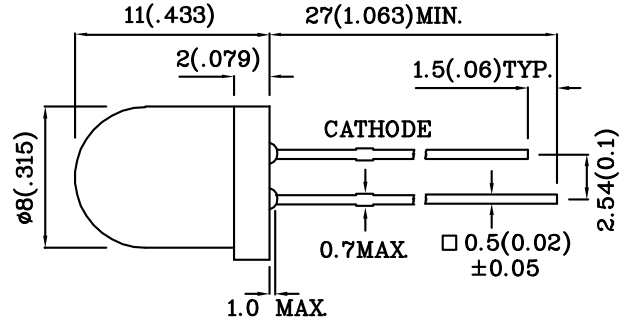
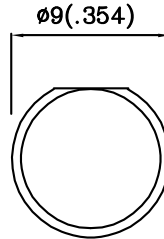


PRELIMINARY SPEC

Features

- 8mm DIAMETER BIG LAMP.
- WIDE VIEWING ANGLE.
- I.C.COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE-SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



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 (TA=25°C)		MDG (InGaAlP)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	150	mA
Power Dissipation	PT	75	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
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 (TA=25°C)		MDG (InGaAlP)	Unit
Forward Voltage (Typ.) (IF=20mA)	VF	1.9	V
Forward Voltage (Max.) (IF=20mA)	VF	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=20mA)	λP	640	nm
Wavelength Of Dominant Emission (Typ.) (IF=20mA)	λD	630	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=20mA)	$\Delta\lambda$	22	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λP	Viewing Angle 2 θ 1/2
				min.	typ.		
LMDG81W	Red	InGaAlP	Water Clear	2500	3990	640	15°

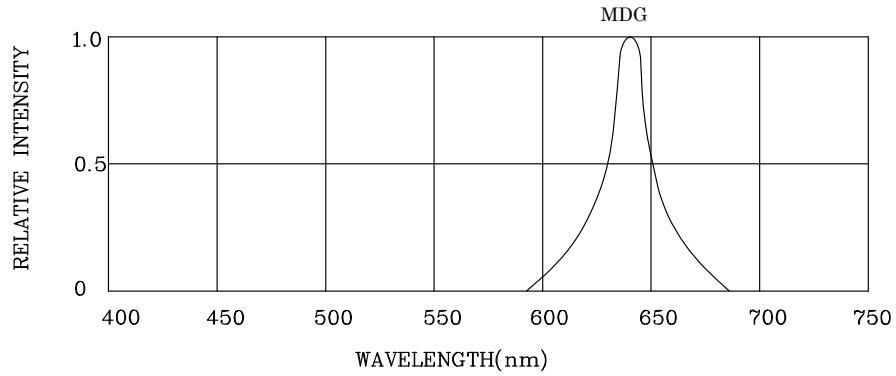
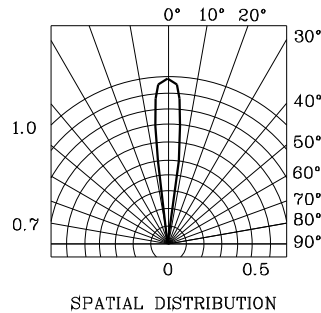
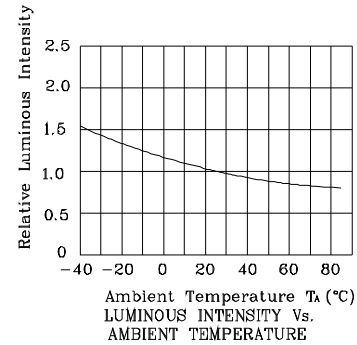
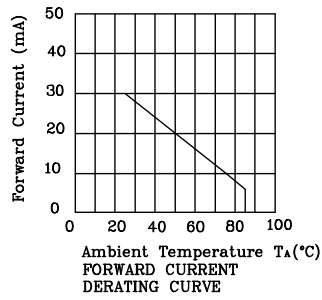
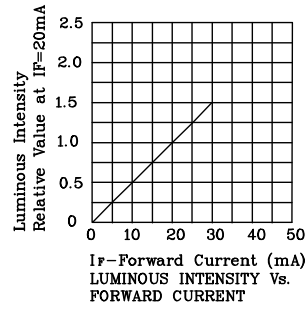
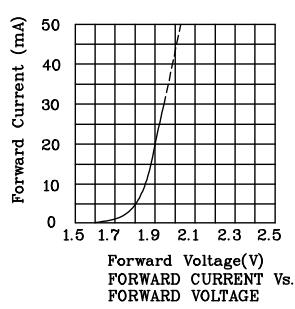
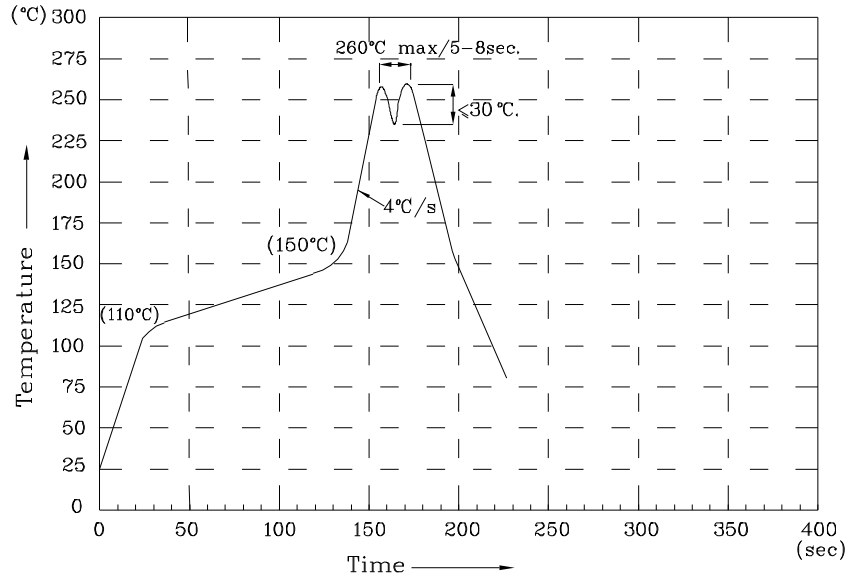


Figure1: RELATIVE INTENSITY VS. WAVELENGTH

❖ MDG



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85 degree°C.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. 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:

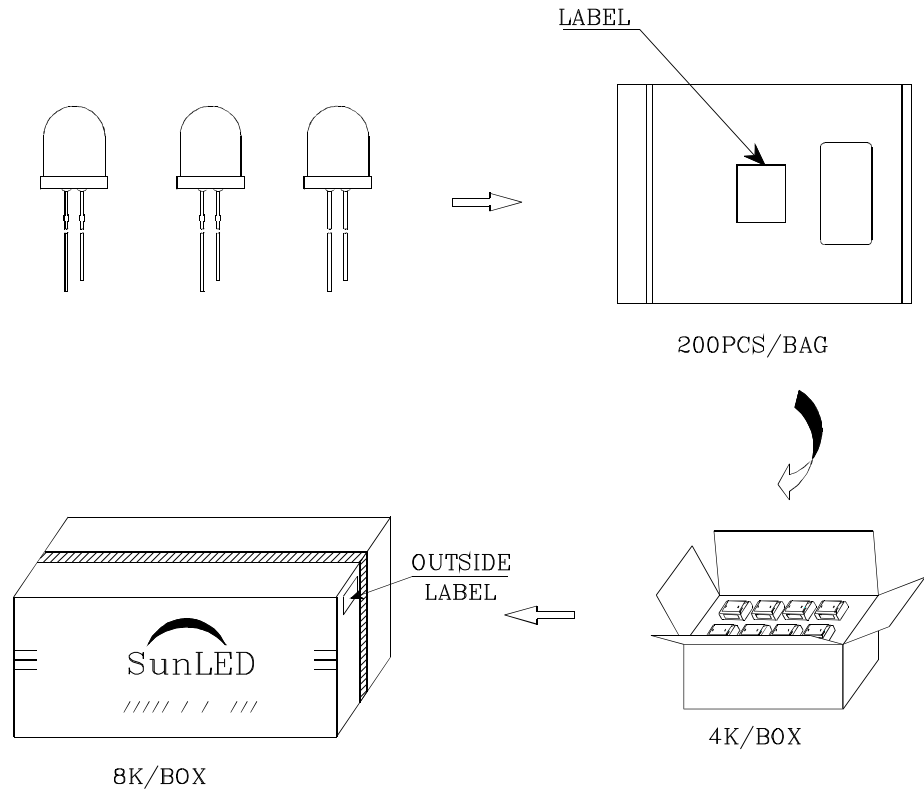
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V


Note: Accuracy may depend on the sorting parameters.



PACKING & LABEL SPECIFICATIONS

LMDG81W






Q C

XX XX.XXXX

PASSED

P/N0 : Lxx81x	
QTY : 200 pcs	CODE: XXX
S/N : XX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	