

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!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











12 SEGMENT BAR GRAPH ARRAY

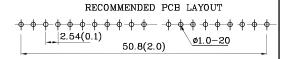
19 20 21

### **Features**

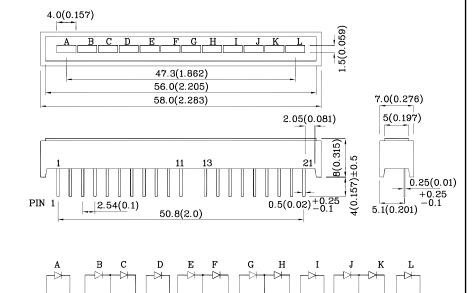
- Robust package
- Uniform light disbursement
- Ideal for backlighting logos or icons
- Excellent for flush mounting
- Standard configuration: Black face w/ white segments
- RoHS compliant







## **Package Schematics**



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

10 11

12 NO PIN

13

14 15 1617 18

2. Specifications are subject to change without notice.

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		UY (GaAsP/GaP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	140	mA	
Power Dissipation	$P_{D}$	75	mW	
Operating Temperature	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	C	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

Operating Characteristics (T <sub>A</sub> =25°C)	UY (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.95	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)	λΡ	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	pF

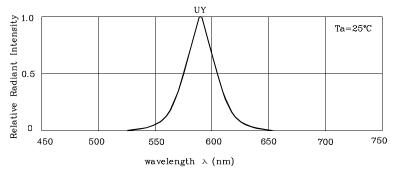
Part Number	Emitting Color	Emitting Material	Luminous I CIE127- (I <sub>F</sub> =10m.	2007*	Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XHUYX12DWB	Yellow	GaAsP/GaP	5600 1400*	8990 2990*	590*	12 Segments Bar graph-Display

XDSA1926 V8-X Layout: Maggie L.

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

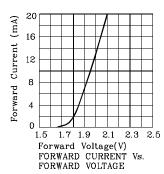


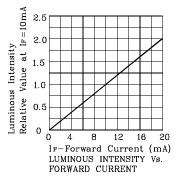


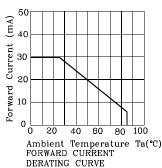


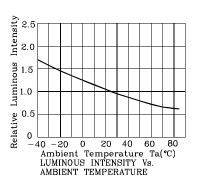
RELATIVE INTENSITY Vs. CIE WAVELENGTH

### **\$** UY

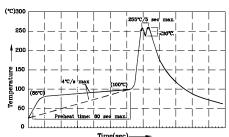








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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
- 2.Peak wave soldering temperature between 245U ~ 25U CM S SEC U max).
  3.Do not apply stress to the epoxy resin while the temperature is above 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:

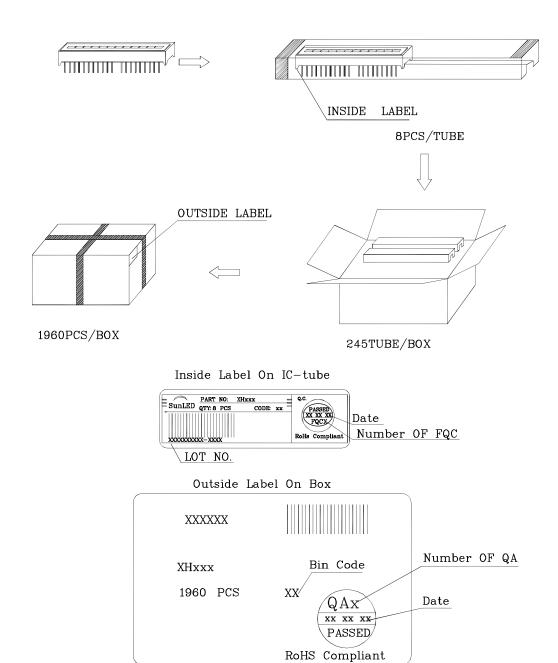
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.





### PACKING & LABEL SPECIFICATIONS



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- 2. Contents within this document are subject to improvement and enhancement changes without notice.
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