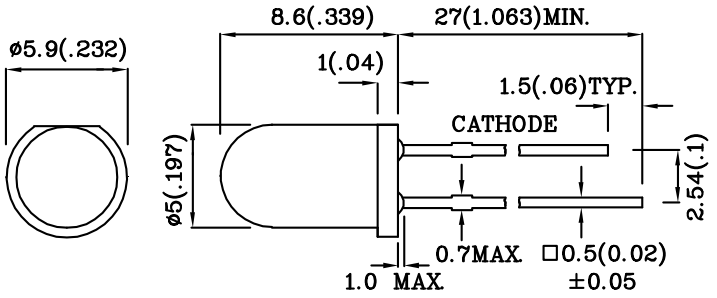
SunLED
www.SunLED.com

Part Number: **XLUR12D14V**

T-1 3/4 (5mm) SOLID STATE LAMP

Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.
- 14V INTERNAL RESISTOR.
- RoHS COMPLIANT.



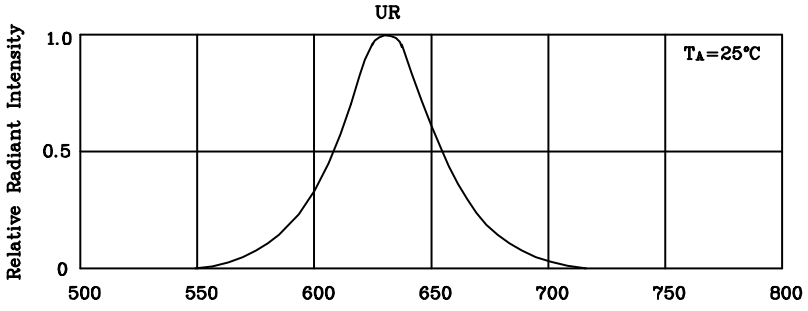
Notes:

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

Absolute maximum ratings (TA=25°C)		**UR (GaAsP/ GaP)**	**Unit**
Reverse voltage	VR	5	V
Forward voltage	VF	16	V
Power dissipation	PT	160	mW
Operating temperature	TA	-40 ~ +70	°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		

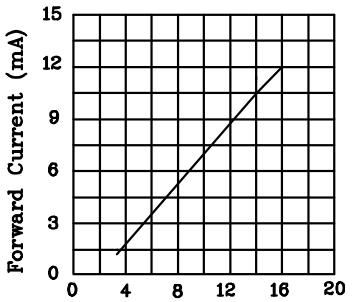
Operating Characteristics (TA=25°C)		**UR (GaAsP/ GaP)**	**Unit**
Forward current (typ.) (VF=14V)	IF	10.5	mA
Forward current (max.) (VF=14V)	IF	13.5	mA
Reverse current (VR=5V)	IR	10	uA
Wavelength at peak emission (VF=14V)	λ peak	627	nm
Wavelength of dominant emission (VF=14V)	λ D	625	nm
Spectral Line half-width (VF=14V)	Δλ	45	nm

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (V=14V) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLUR12D14V	Red	GaAsP/GaP	Red Diffused	12	29	627	30°

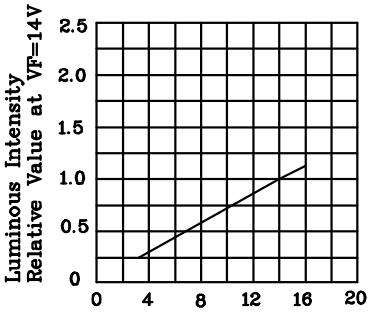


RELATIVE INTENSITY Vs. WAVELENGTH

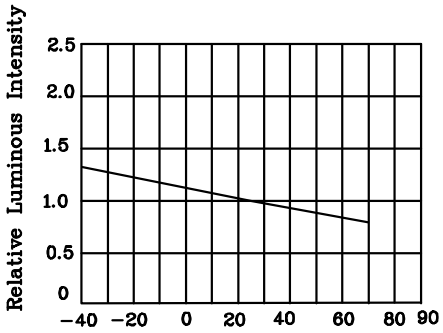
❖ **UR**



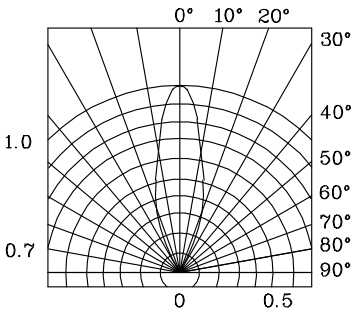
FORWARD VOLTAGE Vs. FORWARD CURRENT



FORWARD VOLTAGE Vs. LUMINOUS INTENSITY

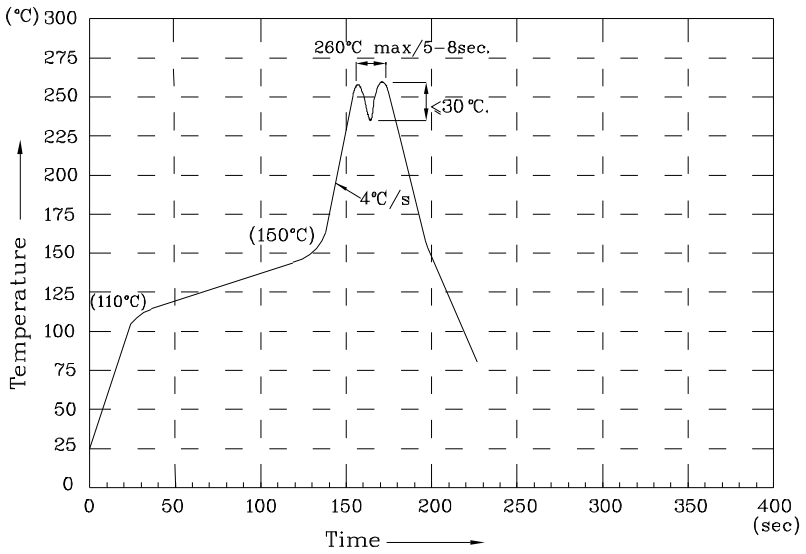


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



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

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%

Note: Accuracy may depend on the sorting parameters.