

PRELIMINARY SPEC

Features

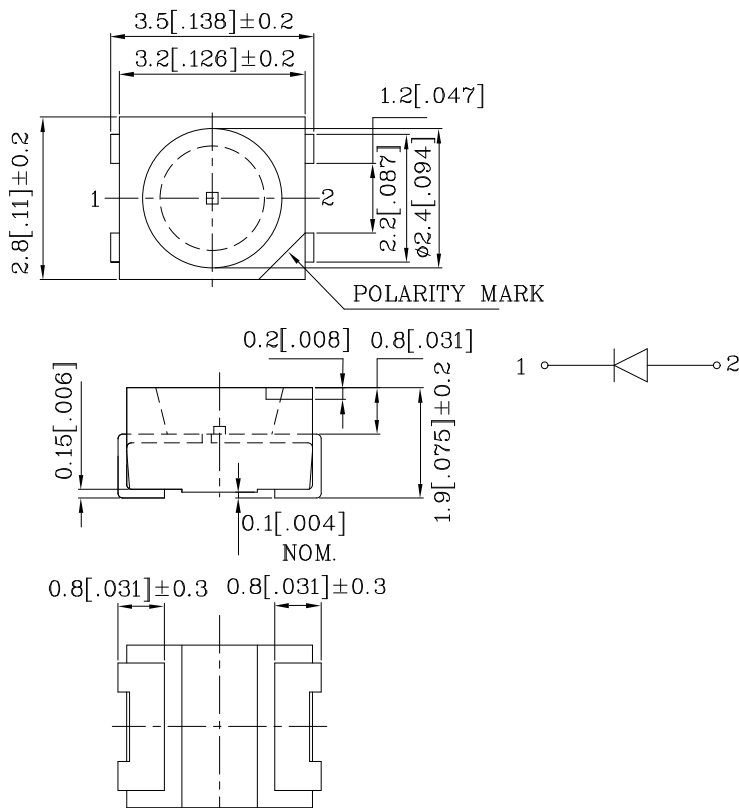
- SINGLE COLOR.
- SUITABLE FOR ALL SMT ASSEMBLY AND SOLDER PROCESS.
- AVAILABLE ON TAPE AND REEL.
- IDEAL FOR BACKLIGHTING.
- PACKAGE : 1500PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Notes:

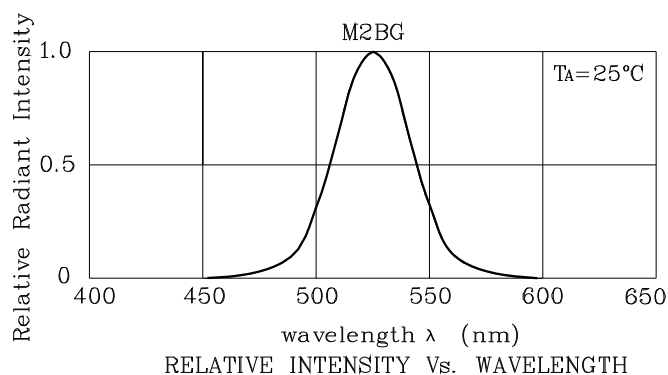
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.
3. Specifications are subject to change without notice.



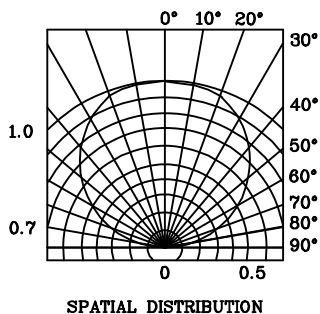
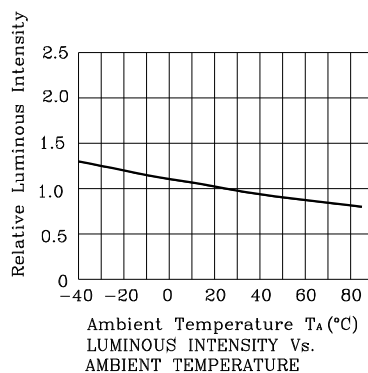
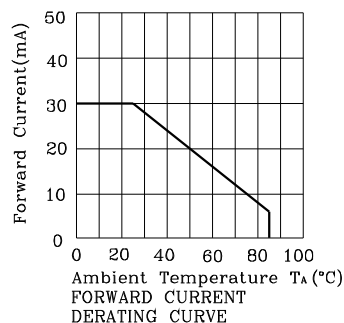
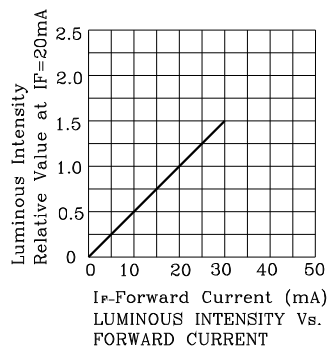
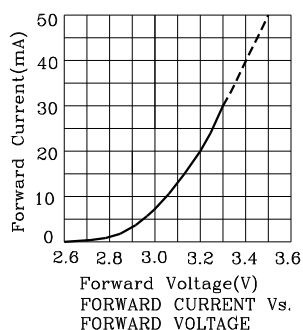
Absolute Maximum Ratings (TA=25°C)		M2BG (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PT	111	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

Operating Characteristics (T _A =25°C)		M2BG (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	3.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	3.7	V
Reverse Current (Max.) (V _R =5V)	I _R	10	uA
Wavelength of Peak Emission (Typ.) (I _F =20mA)	λ P	525	nm
Wavelength of Dominant Emission (Typ.) (I _F =20mA)	λ D	535	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	39	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	65	pF

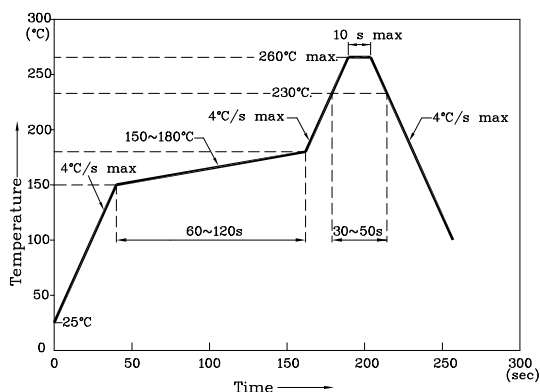
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd	Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.	
ZM2BG45FW	Green	InGaN	Water Clear	480	945	525 120°
Published Date : FEB 28,2008		Drawing No : SDSA6368		V1	Checked : B.L.LIU	P.1/4



❖ M2BG



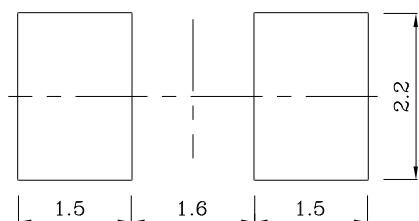
Reflow Soldering Profile For Lead-free SMT Process.



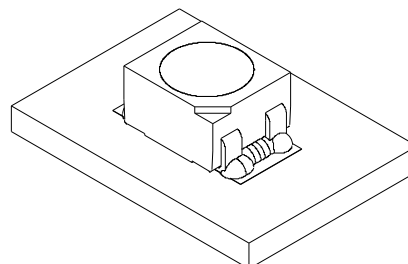
NOTES:

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.

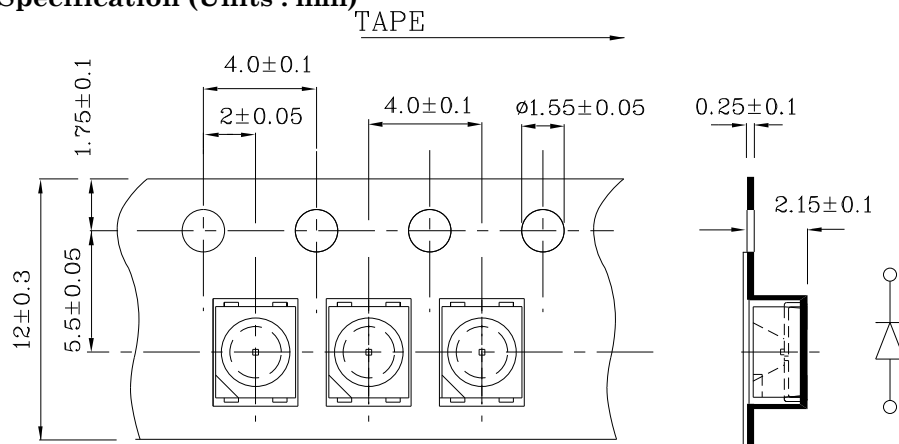
❖ Recommended Soldering Pattern
(Units : mm; Tolerance: ±0.1)



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



❖ Tape Specification (Units : mm)



Remarks:

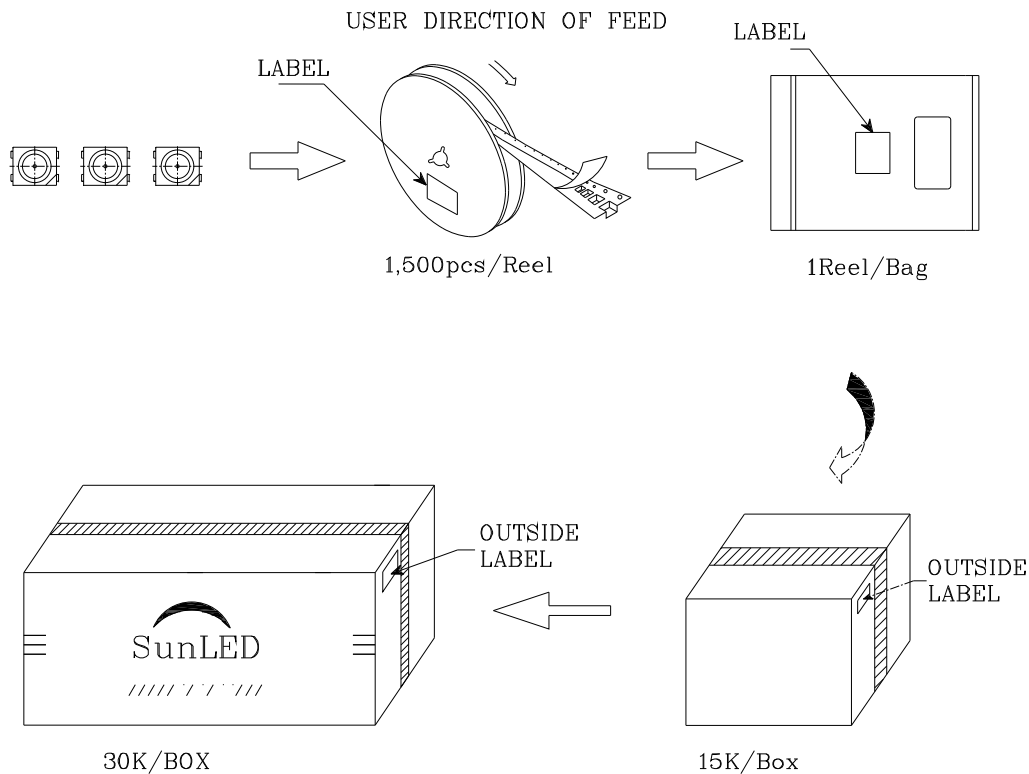
If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

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

ZM2BG45FW



SunLED

Q.C.

Q C

XX XX. XXXX

PASSED

P/NO : Zxx45Fx	
QTY : 1,500 pcs	CODE: XXX
S/N : XX	
LOT NO: XXXXXXXXXXXXXXXXXXXX RoHS Compliant	