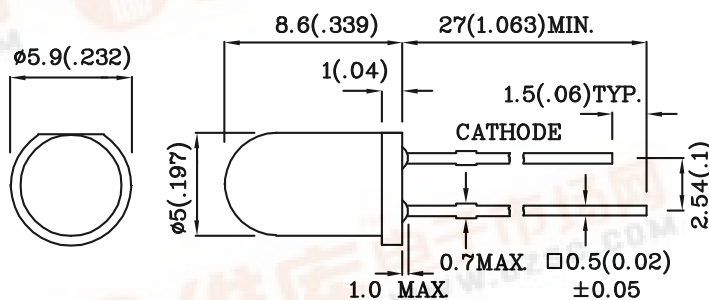


Part Number: **XLVG12D14V**

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 $\pm 0.25 (0.01")$ unless otherwise noted.

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		VG (InGaAlP)	Unit
Reverse Voltage	V_R	5	V
Forward Voltage	V_F	16	V
Power Dissipation	P_T	160	mW
Operating Temperature	T_A	$-40 \sim +70$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +85$	
Lead Solder Temperature [2mm below package base]	260 $^\circ\text{C}$ For 3 Seconds		
Lead Solder Temperature [5mm below package base]	260 $^\circ\text{C}$ For 5 Seconds		

Operating Characteristics ($T_A=25^\circ\text{C}$)		VG (InGaAlP)	Unit
Forward Current (typ.) ($V_F=14\text{V}$)	$I_F \text{ typ}$	10.5	mA
Forward Current (max.) ($V_F=14\text{V}$)	$I_F \text{ max}$	13.5	mA
Reverse Current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission ($V_F=14\text{V}$)	$\lambda \text{ peak}$	574	nm
Wavelength of Dominant Emission ($V_F=14\text{V}$)	$\lambda \text{ D}$	570	nm
Spectral Line Full Width At Half-Maximum ($V_F=14\text{V}$)	$\Delta\lambda$	20	nm

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($V=14\text{V}$) mcd	Wavelength nm $\lambda \text{ P}$	Viewing Angle $2\theta \text{ 1/2}$
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min. typ.

XLVG12D14V

Green

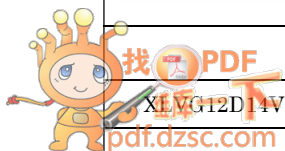
InGaAlP

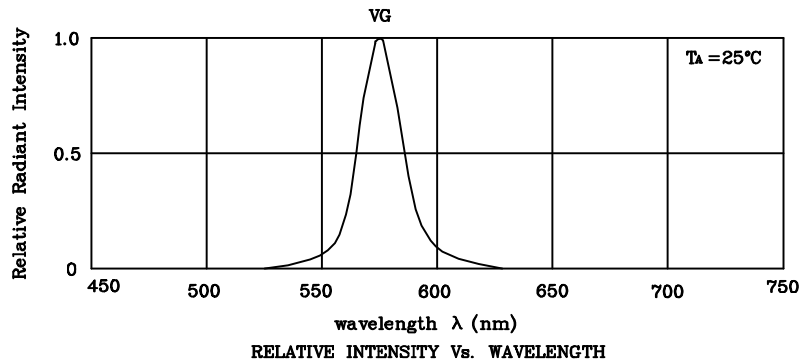
Green Diffused

8

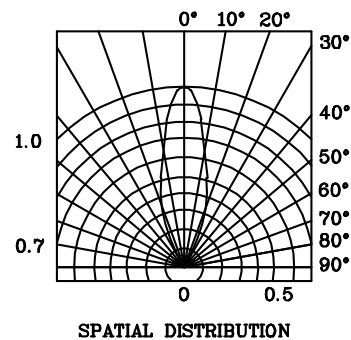
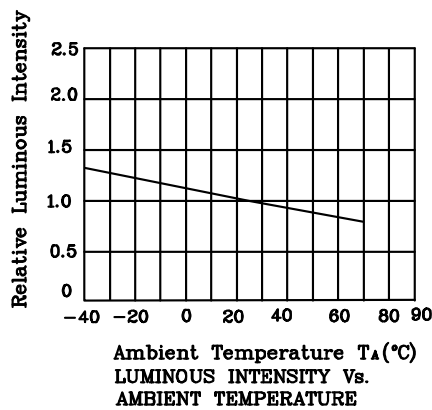
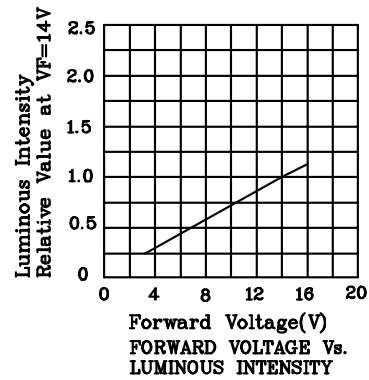
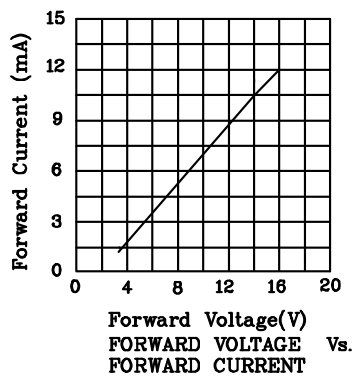
49

574

30 $^\circ$ 



❖ VG



Remarks:

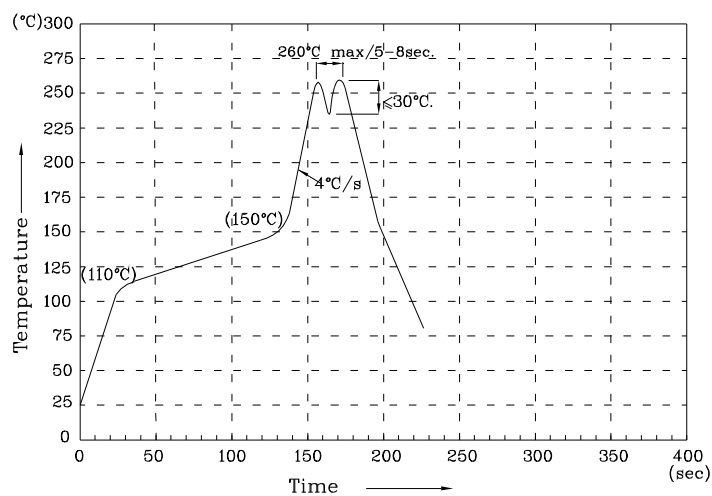
If special sorting is required (e.g. binning based on luminous intensity or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$

Note: Accuracy may depend on the sorting parameters.

XLVG12D14V

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.