# imall

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

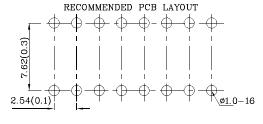




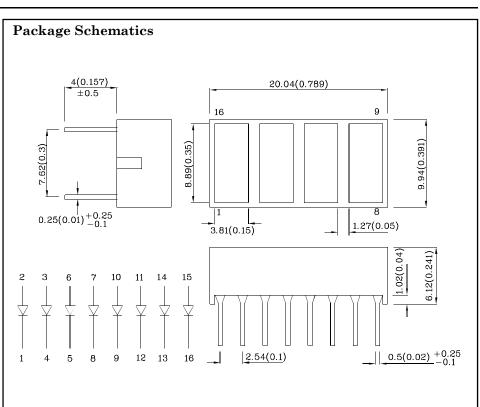
### Features

- $\bullet$  Robust package
- $\bullet$  Uniform light disbursement
- Ideal for backlighting logos or icons
- Excellent for flush mounting
- RoHS compliant





8.89mmx3.81mm LED LIGHT BAR



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)	MG (GaP)	Unit		
Reverse Voltage	$V_{R}$	5	V	
Forward Current	$I_{\rm F}$	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	$T_{\rm A}$	$-40 \sim +85$	°C	
Storage Temperature	Tstg	-40 ~ +85		
Lead Solder Temperature [2mm Below Package Base]	260°C For 3-5 Seconds			

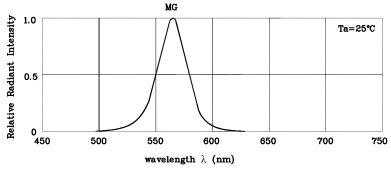
Operating Characteristics (T <sub>A</sub> =25°C)	MG (GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.2	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA) V <sub>F</sub>		2.5	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λP	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =20mA)	λD	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$ riangle\lambda$	30	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> =20mA) mcd		Wavelength CIE127-2007* nm λP	Lens-color
			min.	typ.		
XEMG2820D	Green	GaP	12 3*	24 7*	565*	Green Diffused

\*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 11,2014

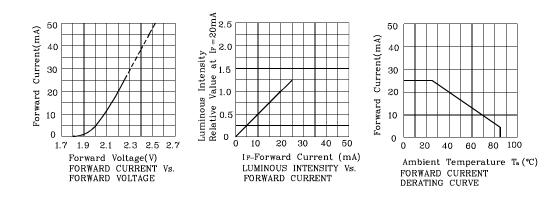
XDSA1987 V6-X Layout: Maggie L.

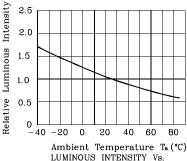




RELATIVE INTENSITY Vs. CIE WAVELENGTH

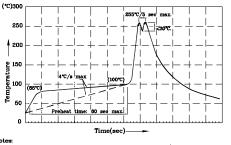
#### ♦ MG





AMBIENT TEMPERATURE

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



nmend pre-heat temperature of 105°C or less (as measured with a noccupie attached to the LED pins) prior to immersion in the solder with a maximum solder bath temperature of 260°C wave soldering temperature between  $245°C \sim 255°C$  for 3 sec (5 sec 1. Rec the wave 2.Peak

2.Peak wave soldering temperature between 245°C ~ 255°C for 3 secmax).
3.Do not apply stress to the epoxy resin while the temperature is a 4.Fixtures should not incur stress on the component when mounting during soldering process.
5.SAC 305 solder alloy is recommended.
6.No more than one wave soldering pass.
7.During wave soldering, the PCB top-surface temperature should be kept below 105°C. while the temperature is ab component when mounting 85°C

Remarks:

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

luminous intensity / luminous flux, or wavelength),

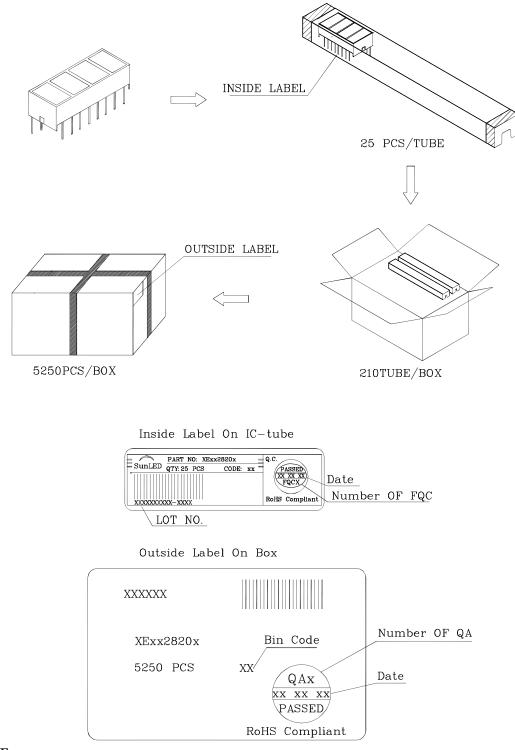
the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V
- Note: Accuracy may depend on the sorting parameters.



8.89mmx3.81mm LED LIGHT BAR

## PACKING & LABEL SPECIFICATIONS



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- 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.
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- 6. Additional technical notes are available at <u>http://www.SunLEDusa.com/TechnicalNotes.asp</u>