SunLED
www.SunLEDusa.com

Part Number: XSM2DG883W

SUPER FLUX LED LAMP

Features

- High current operation for greater luminous output
- Low Power Consumption and thermal resistance
- Can be used with automatic insertion equipment
- RoHS Compliant

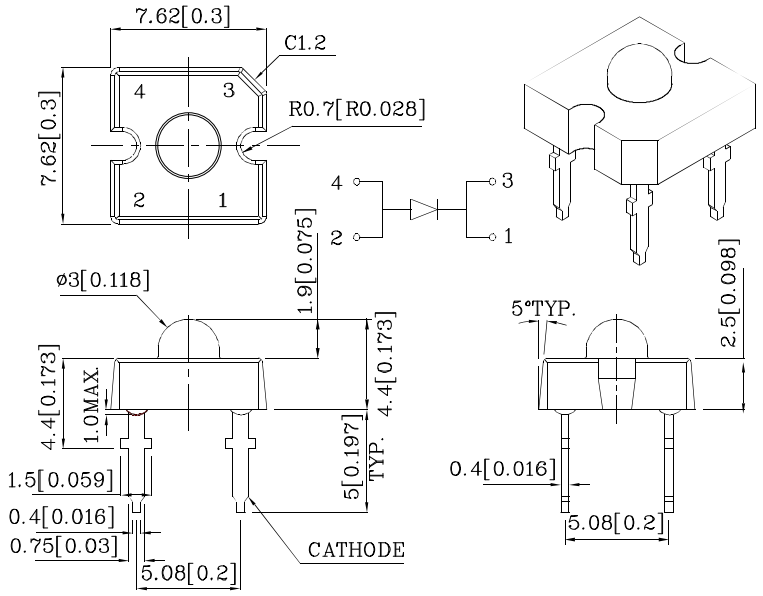
Benefits:

- Rugged design allows for easy maintenance
- Robust package for optimum reliability

Typical Applications:

- Automotive side markers
- Gaming and entertainment lighting
- Signs and road hazard indicators

Package Schematics



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

ATTENTION
OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

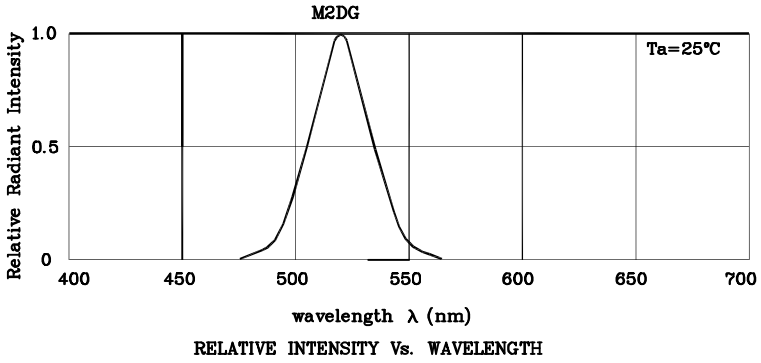
Absolute Maximum Ratings (T_A=25°C)		**M2DG (InGaN)**	**Unit**
Reverse Voltage	V_R	5	V
DC Forward Current	I_F	30	mA
Power Dissipation	P_D	123	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-55 ~ +85	
Electrostatic Discharge Threshold (HBM)		450	V
Lead Solder Temperature [1.5mm Below Seating Plane.][1]		260°C For 5 Seconds	

1.No Reflow soldering .

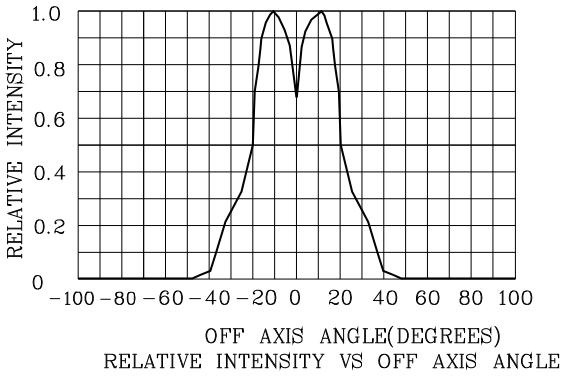
Operating Characteristics (T_A=25°C)		**M2DG (InGaN)**	**Unit**
Forward Voltage (Typ.) (I_F=30mA)	V_F	3.3	V
Forward Voltage (Max.) (I_F=30mA)	V_F	4.1	V
Reverse Current (Max.) (V_R=5V)	I_R	50	uA
Wavelength of Peak Emission (Typ.) (I_F=30mA)	λP	520	nm
Wavelength of Dominant Emission (Typ.) (I_F=30mA)	λD	525	nm
Spectral Line Full Width At Half Maximum (Typ.) (I_F=30mA)	△λ	35	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	100	pF
Thermal Resistance (Typ.)	Rθj-pin	150	°C/W

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I_F=30mA) cd		Viewing Angle 2θ 1/2
				min.	typ.	
XSM2DG883W	Green	InGaN	Water Clear	6	7.99	40°

1.Luminous intensity is measured with an integrating sphere after the device has stabilized.
2.θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

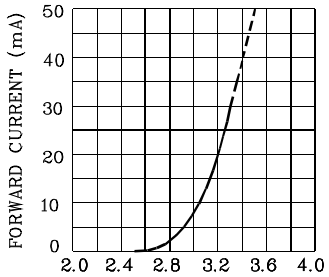


RELATIVE INTENSITY Vs. WAVELENGTH

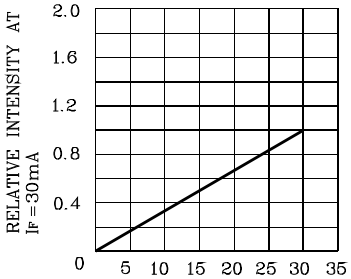


RELATIVE INTENSITY VS OFF AXIS ANGLE

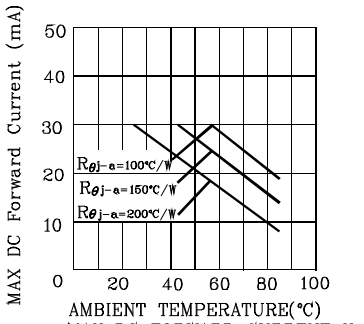
❖ M2DG



FORWARD CURRENT Vs. FORWARD VOLTAGE

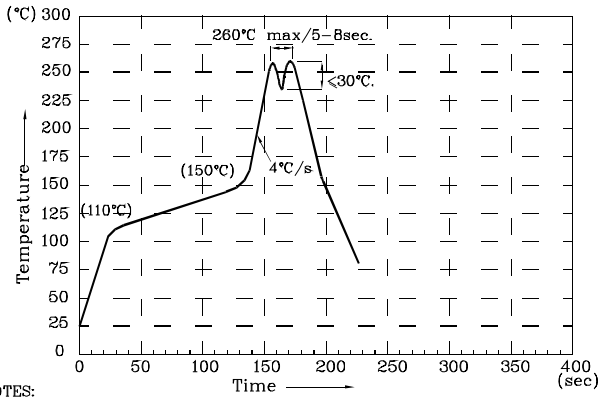


RELATIVE INTENSITY Vs. FORWARD CURRENT



MAX DC FORWARD CURRENT Vs AMBIENT TEMPERATURE

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

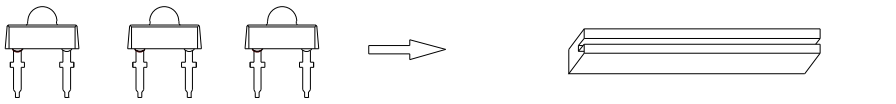


NOTES:
1. Recommend the wave temperature 245℃~260℃. The maximum soldering temperature should be less than 260℃.
2. Do not apply stress on epoxy resins when temperature is over 85℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. During wave soldering, the PCB top-surface temperature should be kept below 105℃.
5. No more than once.

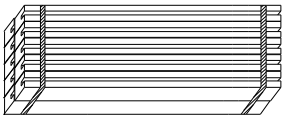
Remarks:

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.

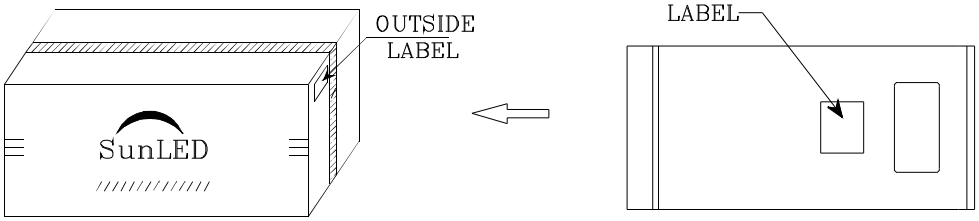
PACKING & LABEL SPECIFICATIONS



75PCS / IC TUBE(520x8.3x15mm)



750pcs / 10pcs IC TUBE



7.5K / BOX

10pcs IC TUBE / Bag