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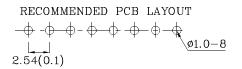
19.05mmx3.81mm LED LIGHT BAR

### **Features**

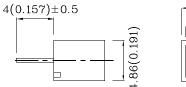
- Robust package
- ullet Uniform light disbursement
- Ideal for backlighting logos or icons
- Excellent for flush mounting
- RoHS compliant

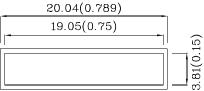




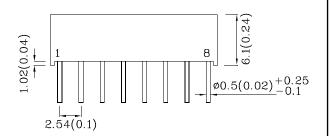


# Package Schematics









### Notes:

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

2. Specifications are subject to change without notice.

Absolute Maximum Ratings $(T_A=25^{\circ}C)$		MR (GaAlAs)	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	155	mA	
Power Dissipation	$P_{\mathrm{D}}$	75	mW	
Operating Temperature	$T_{A}$	-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)		MR (GaAlAs)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	1.85	V
Forward Voltage (Max.) (I <sub>F</sub> =20mA)	$V_{\mathrm{F}}$	2.5	V
Reverse Current (Max.) $(V_R=5V)$	${ m I}_{ m R}$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λΡ	655*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=20\text{mA})$	λD	640*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =20mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF

Part Number	Emitting Color	Emitting Material	CIE127-2007* (I <sub>F</sub> =20mA) mcd		Wavelength CIE127-2007* nm λP	Lens-color
			min.	typ.		
XEMRB100M	Red	GaAlAs	80 20*	178 49*	655*	White Diffused

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

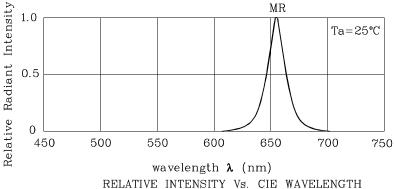
Mar 05,2014

XDSA1981 V6-X Layout: Maggie L.

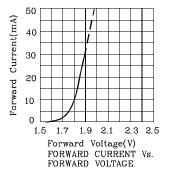




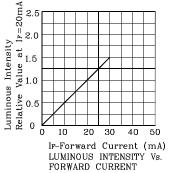
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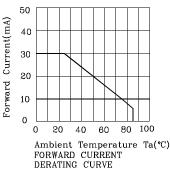


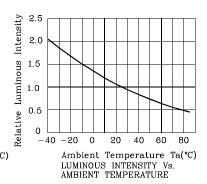
### ❖ MR



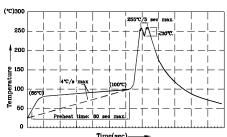
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Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- nmend pre-heat temperature of 105°C or less (as measured with a nocouple 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 ~ 255°C for 3 sec (5 sec
- 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.

### 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:

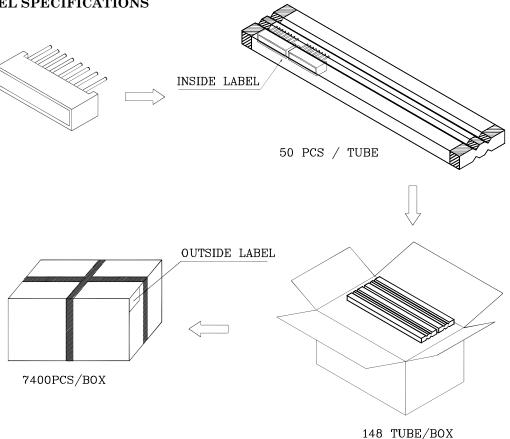
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

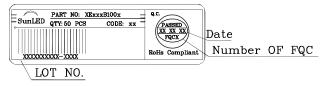
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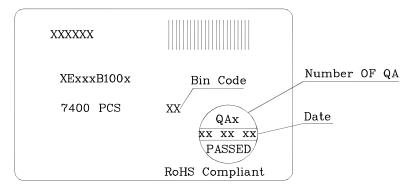
## PACKING & LABEL SPECIFICATIONS



## Inside Label On IC-tube



### Outside Label On Box



## TERMS OF USE

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Mar 05.2014