

## Part Number: XVM1LUGY59M

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

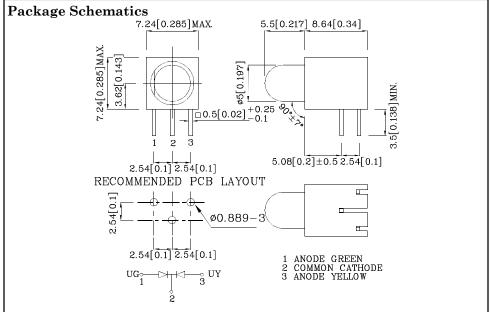


### **Features**

- Housing material: Type 66 Nylon
- Black casing provides superior contrast
- Housing UL rating: 94V-0
- $\bullet$  Reliable & robust
- RoHS Compliant







Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- 3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		UG (GaP)	UY (GaAsP/ GaP)	Unit		
Reverse Voltage	$V_{\rm R}$	5	5	V		
Forward Current	$I_{\mathrm{F}}$	25	30	mA		
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	$i_{\mathrm{FS}}$	140	140	mA		
Power Dissipation	$P_{D}$	62.5	75	mW		
Operating Temperature	$T_{\rm A}$	-40 ~	°C			
Storage Temperature	Tstg	-40 ~				
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 <sub>A</sub> =25°C)	UG (GaP)	UY (GaAsP/ GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	2.1	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_{\mathrm{R}}$	10	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λP	565*	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	568*	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	Δλ	30	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	20	pF

Luminous Intensity

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity CIE127-2007* $(I_F=20\text{mA})$ mcd		Wavelength CIE127-2007* nm λP	Viewing Angle 20 1/2
				min.	typ.		
XVM1LUGY59M Green Yellow	GaP	White Diffused -	50*	98*	565*	60°	
	Yellow	GaAsP/GaP	wnite Diffused =	20*	39*	590*	90-

<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Dec 31,2013

XDSA2867 V7-Z Layout: Maggie L.

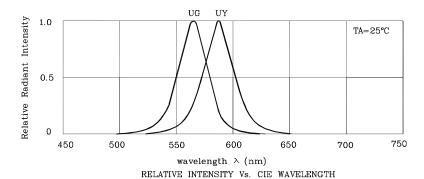
Wavelength



## Part Number: XVM1LUGY59M

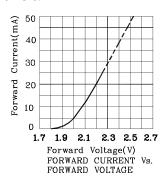
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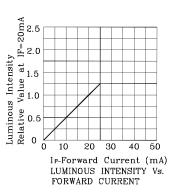


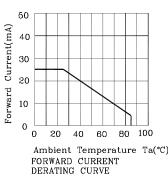


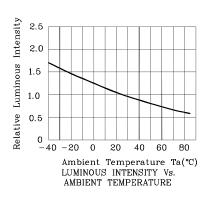
40° 30° 20° 10° 0° Ta=25°C 50° 60° 70° 80° 90° 100 1.0 0.8 0.6 0.4 20° 40° 60° 80° 100° 120° SPATIAL DISTRBUTION

## **♦** UG

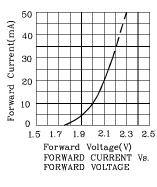


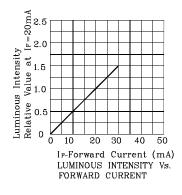


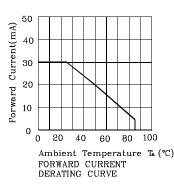


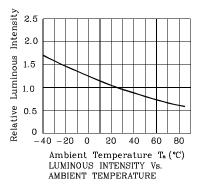


## UY

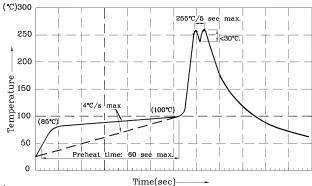








Wave Soldering Profile For Thru-Hole Products (Pb-Free Components)



- 1. Recommend pre-heat temperature of 105°C or less (as measured with a thermocouple attached to the LED pins) prior to immersion in the solder wave with a maximum solder bath temperature of 260°C 2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec
- (5 sec max).
- (8 sec links).

  3.Do not apply stress to the epoxy resin while the temperature is above 85°C.

  4.Fixtures should not incur stress on the component when mounting and during soldering process.

  5.SAC 305 solder alloy is recommended.

  6.No more than one wave soldering pass.

### Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

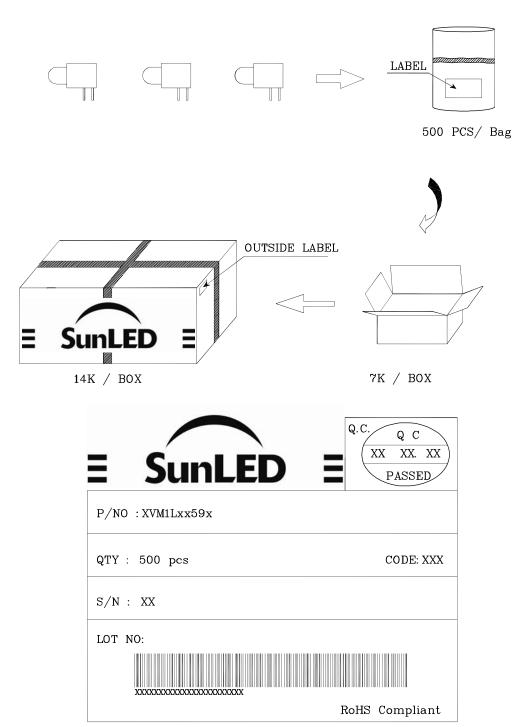
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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#### PACKING & LABEL SPECIFICATIONS



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- $6. \ Additional\ technical\ notes\ are\ available\ at\ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$