



PRELIMINARY SPEC

Features

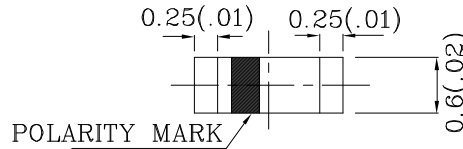
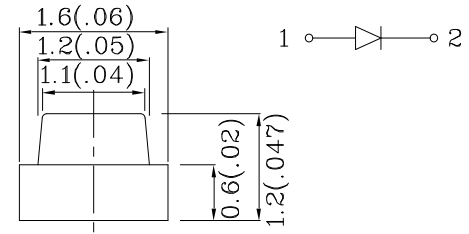
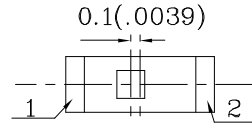
- 1.6mmx0.6mm RIGHT ANGLE SMT LED, 1.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- RoHS COMPLIANT.



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

Notes:

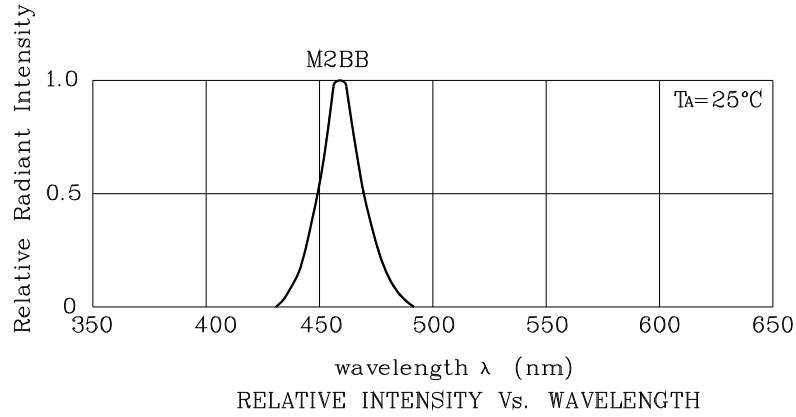
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$  unless otherwise noted.
3. Specifications are subject to change without notice.



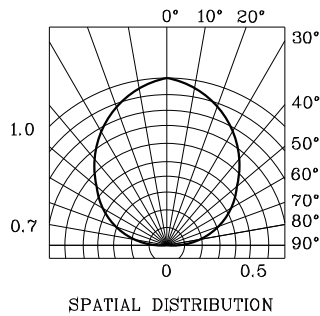
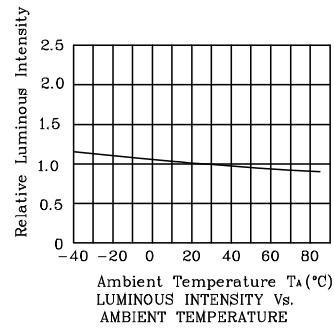
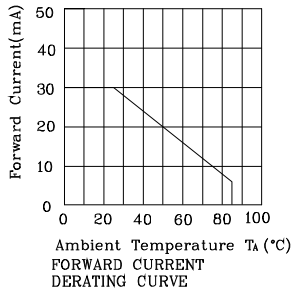
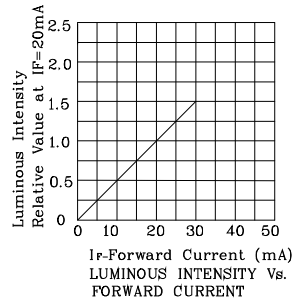
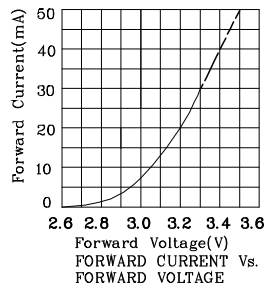
Absolute Maximum Ratings (TA=25°C)		M2BB (InGaN)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	30	mA
Forward Current (peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	100	mA
Power Dissipation	P <sub>T</sub>	111	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

Operating Characteristics (TA=25°C)		M2BB (InGaN)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	3.7	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength Of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>P</sub>	458	nm
Wavelength Of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	465	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	22	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	110	pF

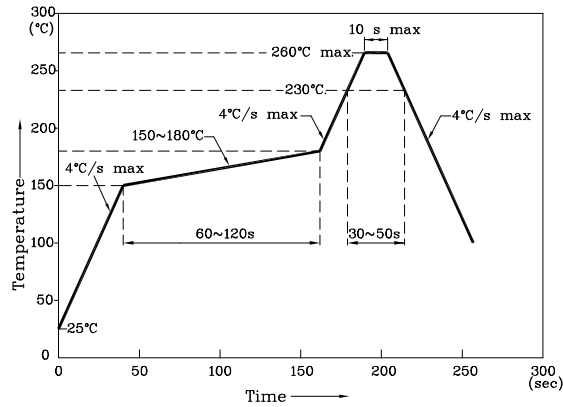
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA)		Wavelength nm λ <sub>P</sub>	Viewing Angle 2 θ 1/2
				min.	typ.		
ZM2BB87W	Blue	InGaN	Water Clear	110	228	458	110°



❖ M2BB

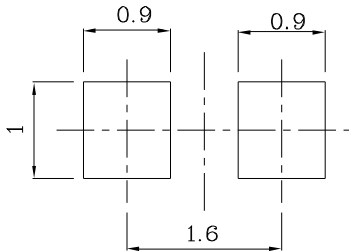


Reflow Soldering Profile For Lead-free SMT Process.

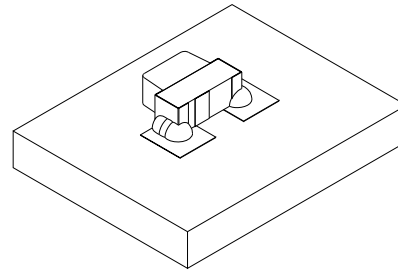


- NOTES:
1. Maximum soldering temperature should not exceed 260°C.
  2. Recommended reflow temperature: 145°C–260°C.
  3. Do not put stress to the epoxy resin during high temperatures conditions.

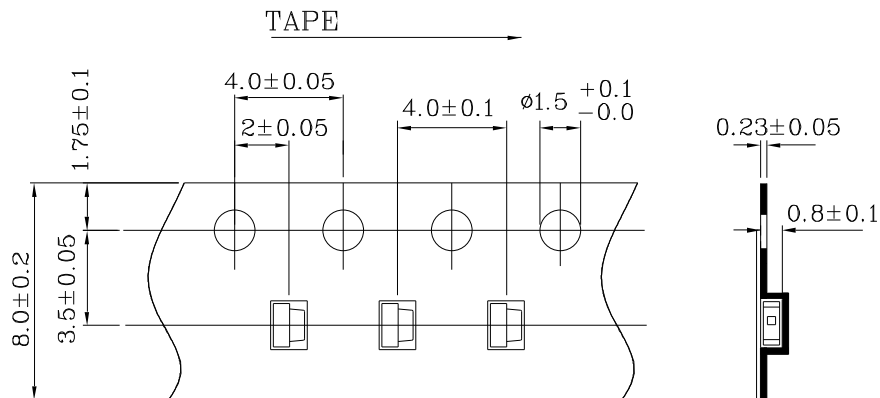
❖ Recommended Soldering Pattern  
(Units : mm; Tolerance: ±0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

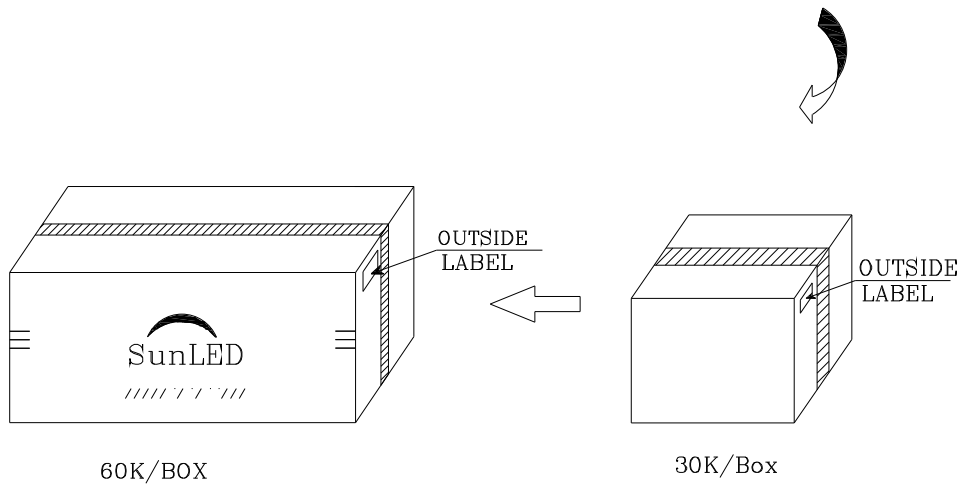
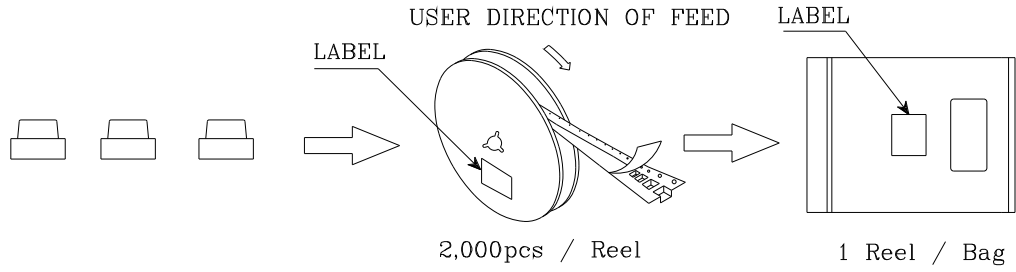
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:


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**

**ZM2BB87W**



P/NO : Zxx87x	
QTY : 2000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	