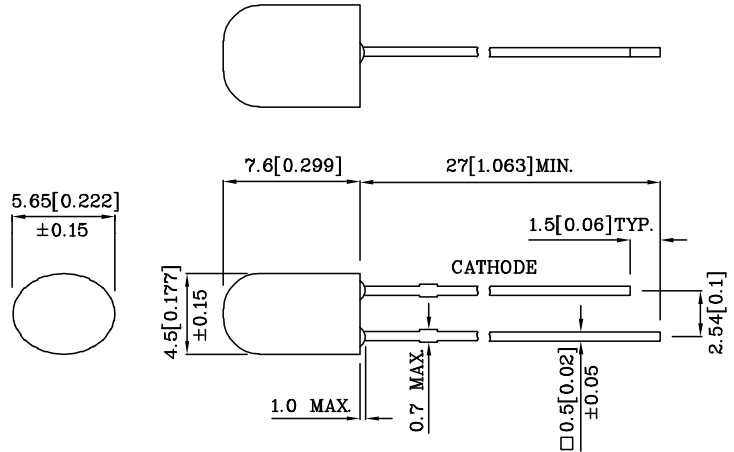


**Features**

- ULTRA BRIGHTNESS.
- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.
- RoHS COMPLIANT.



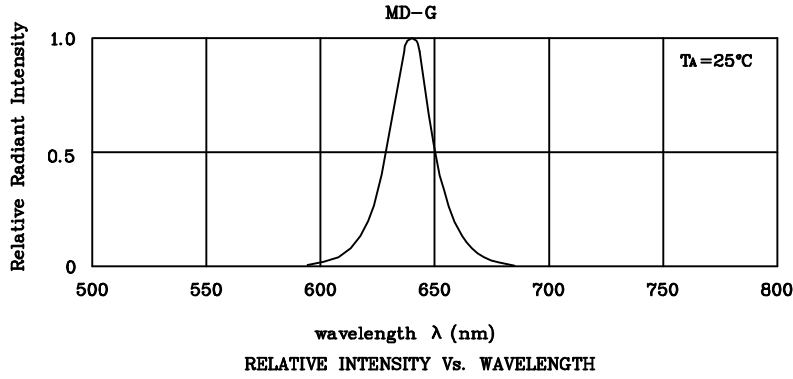
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.

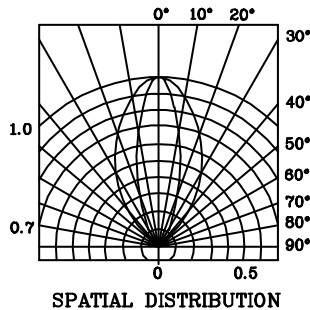
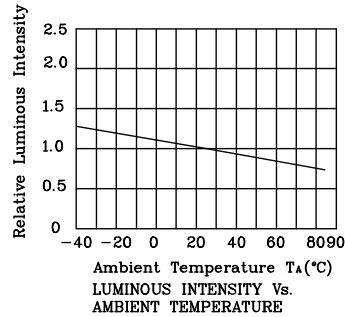
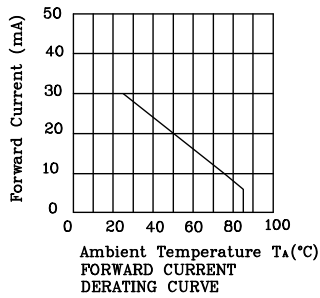
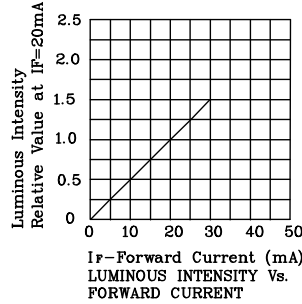
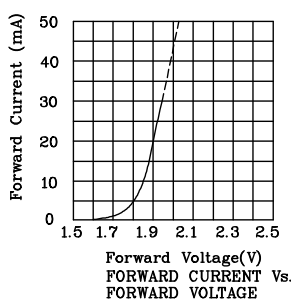
Absolute maximum ratings (TA=25°C)		MD-G (InGaAlP)	Unit
Reverse voltage	V <sub>R</sub>	5	V
Forward current	I <sub>F</sub>	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i <sub>FS</sub>	150	mA
Power dissipation	P <sub>T</sub>	100	mW
Operating temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage temperature	T <sub>stg</sub>	-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)		MD-G (InGaAlP)	Unit
Forward voltage (typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	1.9	V
Forward voltage (max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.5	V
Reverse current (V <sub>R</sub> =5V)	I <sub>R</sub>	10	uA
Wavelength at peak emission (I <sub>F</sub> =20mA)	λ peak	640	nm
Wavelength of Dominant emission (I <sub>F</sub> =20mA)	λ D	630	nm
Spectral Line half-width (I <sub>F</sub> =20mA)	Δλ	22	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLMDG08W	Red	InGaAlP	Water Clear	480	1195	640	30°(H) 60°(V)



❖ MD-G



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength:  $\pm 1\text{nm}$
2. Luminous Intensity:  $\pm 15\%$
3. Forward Voltage:  $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.