

# Part Number: XGUGX10D

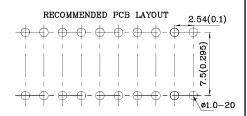
# 10 SEGMENT BAR GRAPH ARRAY

### **Features**

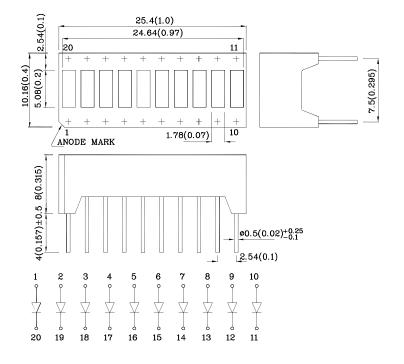
- Robust package
- ullet Uniform light disbursement
- $\bullet$  Ideal for backlighting logos or icons
- Excellent for flush mounting
- $\bullet$  Standard configuration: Gray face w/ white segments
- RoHS compliant







# Package Schematics



### Notes:

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

2. Specifications are subject to change without notice.

Absolute Maximum Ratings $(T_A=25^{\circ}C)$		UG (GaP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	25	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	$P_{D}$	62.5	mW	
Operating Temperature	$T_{A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	-0	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

Operating Characteristics (T <sub>A</sub> =25°C)		UG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XGUGX10D	Green	GaP	5600 1400*	11990 3990*	565*	10 Segments Bar graph-Display

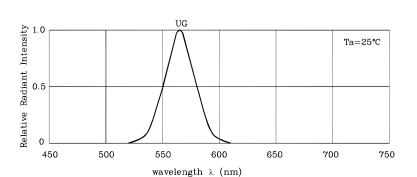
\*Luminous intensity value and wavelength are in accordance with CIE127-2007

Mar 04,2014 XDSA1915 V8-X Layout: Maggie L.



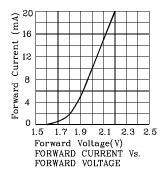


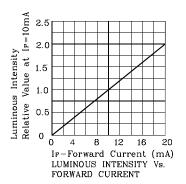


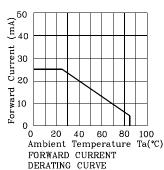


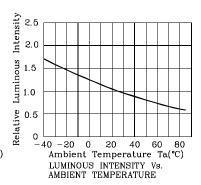
RELATIVE INTENSITY Vs. CIE WAVELENGTH

### **♦ UG**

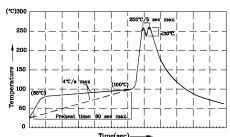








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- nmend pre-heat temperature of 105°C or less (as measured with a noccouple attached to the LED pins) prior to immersion in the solder with a maximum solder bath temperature of 250°C wave soldering temperature between 245°C  $\sim$  255°C for 3 sec (5 sec
- 2.Peak wave soldering temperature netwernax).
  3.Do not apply stress to the epoxy resin relative should not incur stress on the 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),

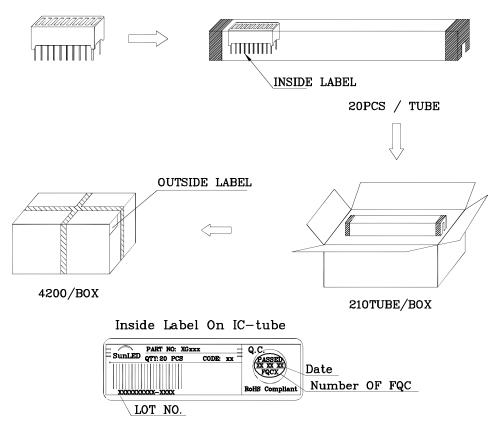
the typical accuracy of the sorting process is as follows:

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

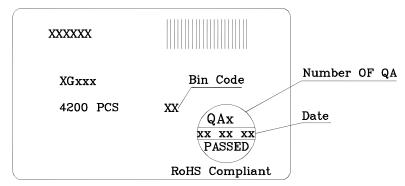
Note: Accuracy may depend on the sorting parameters.

10 SEGMENT BAR GRAPH ARRAY

# PACKING & LABEL SPECIFICATIONS



# Outside Label On Box



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