

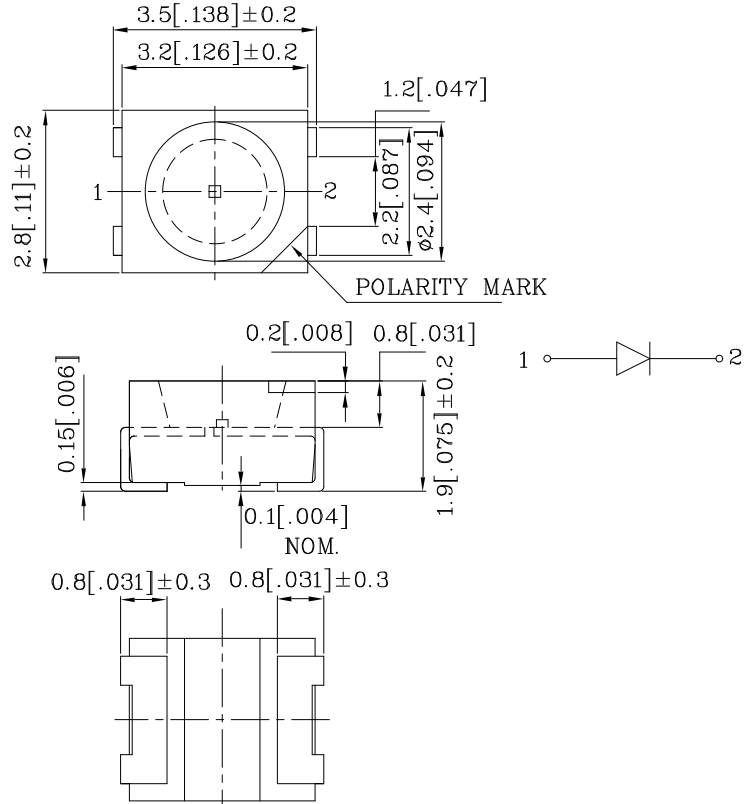
### Features

- 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:

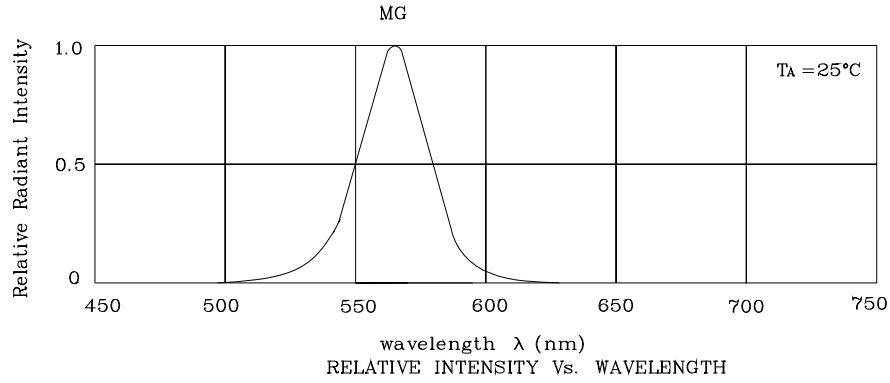
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



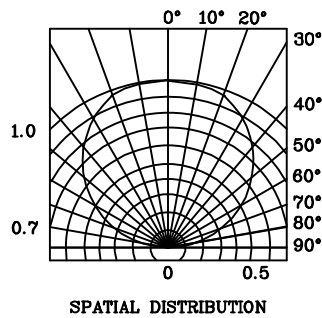
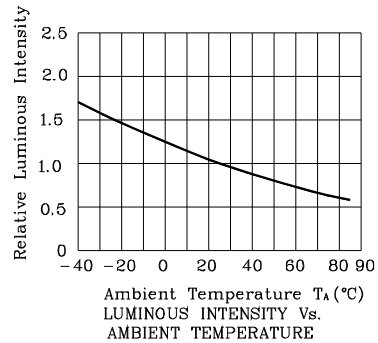
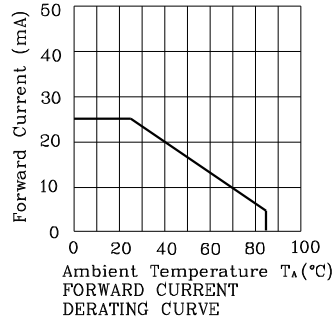
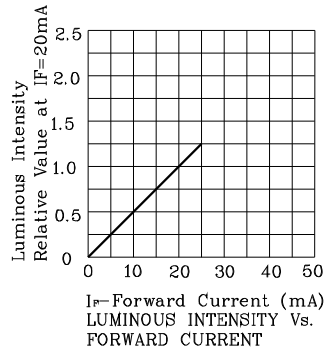
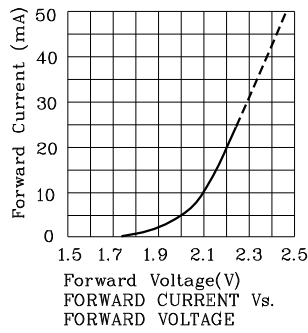
Absolute Maximum Ratings (TA=25°C)		MG (GaP)	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Forward Current	I <sub>F</sub>	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i <sub>FS</sub>	140	mA
Power Dissipation	P <sub>T</sub>	62.5	mW
Operating Temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +85	

Operating Characteristics (TA=25°C)		MG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.5	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>	565	nm
Wavelength of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ <sub>D</sub>	568	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	15	pF

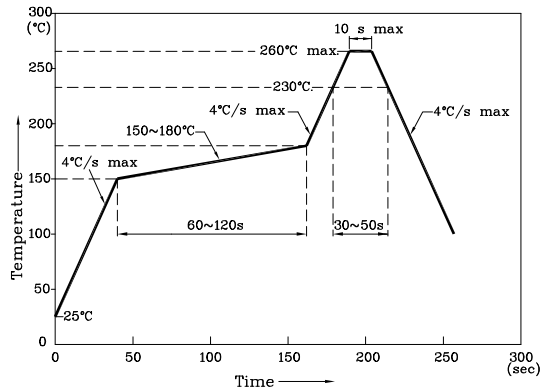
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ <sub>P</sub>	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMG45FW	Green	GaP	Water Clear	10	24	565	120°



❖ MG



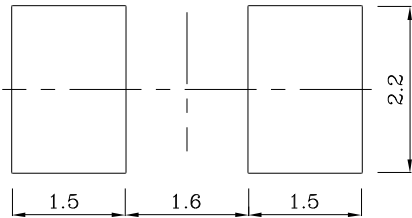
Reflow Soldering Profile For Lead-free SMT Process.



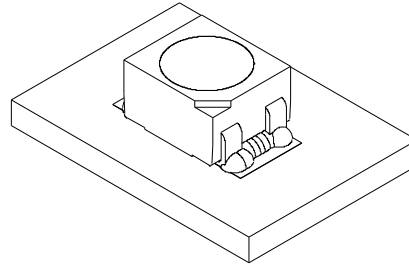
NOTES:

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.

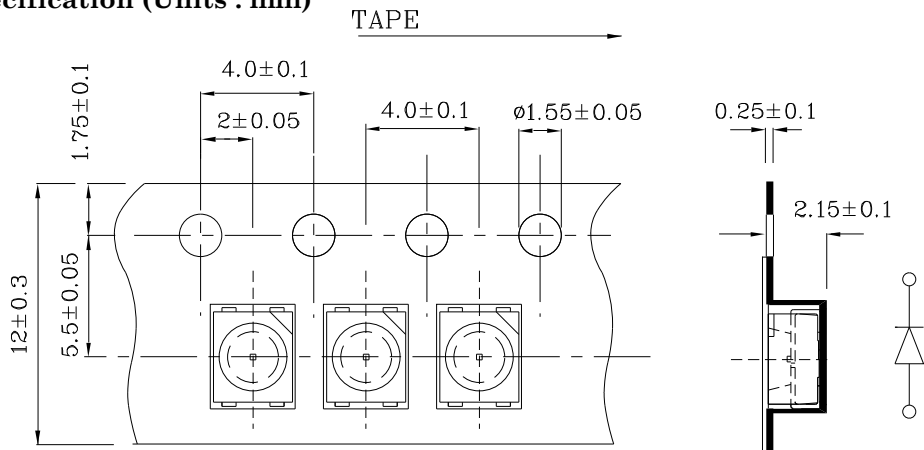
❖ Recommended Soldering Pattern (Units : mm; Tolerance: ±0.1)



❖ 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:

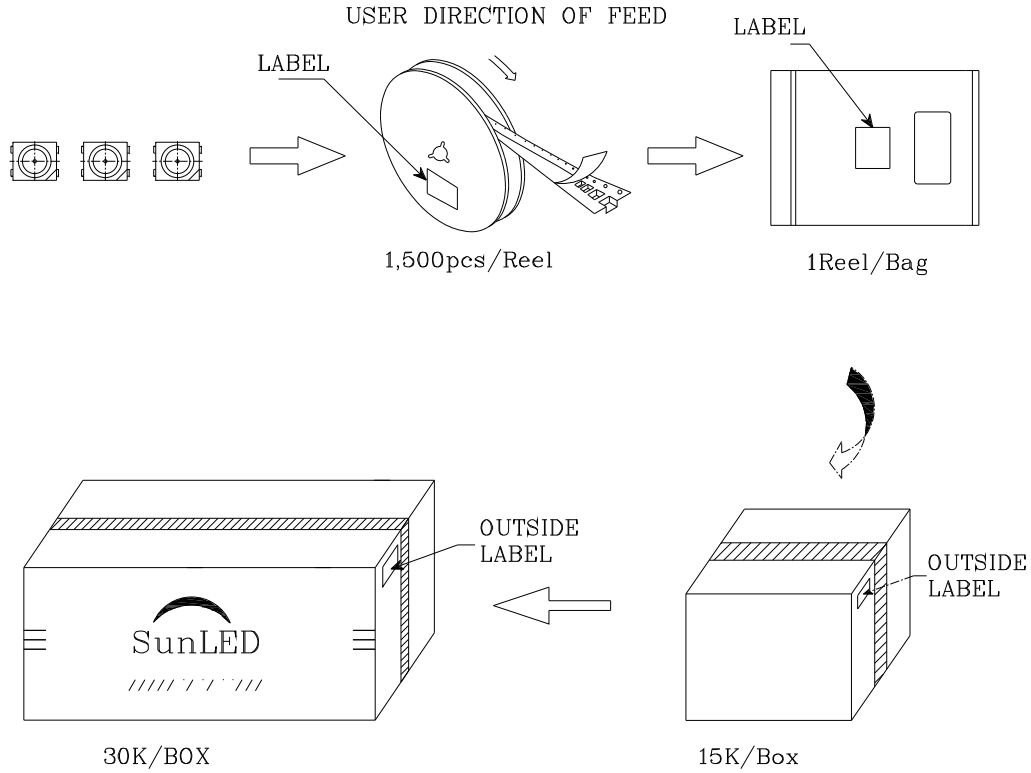

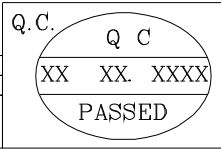
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V


Note: Accuracy may depend on the sorting parameters.



**PACKING & LABEL SPECIFICATIONS**

**ZMG45FW**

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