

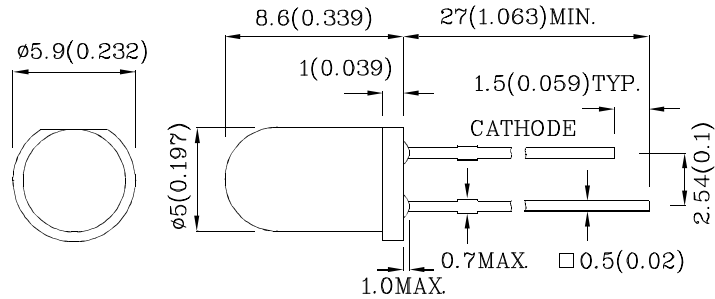
Features

- Radial / Through hole package
- Reliable & robust
- Low power consumption
- Available on tape and reel
- RoHS Compliant



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

Package Schematics



Notes:

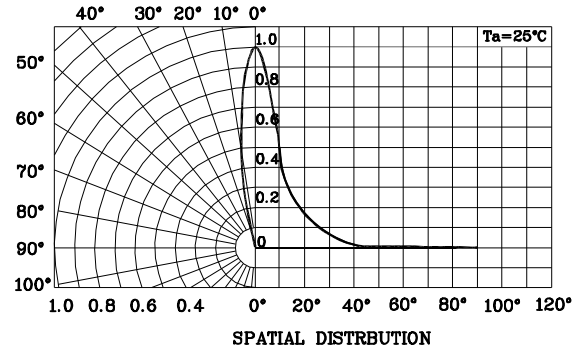
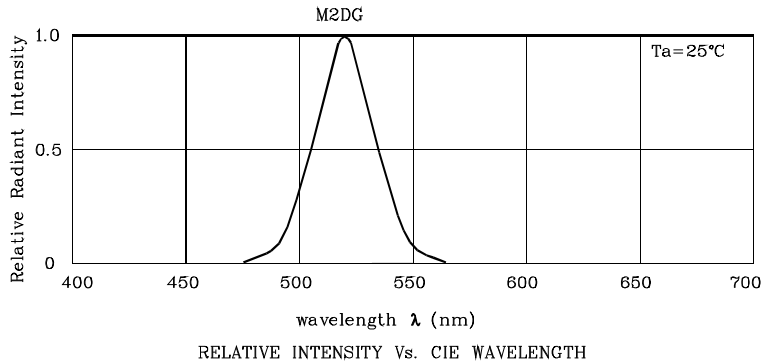
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T _A =25°C)		M2DG (InGaN)	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i _{FS}	100	mA
Power Dissipation	P _D	120	mW
Operating Temperature	T _A	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		450	V
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds		

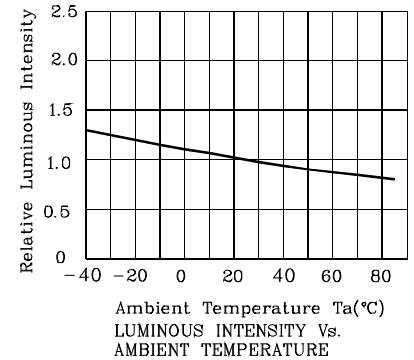
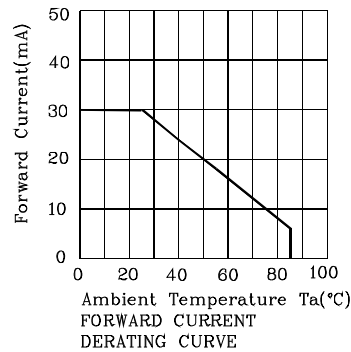
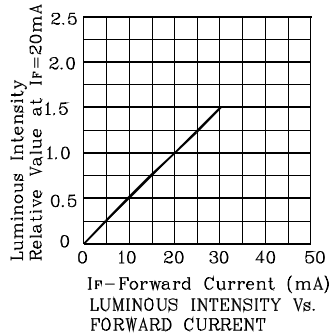
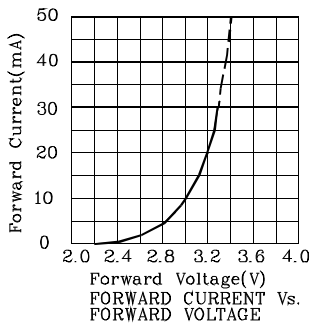
Operating Characteristics (T _A =25°C)		M2DG (InGaN)	Unit
Forward Voltage (Typ.) (I _F =20mA)	V _F	3.2	V
Forward Voltage (Max.) (I _F =20mA)	V _F	4	V
Reverse Current (Max.) (V _R =5V)	I _R	50	uA
Wavelength of Peak Emission CIE127-2007*(Typ.) (I _F =20mA)	λ _P	520*	nm
Wavelength of Dominant Emission CIE127-2007*(Typ.) (I _F =20mA)	λ _D	525*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =20mA)	Δλ	35	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* (I _F =20mA) mcd		Wavelength CIE127-2007* nm λ _P	Viewing Angle 2θ 1/2
				min.	typ.		
XLM2DG12W	Green	InGaN	Water Clear	12000*	19000*	520*	20°

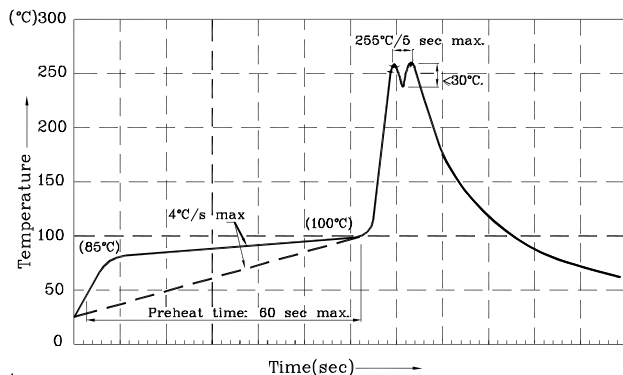
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.



❖ M2DG



Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



Notes:

1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C
2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec (5 sec max).
3. Do not apply stress to the epoxy resin while the temperature is above 85°C.
4. Fixtures should not incur stress on the component when mounting and during soldering process.
5. SAC 305 solder alloy is recommended.
6. No more than one wave soldering pass.

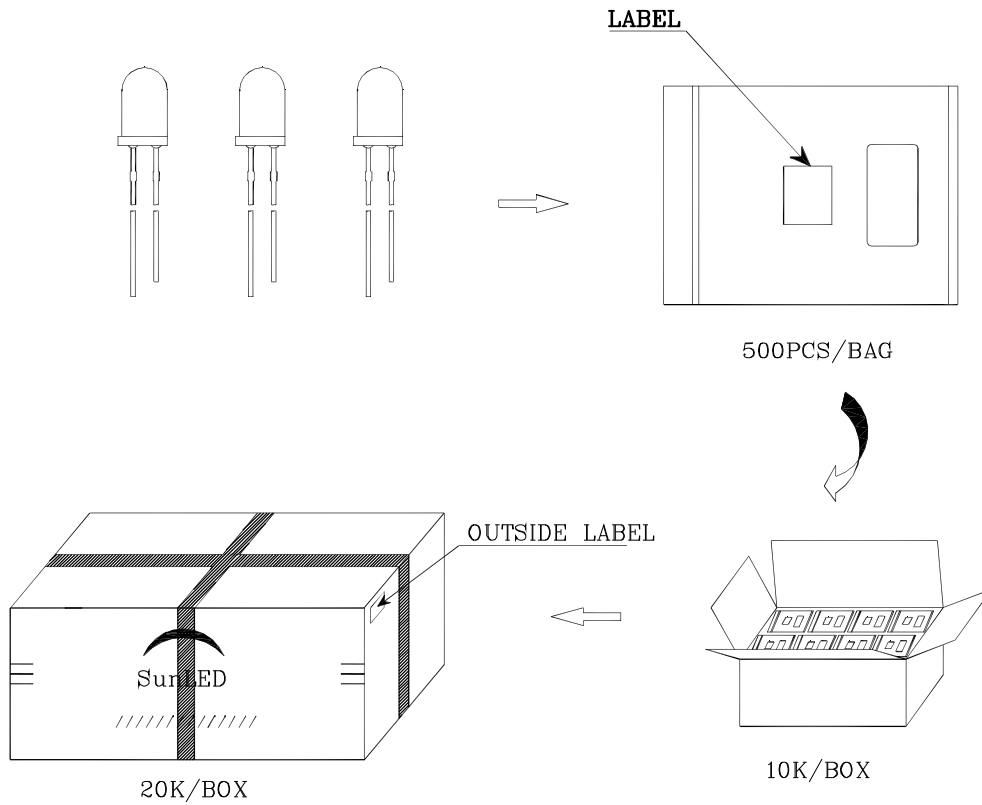
Remarks:

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





Q.C.
 Q C
 XX XX XXXX
 PASSED

P/NO : XLxx12x	
QTY : 500 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	