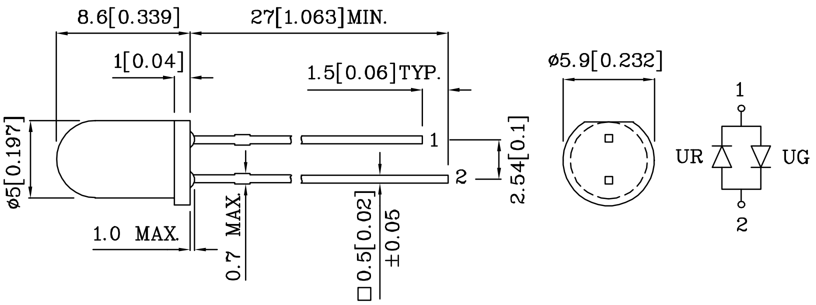
Part Number: **XLUGR58M**

T-1 3/4 (5mm) BI-COLOR INDICATOR LAMP

Features

- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



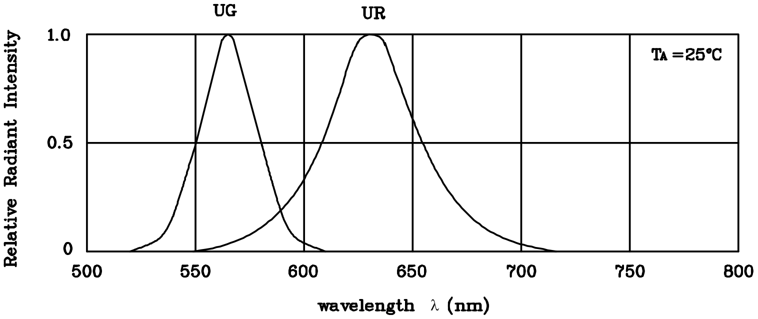
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.

Absolute maximum ratings (T_A=25°C)		**UR (GaAsP/GaP)**	**UG (GaP)**	**Unit**
Forward Current	I_F	30	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	160	140	mA
Power Dissipation	P_T	105	105	mW
Operating Temperature	T_A	-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			

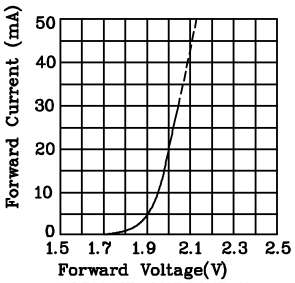
Operating Characteristics (T_A=25°C)		**UR (GaAsP/GaP)**	**UG (GaP)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	V_F	2.0	2.2	V
Forward Voltage (Max.) (I_F=20mA)	V_F	2.5	2.5	V
Wavelength of Peak Emission (I_F=20mA)	λ P	627	565	nm
Wavelength of Dominant Emission (I_F=20mA)	λ D	625	568	nm
Spectral Line Full Width At Half-Maximum (I_F=20mA)	Δλ	45	30	nm
Capacitance (V_F=0V, f=1MHz)	C	15	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLUGR58M	Red	GaAsP/GaP	White Diffused	10	29	627	60°
	Green	GaP		10	19	565	

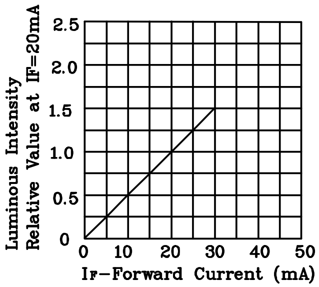


RELATIVE INTENSITY Vs. WAVELENGTH

❖ UR

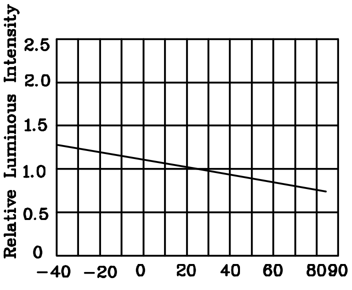


FORWARD CURRENT Vs.
FORWARD VOLTAGE

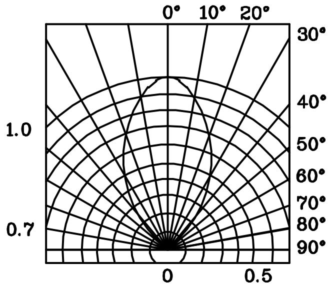


LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

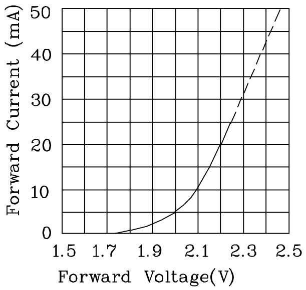


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

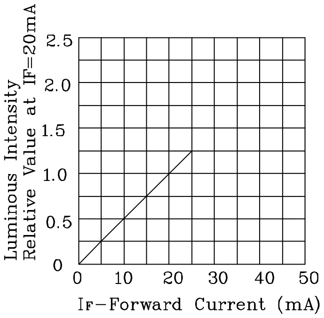


SPATIAL DISTRIBUTION

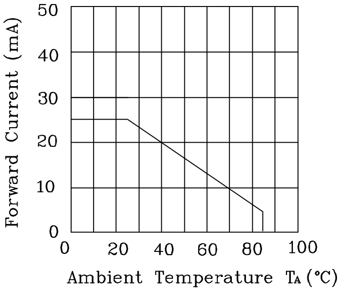
❖ **UG**



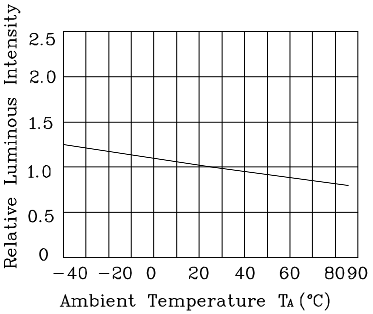
FORWARD CURRENT Vs.
FORWARD VOLTAGE



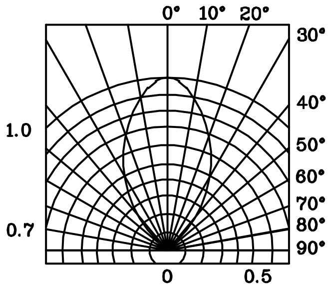
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

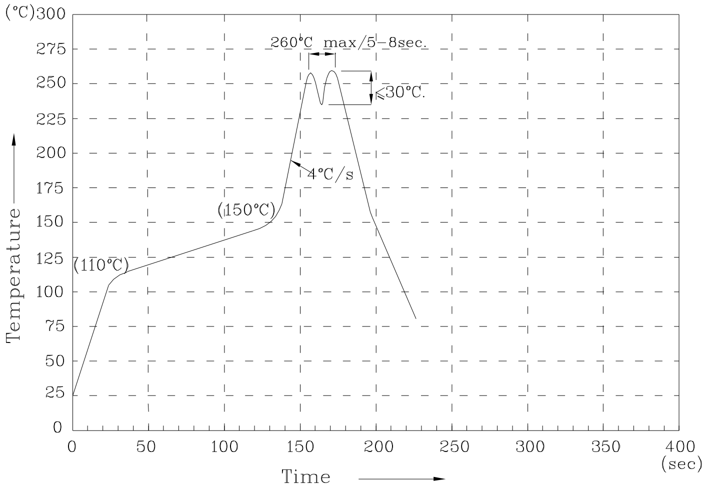
Remarks:
If special sorting is required (e.g. binning based on forward voltage, luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

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

Note: Accuracy may depend on the sorting parameters.

XLUGR58M

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



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 degree℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.