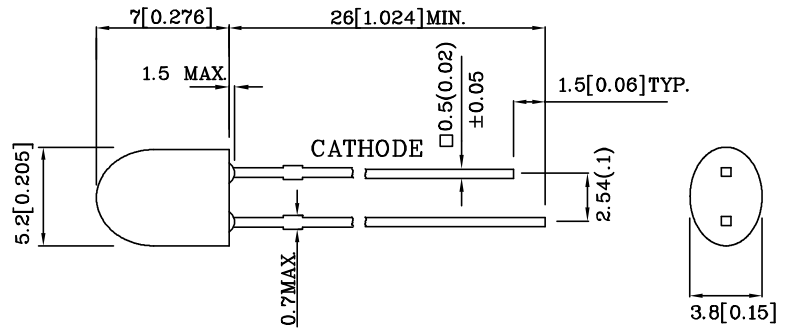


Features

- OUTSTANDING MATERIAL EFFICIENCY.
- RELIABLE AND RUGGED.
- IC COMPATIBLE.
- RoHS COMPLIANT.



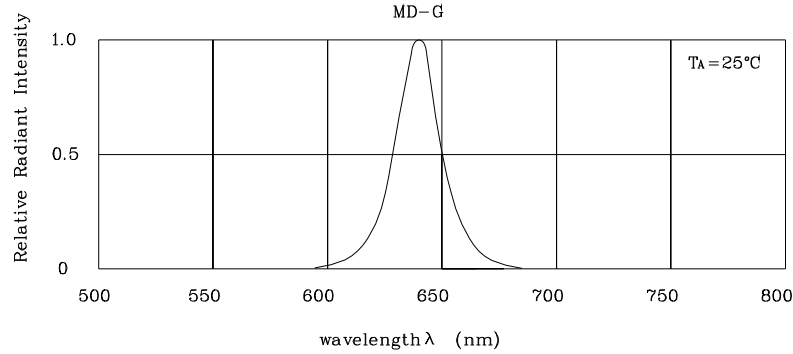
Notes:

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

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		MD-G (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	150	mA
Power dissipation	P_T	100	mW
Operating temperature	T_A	-40 ~ +85	°C
Storage temperature	T_{stg}	-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		

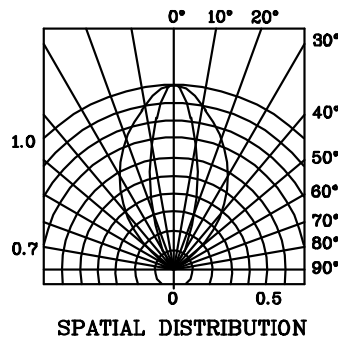
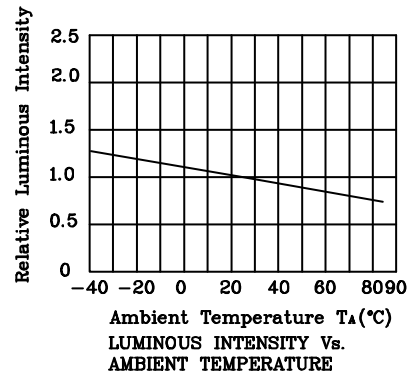
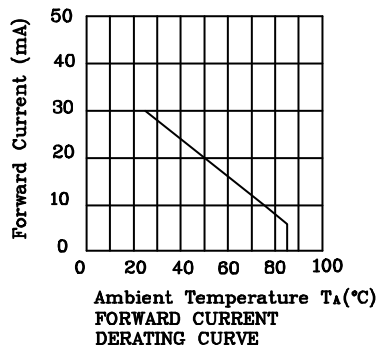
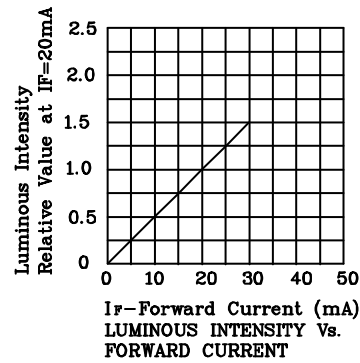
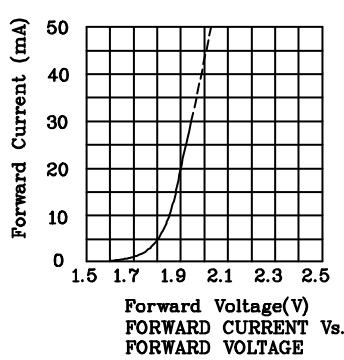
Operating Characteristics ($T_A=25^\circ\text{C}$)		MD-G (InGaAlP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	1.9	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	640	nm
Wavelength of dominant emission ($I_F=20\text{mA}$)	λ_D	630	nm
Spectral Line half- width ($I_F=20\text{mA}$)	$\Delta\lambda$	22	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XLMDG20W	Red	InGaAlP	Water Clear	480	995	640	70°(H) 30°(V)



RELATIVE INTENSITY Vs. WAVELENGTH

❖ MD-G



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, or wavelength), the typical accuracy of the sorting process is as follows:

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

Note: Accuracy may depend on the sorting parameters.