

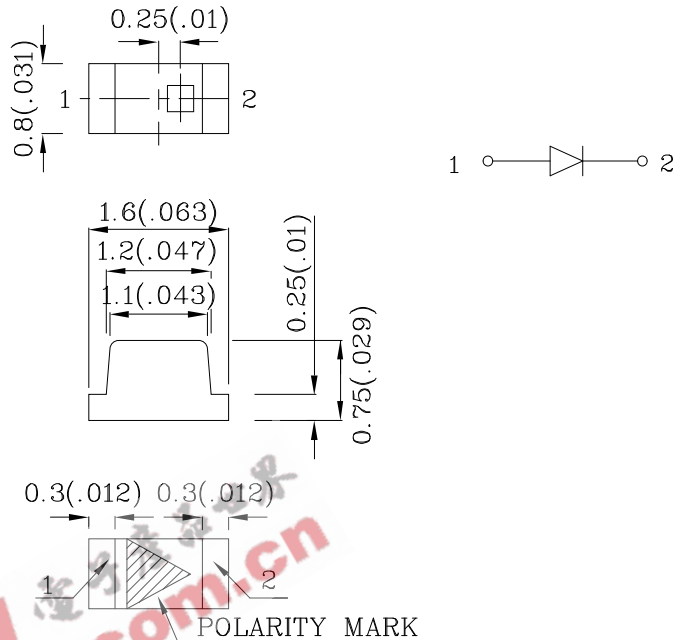
### Features

- 1.6mmX0.8mm SMT LED, 0.75mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- MOISTURE SENSITIVITY LEVEL : LEVEL 3.
- PACKAGE: 2000PCS / REEL .
- RoHS COMPLIANT.



### Notes:

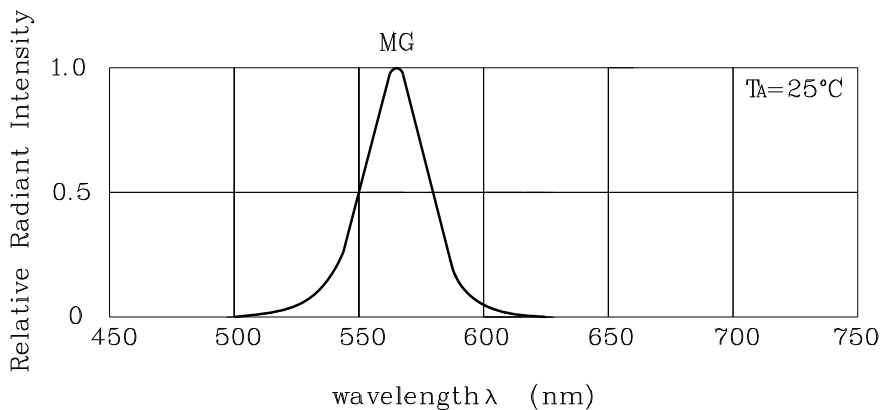
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1(0.004)$ " unless otherwise noted.
3. Specifications are subject to change without notice.



Absolute Maximum Ratings (TA=25°C)		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	

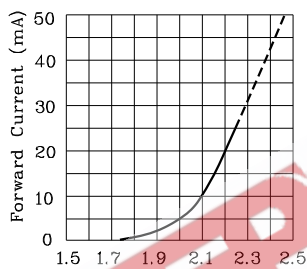
Operating Characteristics (TA=25°C)		MG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength Of Peak Emission (Typ.) (I <sub>F</sub> =20mA)	λ P	565	nm
Wavelength Of Dominant Emission (Typ.) (I <sub>F</sub> =20mA)	λ D	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 P	Viewing Angle 2 θ 1/2
				min.	typ.		
ZMG53W-1	Green	GaP	Water Clear	4	14	565	120°

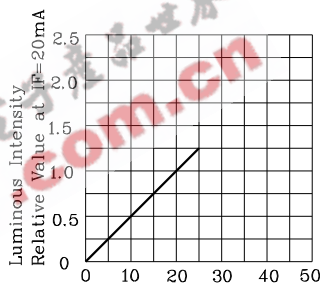


RELATIVE INTENSITY Vs. WAVELENGTH

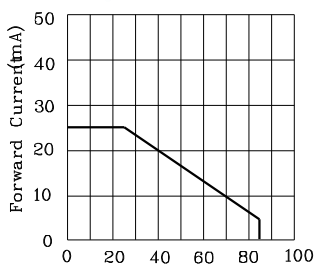
◆ MG



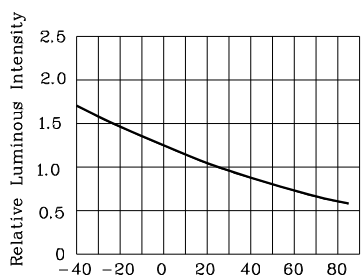
FORWARD CURRENT Vs. FORWARD VOLTAGE



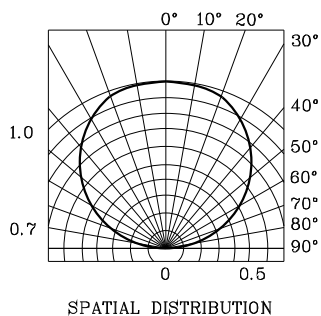
LUMINOUS INTENSITY Vs. FORWARD CURRENT



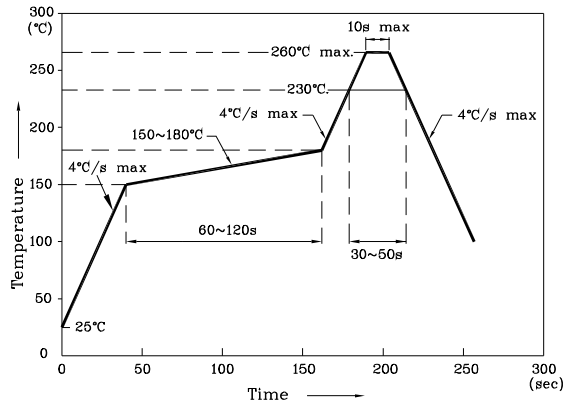
FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



Reflow Soldering Profile For Lead-free SMT Process.

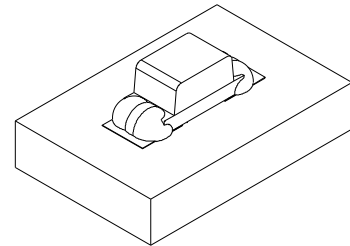
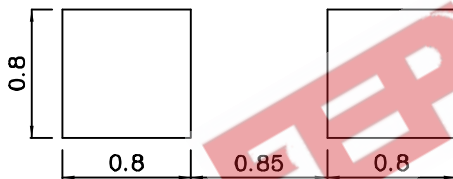


Notes:

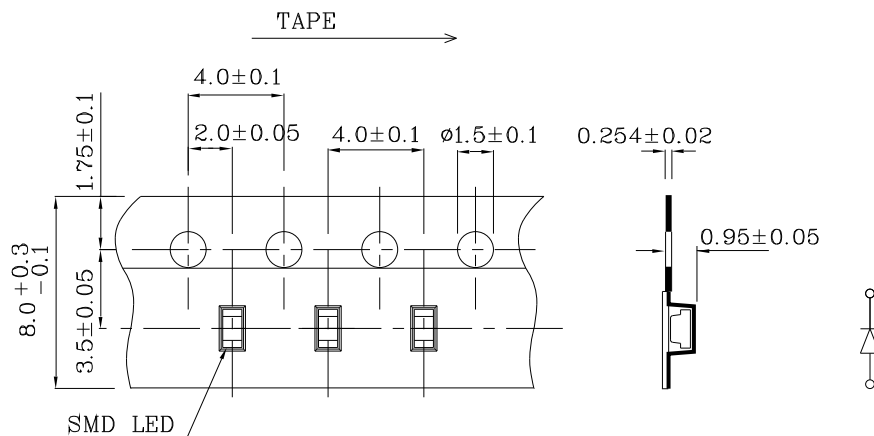
1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C~260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ 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:

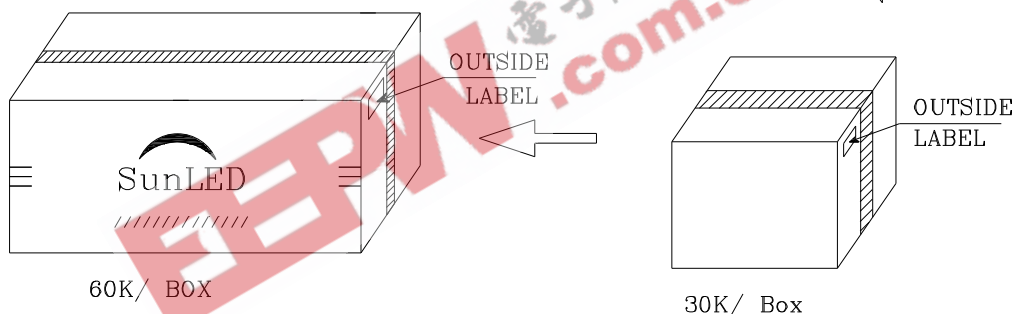
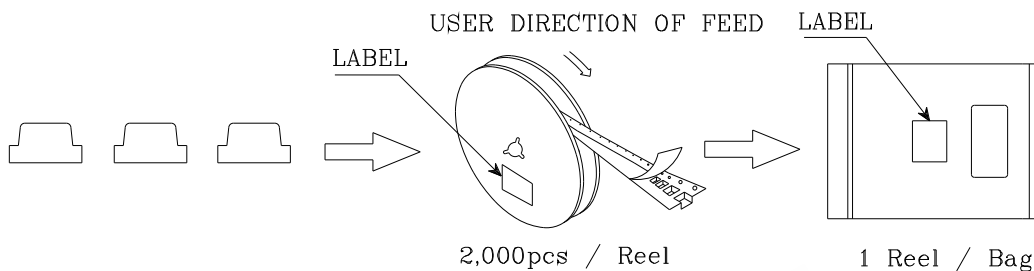

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity / luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

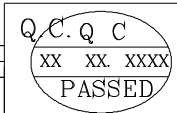

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS

ZMG53W-1

	
P/NO : Zxxx53x-1	
QTY : 2000 pcs	CODE: XXX
S/N : XX	
LOT NO:	
	
XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	