

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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• Robust package

**Features** 

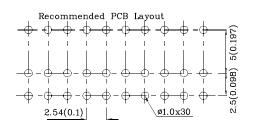
- ullet Uniform light disbursement
- Ideal for backlighting logos or icons
- Excellent for flush mounting
- $\bullet$  Standard configuration: Gray face w/ white segments

www.SunLEDusa.com

• RoHS compliant







### **Package Schematics** 25.4(1.0) 2.54(0. 24.64(0.97) 20 + + + 2.5(0.098) 5(0.197) 10.16(0.4) 5.08(0.2) В6 В8 B2 В4 B5 В9 B1 вз 1.78(0.07) ANODE MARK 8(0.315) $4(0.157)\pm0.5$ Ø0.5(0.02) + 0.25 -0.1 2.54(0.1) B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 Red Green

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 <sub>A</sub> =25°C)		Red (GaAsP/ GaP)	Green (GaP)	Unit
Reverse Voltage	$V_{\rm R}$	5	5	V
Forward Current	$I_{\mathrm{F}}$	30	25	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	140	mA
Power Dissipation	$P_D$	75	62.5	mW
Operating Temperature	$T_{A}$	-40 ~	°C	
Storage Temperature	Tstg	-40 ~		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3~5 Seconds			

A Relative Humidity between 40% and 60% is recommended in ESD-protected work areas to reduce static build up during assembly process (Reference JEDEC/JESD625-A and JEDEC/J-STD-033)

Operating Characteristics (T <sub>A</sub> =25°C)		Red (GaAsP/GaP)	Green (GaP)	Un it
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.9	2	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.5	2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_{R}$	10	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	627*	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	617*	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	Δλ	45	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	15	pF

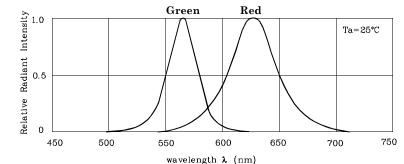
Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (IF=10mA) ucd		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XGURUGX10D	Red	GaAsP/GaP	3600 900*	8990 1990*	627*	10 Segments
	Green	GaP	5600 1400*	11990 3990*	565*	Bar graph-Display

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

Oct 18,2016

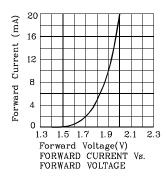


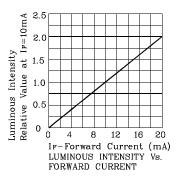


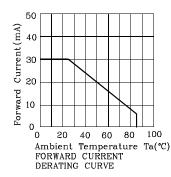


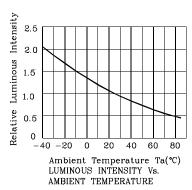
RELATIVE INTENSITY Vs. CIE WAVELENGTH

## **❖** Red

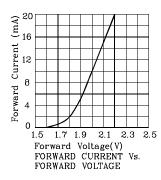


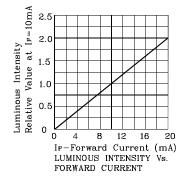


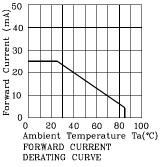


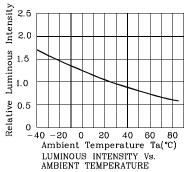


# Green

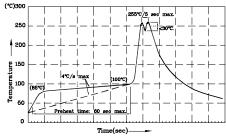








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- ore—heat temperature of 105°C or less (as measured attached to the LED pins) prior to immersion in the maximum solder bath temperature of 256°C oldering temperature between 245°C ~ 255°C for 3 se
- not apply stress to the epoxy resin while the temperature is above 85°C.
  tures should not incur stress on the component when mounting and
- Adving soldering process

  SAC 305 solder alloy is recommended.

  6.No more than one wave soldering pass.

  7.During wave soldering, the PCS top-surface temperature should be kept below 105°C.

### 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:

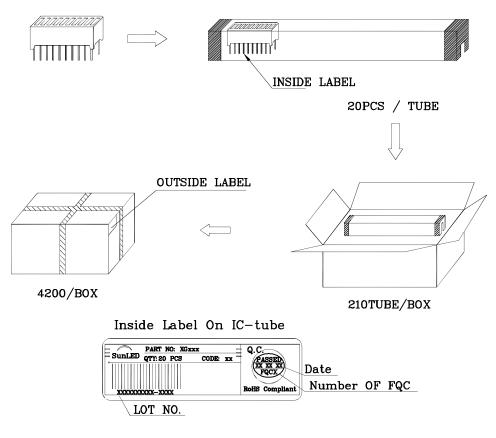
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

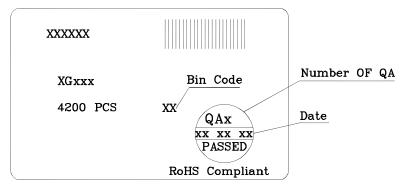




## PACKING & LABEL SPECIFICATIONS



# Outside Label On Box



### TERMS OF USE

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- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
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- 6. Additional technical notes are available at <a href="http://www.SunLEDusa.com/TechnicalNotes.asp">http://www.SunLEDusa.com/TechnicalNotes.asp</a>