SunLED
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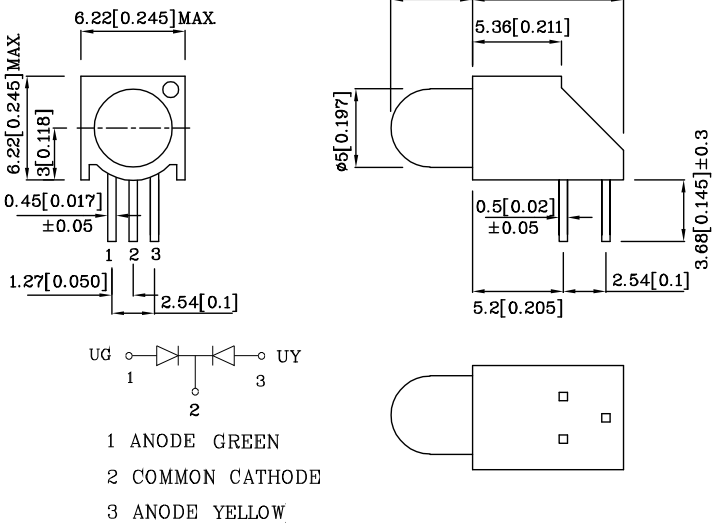
Part Number: **XYP1LUGY100M**

T-1 3/4 (5mm) BI-COLOR RIGHT ANGLE
LED INDICATOR

Features

- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- I.C. COMPATIBLE.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY - LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.



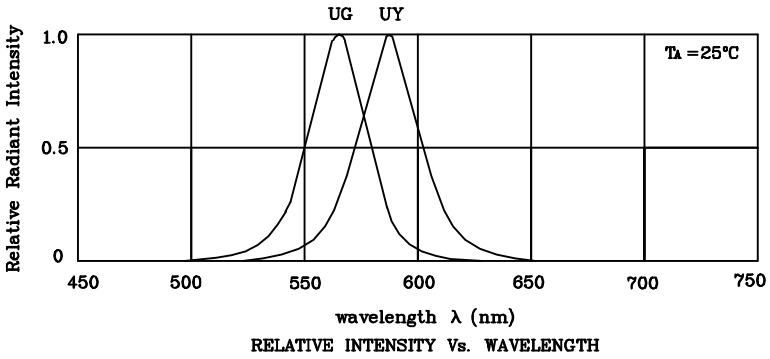
Notes:

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

Absolute maximum ratings (TA=25°C)		**UG (GaP)**	**UY (GaAsP/ GaP)**	**Unit**
Forward Current	IF	25	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	140	140	mA
Power Dissipation	PT	105	105	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			

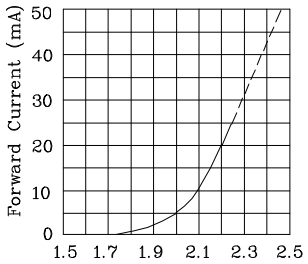
Operating Characteristics (TA=25°C)		**UG (GaP)**	**UY (GaAsP /GaP)**	**Unit**
Forward Voltage (typ.) (IF=20mA)	VF	2.2	2.1	V
Forward Voltage (max.) (IF=20mA)	VF	2.5	2.5	V
Wavelength of Peak Emission (IF=20mA)	λ P	565	590	nm
Wavelength of Dominant Emission (IF=20mA)	λ D	568	588	nm
Spectral Line Full Width At Half-Maximum (IF=20mA)	Δλ	30	35	nm
Capacitance (VF=0V, f=1MHz)	C	15	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd min.	Luminous Intensity (IF=20mA) mcd typ.	Wavelength nm λ P	Viewing Angle 2 θ 1/2
XYP1LUGY100M	Green	GaP	White Diffused	10	49	565	30°
	Yellow	GaAsP/GaP		7	29	590	

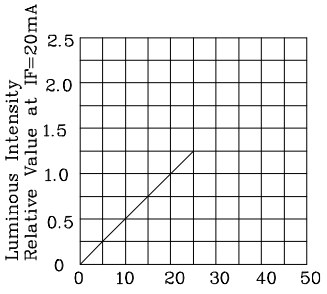


RELATIVE INTENSITY Vs. WAVELENGTH

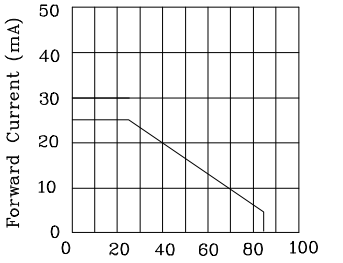
❖ UG



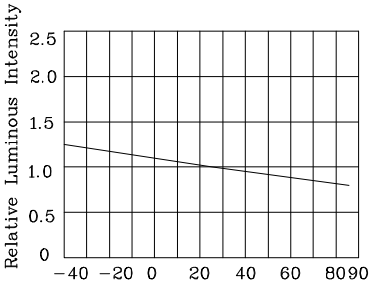
FORWARD CURRENT Vs.
FORWARD VOLTAGE



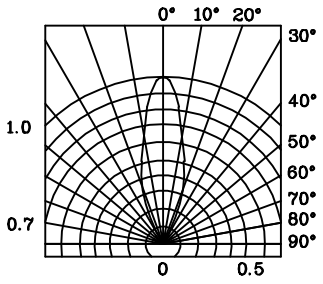
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

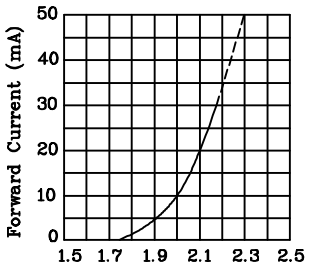


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

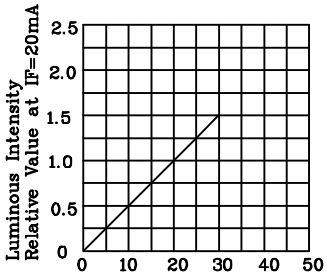


SPATIAL DISTRIBUTION

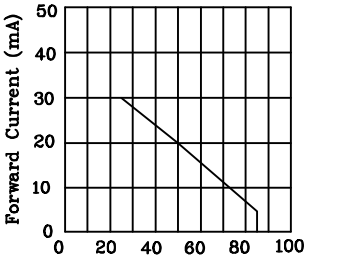
❖ **UY**



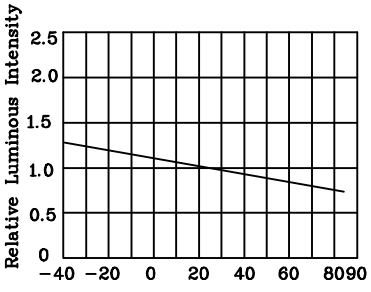
FORWARD CURRENT Vs.
FORWARD VOLTAGE



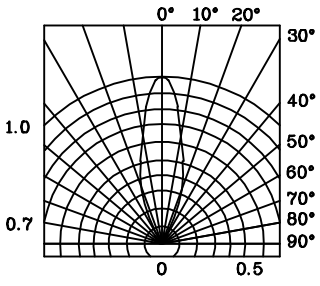
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

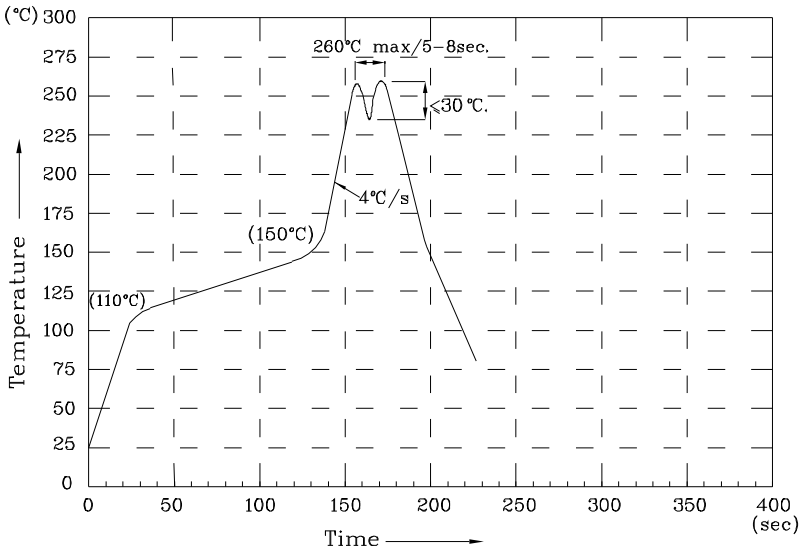


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

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.

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.