

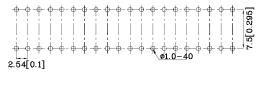
# Part Number: XGURX20D

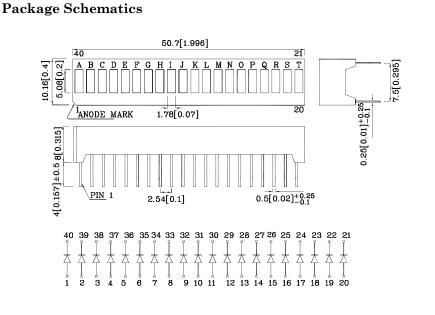
20 SEGMENTS BAR GRAPH ARRAY

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



### RECOMMENDED PCB LAYOUT





Notes: 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted. 2. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)	UR (GaAsP/GaP)	Unit		
Reverse Voltage	$V_{R}$	5	V	
Forward Current	$I_{\rm F}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	mA	
Power Dissipation	$P_{D}$	75	mW	
Operating Temperature	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	$-40 \sim +85$		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

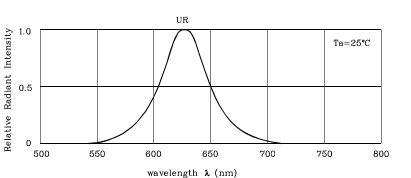
Operating Characteristics (T <sub>A</sub> =25°C)	UR (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.9	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λP	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	617*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$ riangle\lambda$	45	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	$_{\rm pF}$

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I <sub>F</sub> =10mA) ucd		Wavelength CIE127-2007* nm λΡ	Description
			min.	typ.		
XGURX20D	Red	GaAsP/GaP	3600 900*	8990 1990*	627*	20 Segments Bar graph-Display

\*Luminous intensity value and wavelength are in accordance with CIE127-2007 Mar 05,2014

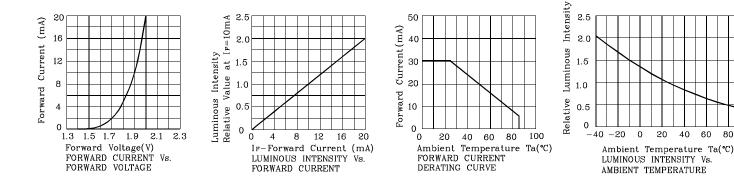
XDSA1920 V8-X Layout: Maggie L.



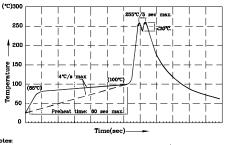


RELATIVE INTENSITY Vs. CIE WAVELENGTH

## ♦ UR



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



Access I.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)

Peak wave soldering temperature between 240 c ~ 200 c tot 3 sec (max).
Do not apply stress to the epoxy resin while the temperature is abt 4.Pixtures should not incur stress on the component when mounting during soldering process.
S.AG 305 solder alloy is recommended.
No more than one wave soldering pass.

### Remarks:

If special sorting is required (e.g. binning based on forward voltage,

0 20 40 60 80

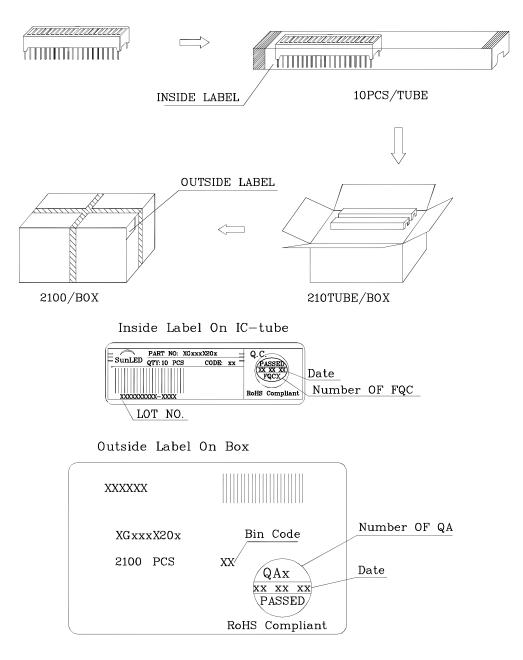
luminous intensity / luminous flux, or wavelength),

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.



# **PACKING & LABEL SPECIFICATIONS**



### TERMS OF USE

- 1. Data presented in this document reflect statistical figures and should be treated as technical reference only.
- 2. Contents within this document are subject to improvement and enhancement changes without notice.
- 3. The product(s) in this document are designed to be operated within the electrical and environmental specifications indicated on the datasheet.
- User accepts full risk and responsibility when operating the product(s) beyond their intended specifications.
- 4. The product(s) described in this document are intended for electronic applications in which a person's life is not reliant upon the LED. Please
- consult with a SunLED representative for special applications where the LED may have a direct impact on a person's life.
- 5. The contents within this document may not be altered without prior consent by SunLED.
- 6. Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>