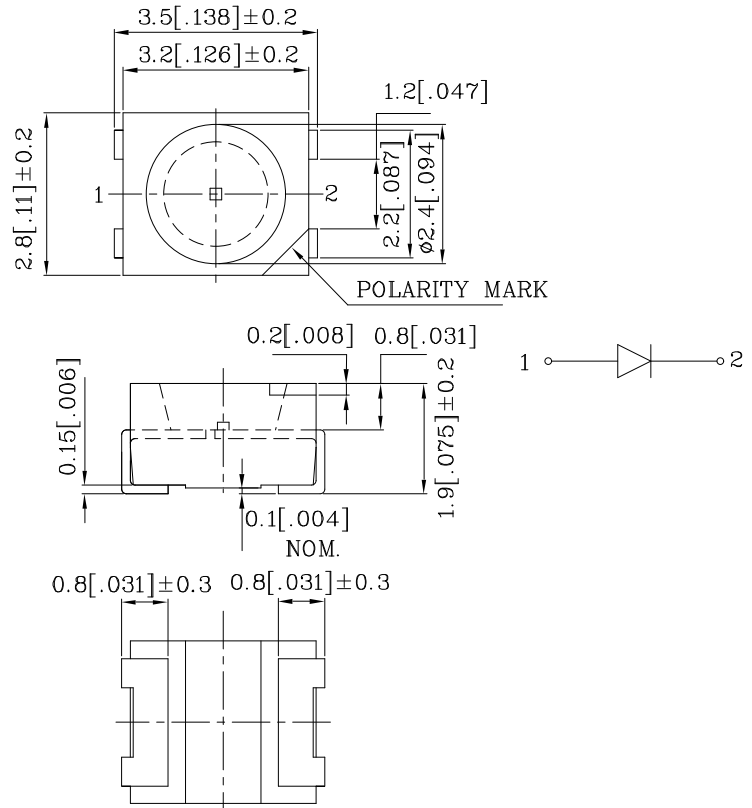
Features

- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



Notes:

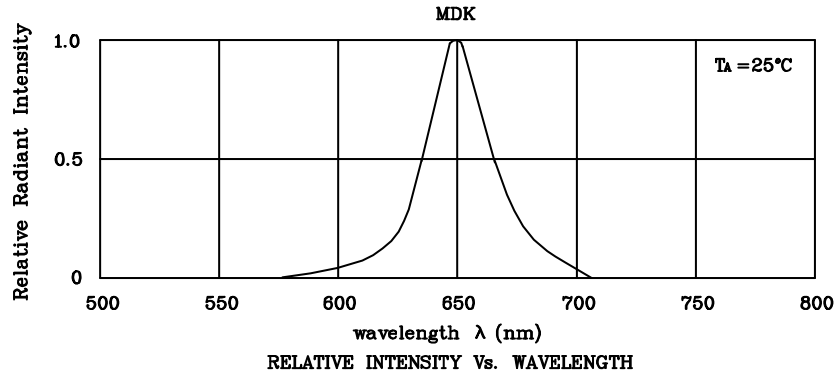
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.



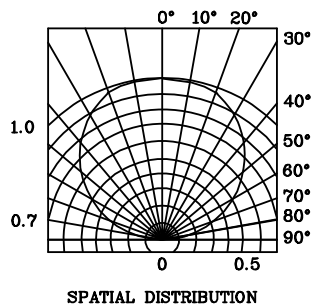
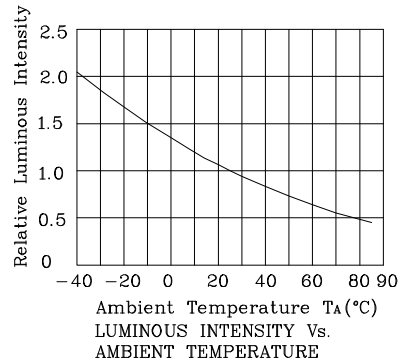
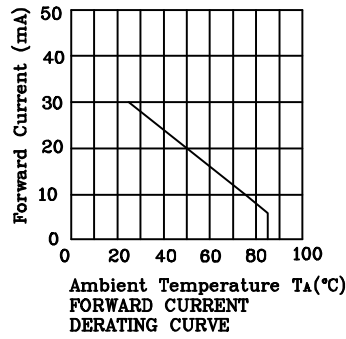
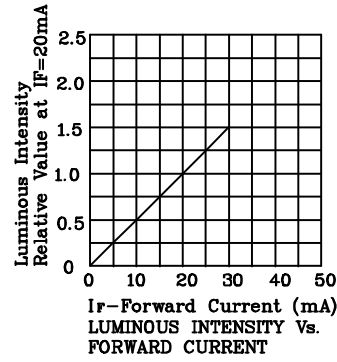
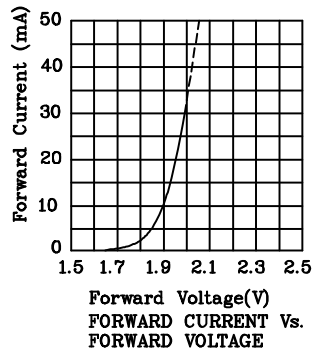
| Absolute Maximum Ratings (TA=25°C) | | MDK (InGaAlP) | Unit |
|----------------------------------------------------------------|------------------|------------------|------|
| Reverse Voltage | V _R | 5 | V |
| Forward Current | I _F | 30 | mA |
| Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width | i _{FS} | 185 | mA |
| Power Dissipation | P _T | 75 | mW |
| Operating Temperature | T _A | -40 ~ +85 | °C |
| Storage Temperature | T _{stg} | -40 ~ +85 | |

| Operating Characteristics (TA=25°C) | | MDK (InGaAlP) | Unit |
|------------------------------------------------------------------------------|----------------|------------------|------|
| Forward Voltage (Typ.) (I _F =20mA) | V _F | 1.95 | V |
| Forward Voltage (Max.) (I _F =20mA) | V _F | 2.5 | V |
| Reverse Current (Max.) (V _R =5V) | I _R | 10 | uA |
| Wavelength of Peak Emission (Typ.) (I _F =20mA) | λ _p | 650 | nm |
| Wavelength of Dominant Emission (Typ.) (I _F =20mA) | λ _D | 635 | nm |
| Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA) | Δλ | 28 | nm |
| Capacitance (Typ.) (V _F =0V, f=1MHz) | C | 35 | pF |

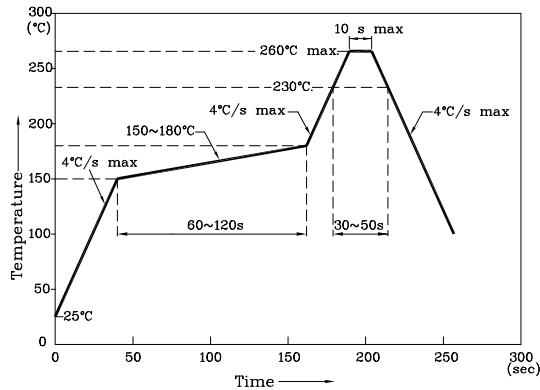
| Part Number | Emitting Color | Emitting Material | Lens-color | Luminous Intensity (I _F =20mA) | | Wavelength nm λ _P | Viewing Angle 2 θ 1/2 |
|-------------|----------------|-------------------|-------------|----------------------------------------------|------|------------------------------------|--------------------------|
| | | | | min. | typ. | | |
| XZMDK45FW | Red | InGaAlP | Water Clear | 70 | 198 | 650 | 120° |



❖ **MDK**



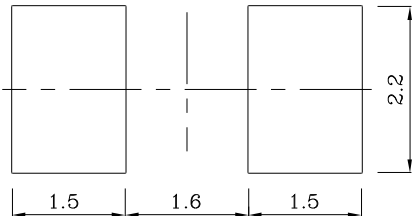
Reflow Soldering Profile For Lead-free SMT Process.



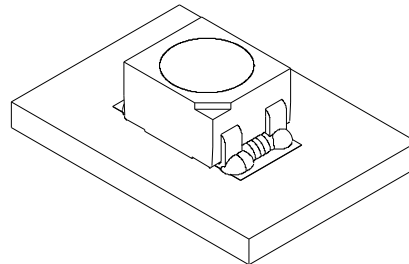
NOTES:

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.

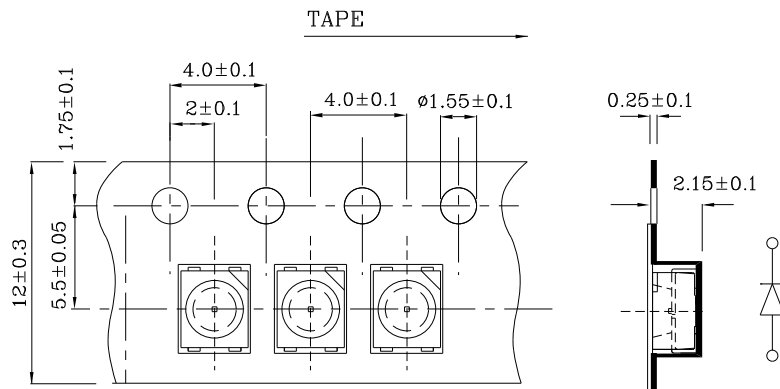
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ±0.1)



❖ The device has a single mounting surface. The device must be mounted according to the specifications.



❖ Tape Specification (Units : mm)



Remarks:

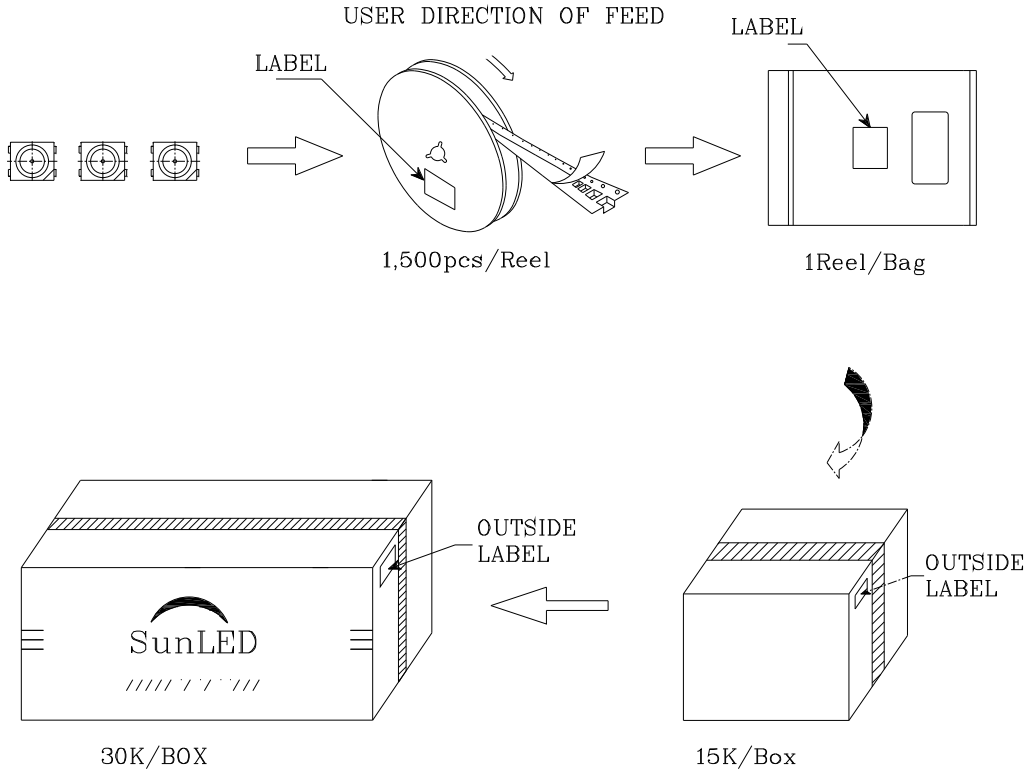

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

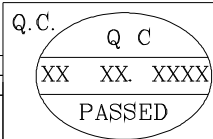
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

XZMDK45FW

| | |
|---------------------------------------------------------------------------------------------------------------|-----------|
| P/NO : XZxx45Fx | |
| QTY : 1,500 pcs | CODE: XXX |
| S/N : XX | |
| LOT NO: | |
|  XXXXXXXXXXXXXXXXXXXXX | |
| RoHS Compliant | |