

## Part Number: ZM2DG45WT

3.5x2.8mm PLCC2 SMD LED

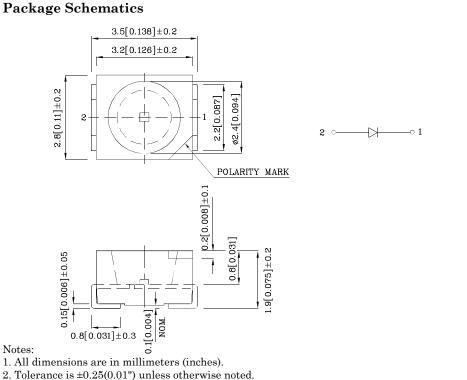
## Features

- $\bullet$  Ideal for indication light on hand held products
- Long life and robust package
- Standard Package: 2000pcs/ Reel
- MSL (Moisture Sensitivity Level): 4
- RoHS compliant





ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES



2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.

3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	M2DG (InGaN)	Unit		
Reverse Voltage	VR	5	V	
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	mA	
Power Dissipation	$\mathbf{P}_{\mathbf{D}}$	120	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	450	V		

Operating Characteristics (T <sub>A</sub> =25°C)		M2DG (InGaN)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	3.2	V	
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	V <sub>F</sub> 4		
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	50	uA	
Wavelength of Peak Emission CIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λΡ	520*	nm	
Wavelength of Dominant EmissionCIE127-2007*(Typ.) (I <sub>F</sub> =20mA)	λD	525*	nm	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	35	nm	
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	100	pF	

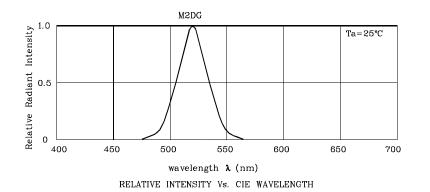
Part Number	Emitting Color	Emitting Material	Lens-color	CIE12'	0mA)	Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
ZM2DG45WT	Green	InGaN	Water Clear	1000*	1395*	520*	120°

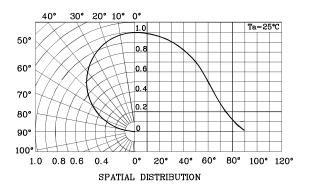
\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

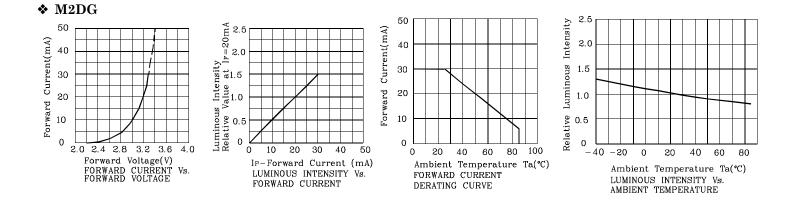
Feb 22,2014

SDSA9402 V1-Z Layout: Maggie L.



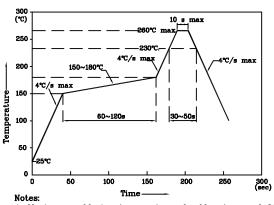






# LED is recommended for reflow soldering and soldering profile is shown below.

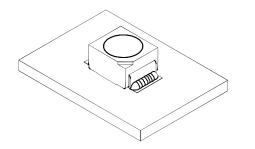
Reflow Soldering Profile for SMD Products (Pb-Free Components)



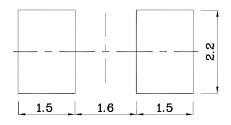
- 1. Maximum soldering temperature should not exceed 260°C 2. Recommended reflow temperature: 145°C-260°C
- 2. Recommended reflow temperature: 145°C-260°C 3. Do not put stress to the epoxy resin during
- high temperatures conditions



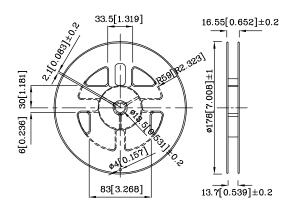
✤ The device has a single mounting surface. The device must be mounted according to the specifications.



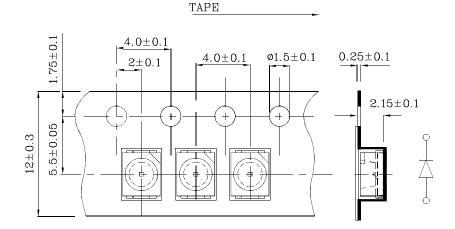
### Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



## 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

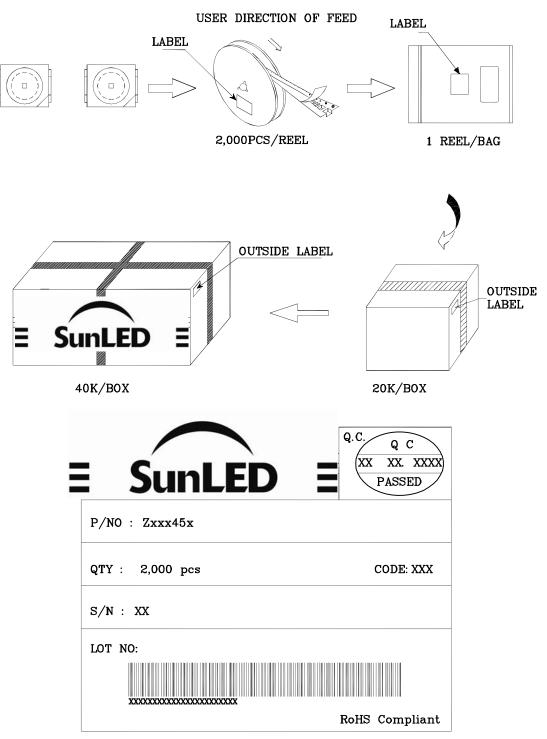
2. Luminous intensity / luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.



## **PACKING & LABEL SPECIFICATIONS**



#### TERMS OF USE

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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
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