





#### **Features**

- Ideal for indication light on hand held products
- Long life and robust package
- Variety of lens types and color choices available
- Tinned pads for improved solderability
- Package : 2000pcs / reel
- $\bullet$  Moisture sensitivity level : level 3
- RoHS compliant

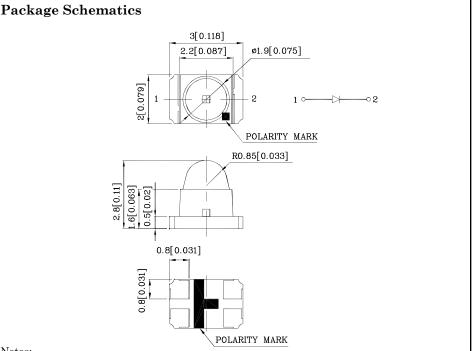






#### ATTENTION OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE

DEVICES



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.2(0.008")$  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	$V_{\rm R}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	100	mA	
Power Dissipation	$P_D$	120	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85		
Electrostatic Discharge Threshold (HBM)	450	V		

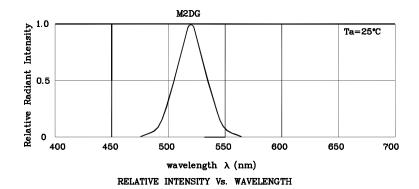
	M2DG (InGaN)	Unit
$V_{\mathrm{F}}$	3.2	V
$V_{\mathrm{F}}$	4	V
$I_R$	50	uA
λΡ	520	nm
λD	525	nm
$\triangle \lambda$	35	nm
C	100	pF
	$V_{\mathrm{F}}$ $I_{\mathrm{R}}$ $\lambda P$ $\lambda D$ $\triangle \lambda$	$\begin{array}{c cccc} & & & & & & & & & \\ & & V_F & & & & & & \\ & V_F & & & & & & \\ & & I_R & & 50 & & & \\ & & \lambda P & & 520 & & \\ & & \lambda D & & 525 & & \\ & & \triangle \lambda & & 35 & & \\ \end{array}$

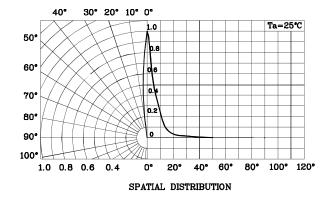
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λΡ	Viewing Angle 20 1/2
				min.	typ.		
XZM2DG50WT-2	Green	InGaN	Water Clear	2500	3290	520	10°

Mar 23,2011 XDSB5716 V1 Layout: Maggie L.

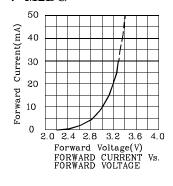


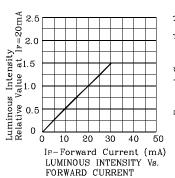


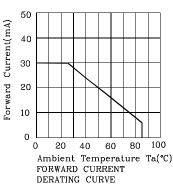


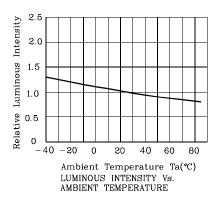


# **❖ M2DG**



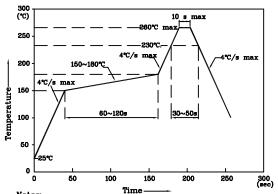






# LED is recommended for reflow soldering and soldering profile is shown below.

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



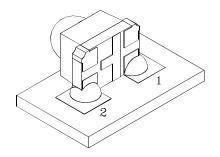
- 1. Maximum soldering temperature should not exceed 260°C
- 2. Recommended reflow temperature: 145°C-260°C
- 3. Do not put stress to the epoxy resin during high temperatures conditions

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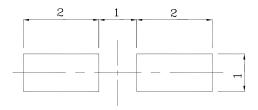




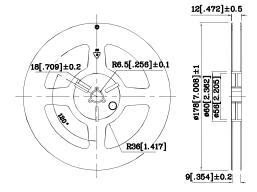
❖ The device has a single mounting surface. The device must be mounted according to the specifications.



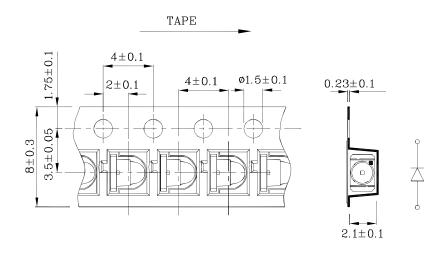
**❖** Recommended Soldering Pattern (Units:mm; Tolerance: ± 0.1)



# \* 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.

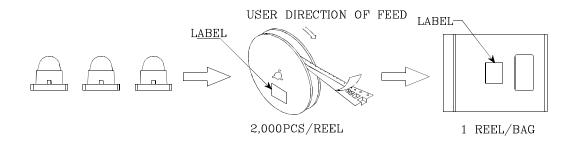
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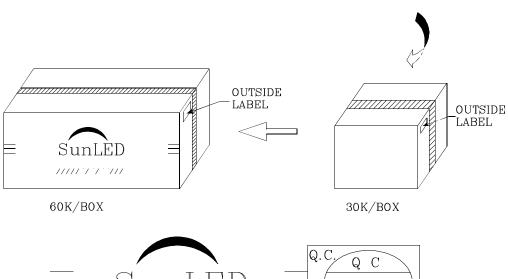
XDSB5716 V1 Layout: Maggie L.

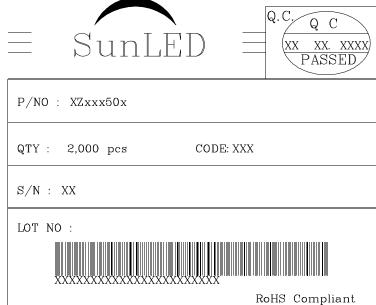




# PACKING & LABEL SPECIFICATIONS







Mar 23,2011