SunLED
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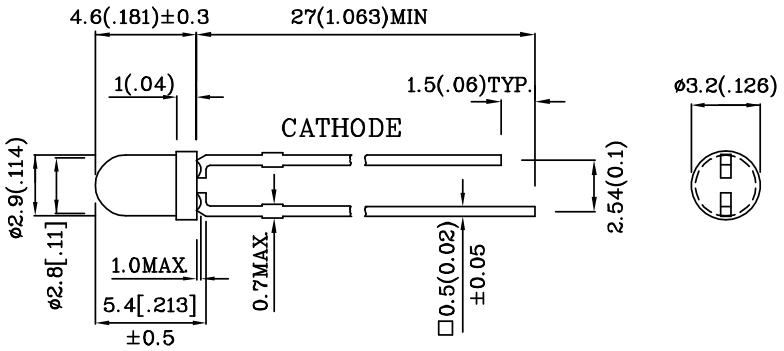
Part Number: **XLUS11W**

T-1 (3mm) SOLID STATE LAMP

Features

- ●LOW POWER CONSUMPTION.
- ●POPULAR T-1 DIAMETER PACKAGE.
- ●GENERAL PURPOSE LEADS.
- ●RELIABLE AND RUGGED.
- ●LONG LIFE - SOLID STATE RELIABILITY.
- ●AVAILABLE ON TAPE AND REEL.
- ●RoHS COMPLIANT.



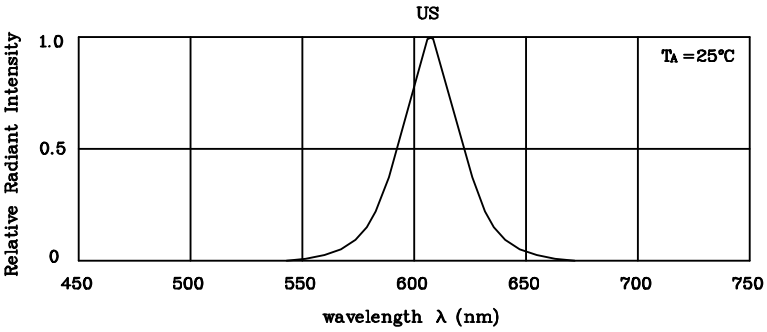
Notes:

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

Absolute maximum ratings (TA=25°C)		**US (GaAsP/GaP)**	**Unit**
Reverse voltage	V_R	5	V
Forward current	I_F	25	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	145	mA
Power dissipation	P_T	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		

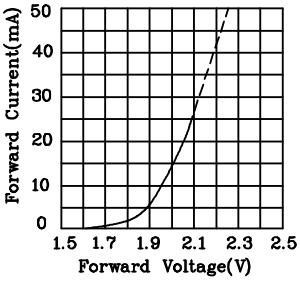
Operating Characteristics (TA=25°C)		**US (GaAsP/ GaP)**	**Unit**
Forward voltage (typ.) (IF=10mA)	V_F	1.95	V
Forward voltage (max.) (IF=10mA)	V_F	2.5	V
Reverse current (VR=5V)	I_R	10	uA
Wavelength at peak emission (IF=10mA)	λ peak	607	nm
Wavelength of Dominant emission (IF=10mA)	λ D	610	nm
Spectral Line half-width (IF=10mA)	Δλ	35	nm
Capacitance (VF=0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=10mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XLUS11W	Orange	GaAsP/GaP	Water Clear	18	49	607	34°

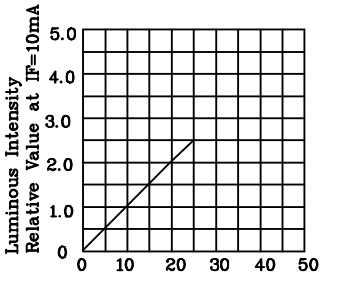


RELATIVE INTENSITY Vs. WAVELENGTH

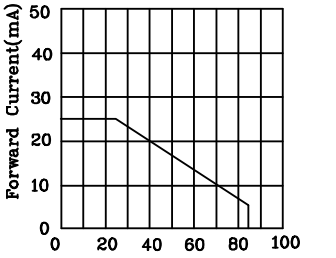
❖ **US**



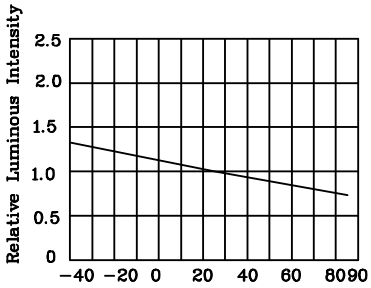
FORWARD CURRENT Vs.
FORWARD VOLTAGE



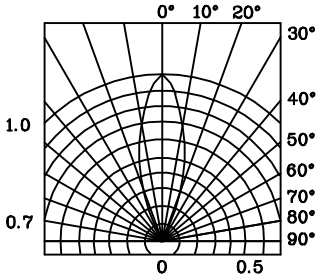
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



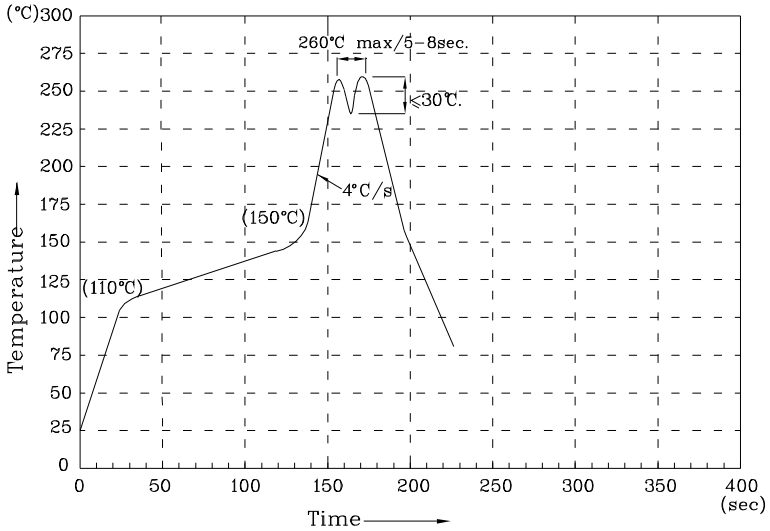
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

XLUS11W

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



NOTE:

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.