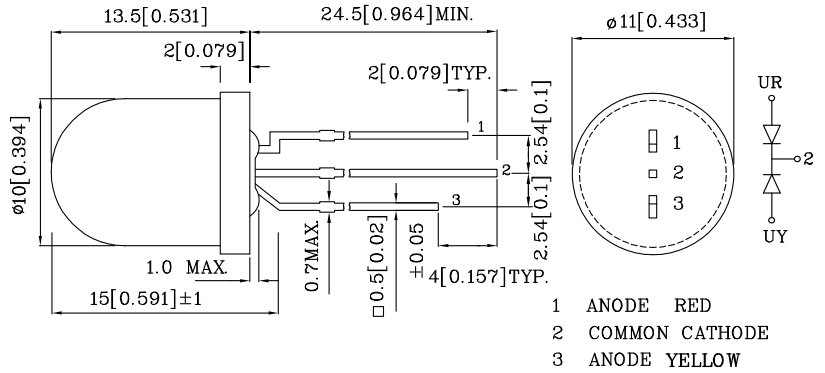


Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON CATHODE LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



Notes:

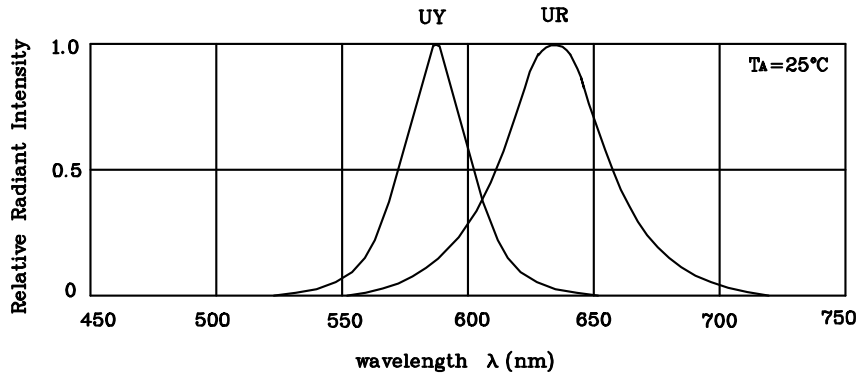
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		UR (GaAsP/ GaP)	UY (GaAsP/ GaP)	Unit
Reverse Voltage	V_R	5	5	V
Forward Current	I_F	30	30	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	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 ($T_A=25^\circ\text{C}$)		UR (GaAsP/ GaP)	UY (GaAsP/ GaP)	Unit
Forward Voltage (Typ.) ($I_F=20\text{mA}$)	V_F	2.0	2.1	V
Forward Voltage (Max.) ($I_F=20\text{mA}$)	V_F	2.5	2.5	V
Reverse Current ($V_R=5\text{V}$)	I_R	10	10	μA
Wavelength of Peak Emission ($I_F=20\text{mA}$)	λ_P	627	590	nm
Wavelength of Dominant Emission ($I_F=20\text{mA}$)	λ_D	625	588	nm
Spectral Line Full Width At Half-Maximum ($I_F=20\text{mA}$)	$\Delta\lambda$	45	35	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	15	20	pF

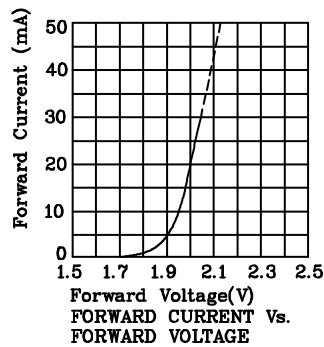
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XLUYR02M	Red	GaAsP/GaP	White Diffused	36	79	627	50°
	Yellow	GaAsP/GaP		10	29	590	

Published Date : MAY 28,2005 Drawing No : XDSA2598 V3 Checked : B.L.LIU P.1/4

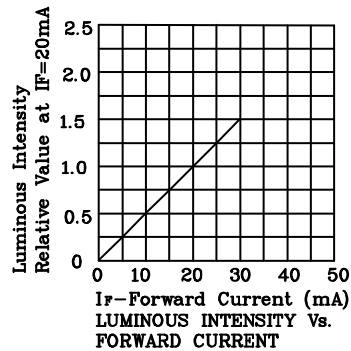


RELATIVE INTENSITY Vs. WAVELENGTH

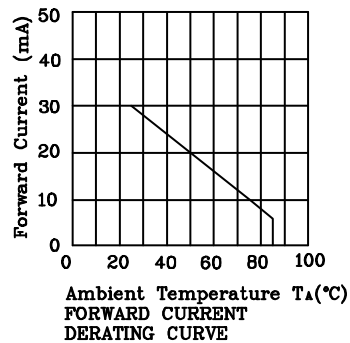
❖ UR



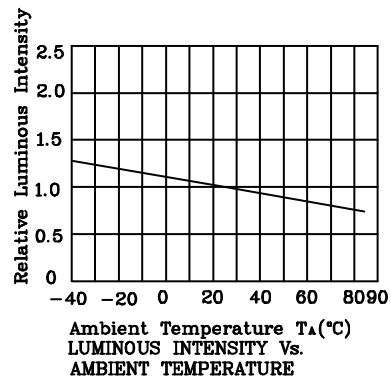
FORWARD CURRENT Vs. FORWARD VOLTAGE



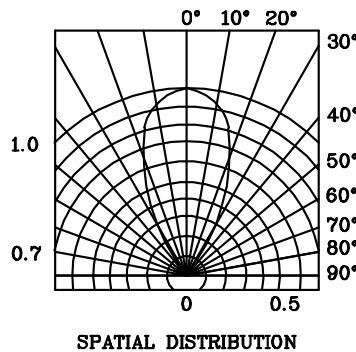
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT Vs. AMBIENT TEMPERATURE DERATING CURVE

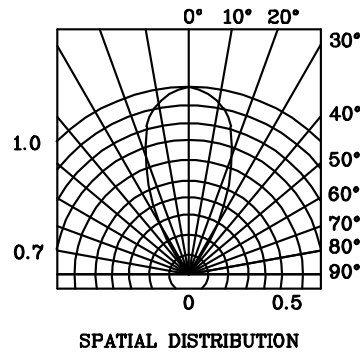
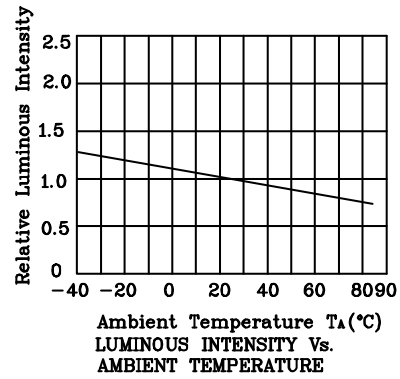
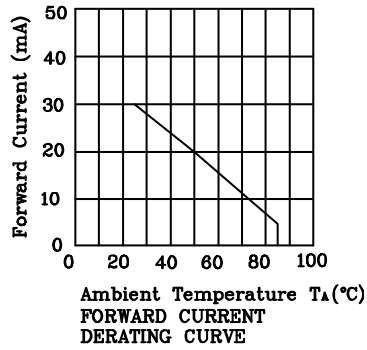
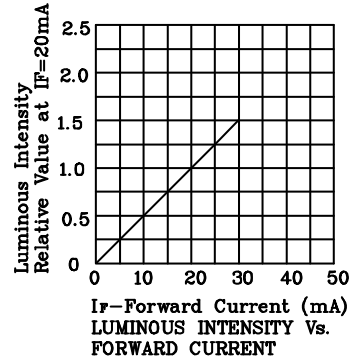
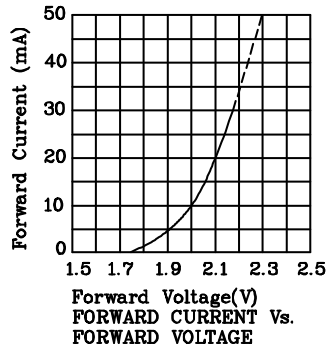


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

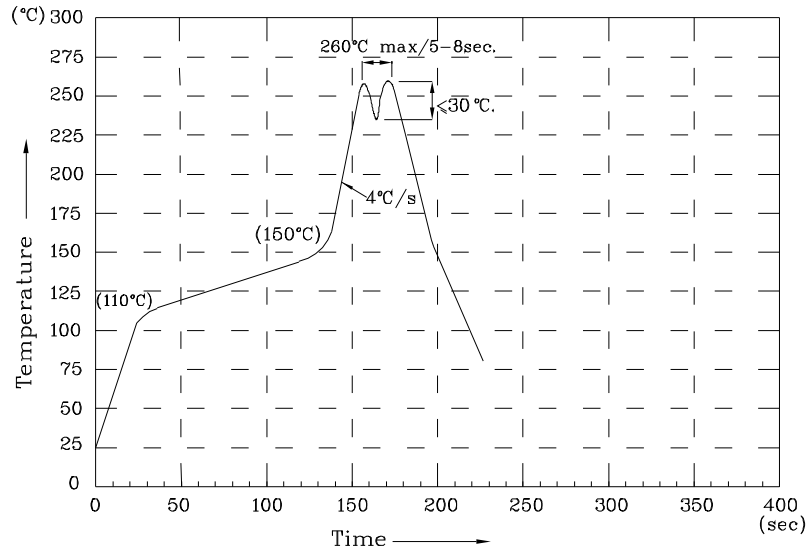


SPATIAL DISTRIBUTION

❖ UY



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.