

PRELIMINARY SPEC

Features

- 4.1mm x 1.0mm RIGHT ANGLE SMT LED, 1.52mm 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 4.
- RoHS COMPLIANT.

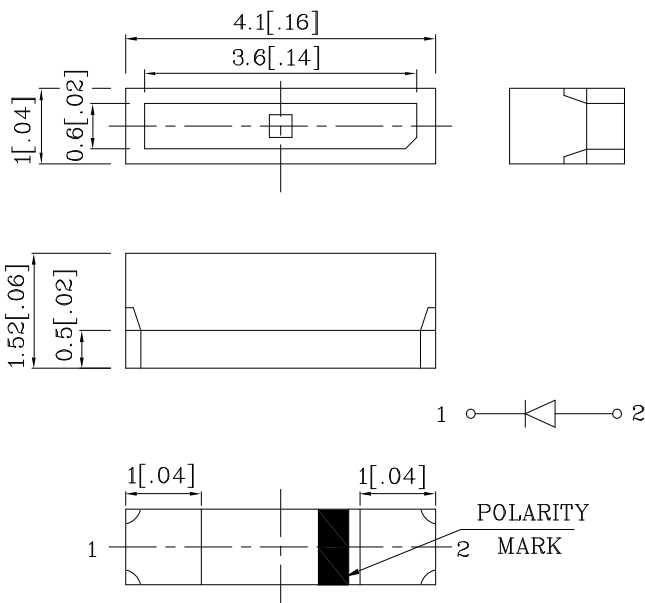


**ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES**

Notes:

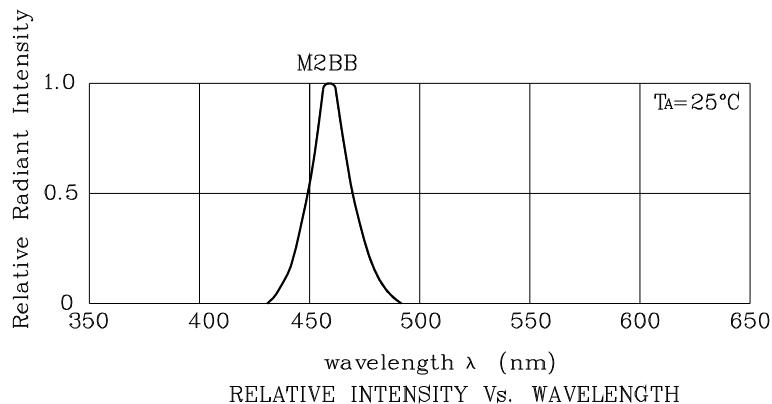
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (TA=25°C)		M2BB (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PT	111	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

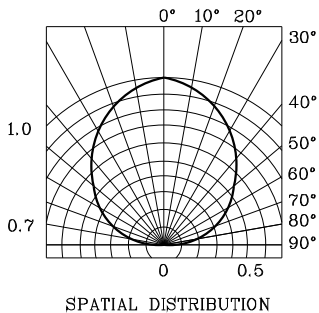
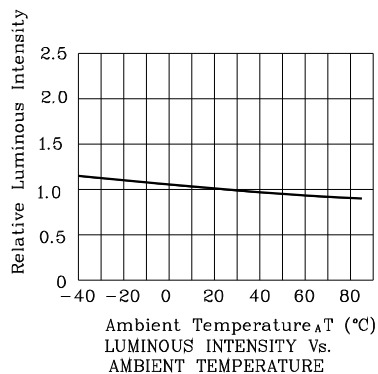
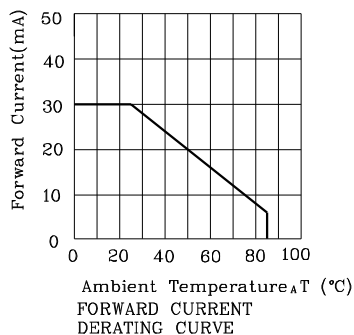
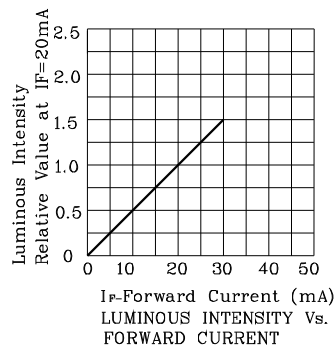
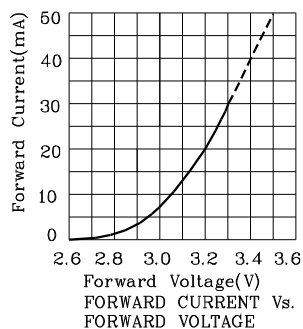


Operating Characteristics (TA=25°C)		M2BB (InGaN)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	3.2	V
Forward Voltage (Max.) (IF=20mA)	VF	3.7	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λ P	458	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λ D	465	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	22	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	110	pF

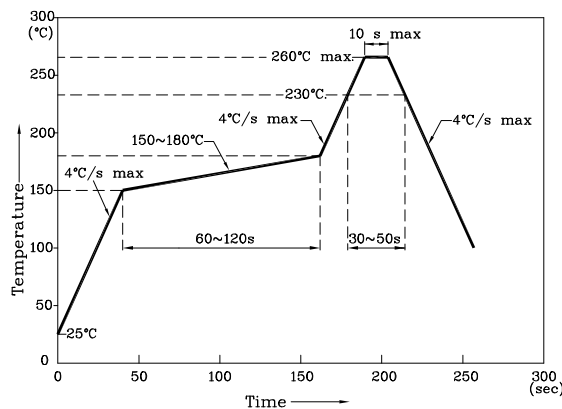
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd	Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.	
ZM2BB90W	Blue	InGaN	Water Clear	110	248	458 110°
Published Date : FEB 26,2008		Drawing No :SDSA6416		M V1	Checked : B.L.LIU	P. 1/4



❖ M2BB



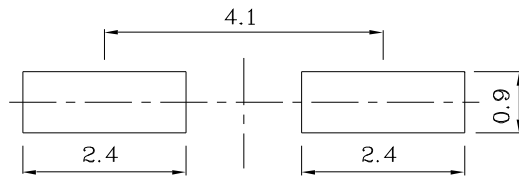
Reflow Soldering Profile For Lead-free SMT Process.



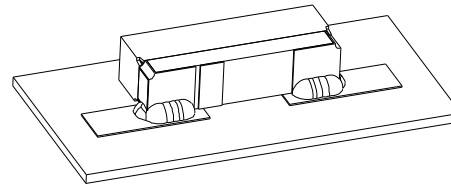
NOTES:

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.

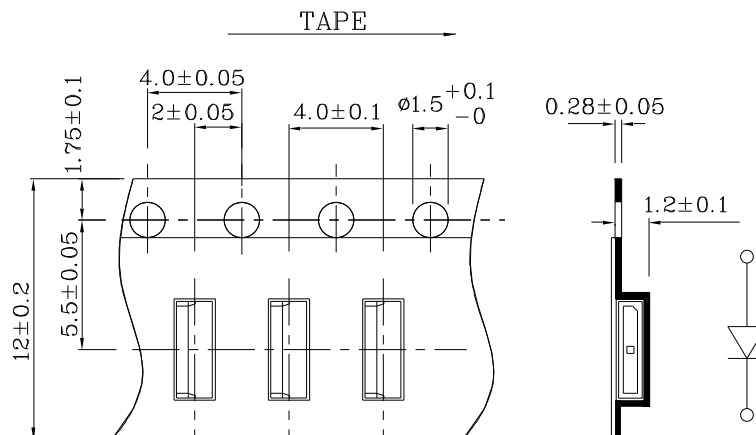
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ± 0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

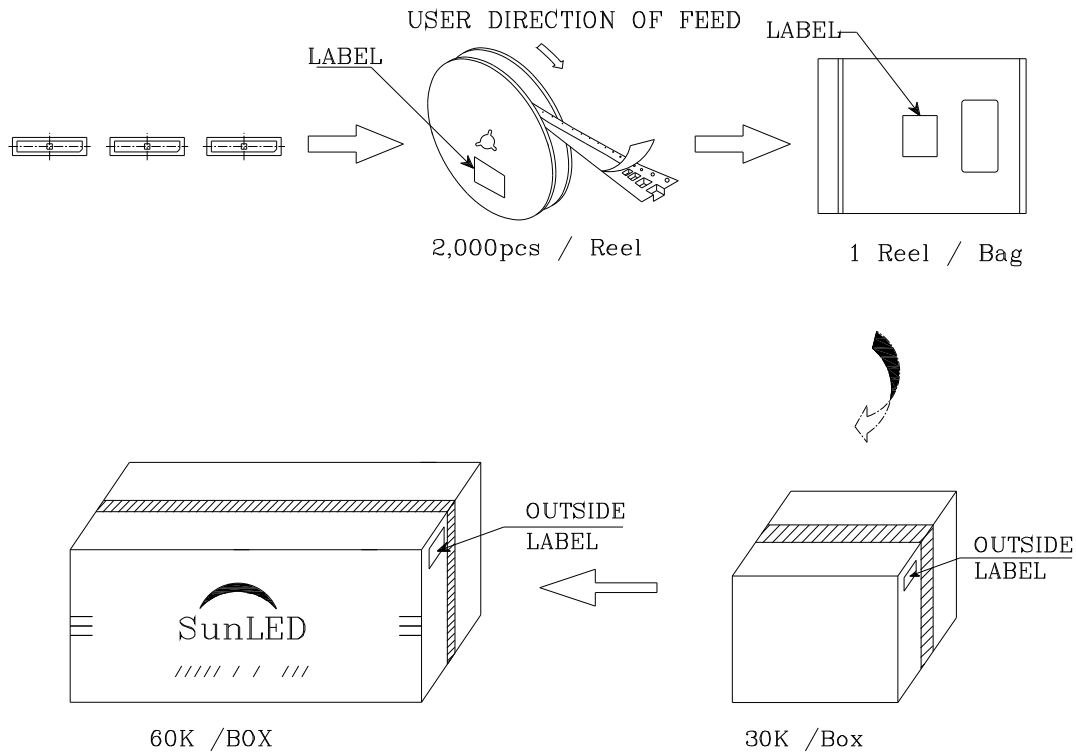
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity / luminous flux: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZM2BB90W



		<table border="1"> <tr> <td>Q.C.</td> <td>Q C</td> </tr> <tr> <td>XX</td> <td>XX XXXX</td> </tr> <tr> <td colspan="2">PASSED</td> </tr> </table>	Q.C.	Q C	XX	XX XXXX	PASSED	
Q.C.	Q C							
XX	XX XXXX							
PASSED								
P/NO : Zxx90x								
QTY : 2,000pcs		CODE: XXX						
S/N : XX								
LOT NO: XXXXXXXXXXXXXXXXXXXX								
RoHS Compliant								