

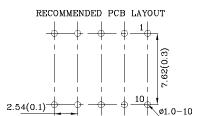


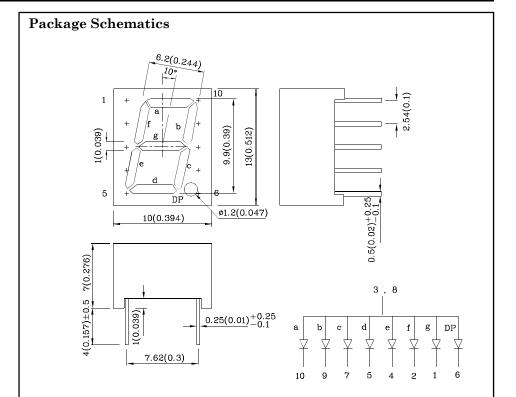
### **Features**

- Low power consumption
- ullet Robust package
- I.C. Compatible
- $\bullet$  Standard configuration: Gray face w/ white segments
- $\bullet$  Optional black face provides superior color contrast
- RoHS Compliant









### 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 ( $T_A$ =25°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	$P_{D}$	75	mW	
Operating Temperature	$T_{A}$	-40 ~ +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)	MR (GaAlAs)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.8	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	655*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	640*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	45	pF

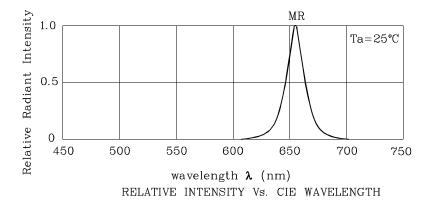
Part Number	Emitting Color	Emitting Material	$\begin{array}{c} \text{Luminous Intensity} \\ \text{CIE127-2007*} \\ \text{(I_F=10mA)} \\ \text{ucd} \end{array}$		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XDMR08A	Red	GaAlAs	9000 2200*	16990 4790*	655*	Common Anode , Rt.Hand Decimal.

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

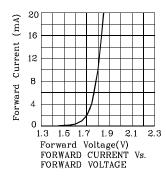
Jan 16,2014 XDSA0139 V7-X Layout: Maggie L.

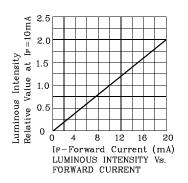


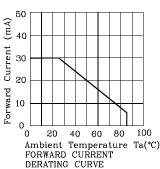


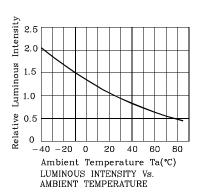


## ❖ MR

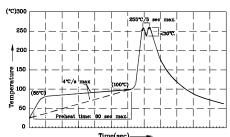








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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 oetwermax).
  3.Do not apply stress to the epoxy resin (-Pixtures should not incur stress on the 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),

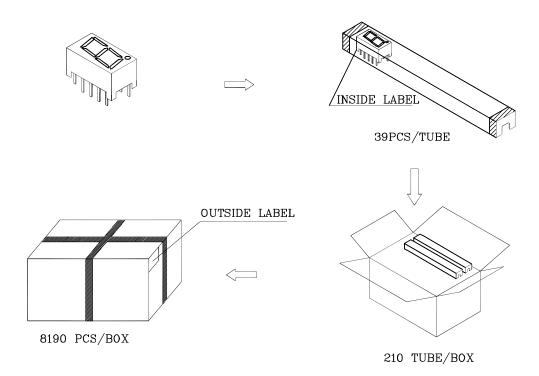
the typical accuracy of the sorting process is as follows:

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

Note: Accuracy may depend on the sorting parameters.

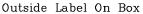


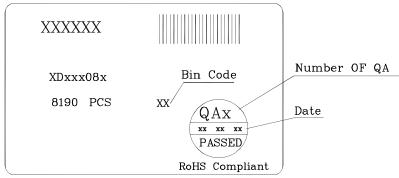
# PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube







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