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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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## 8mm (0.32") SINGLE DIGIT NUMERIC DISPLAY

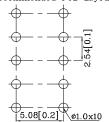
#### **Features**

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

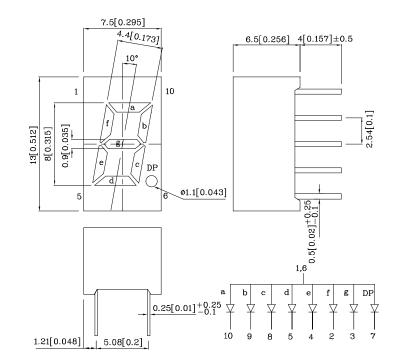




Recommended PCB Layout



# **Package Schematics**



#### 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)	Unit	
Reverse Voltage	$V_{\rm R}$	5	V	
Forward Current	$I_{\mathrm{F}}$	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	160	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			

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)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.9	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	627*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	λD 617*	
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	45	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	pF

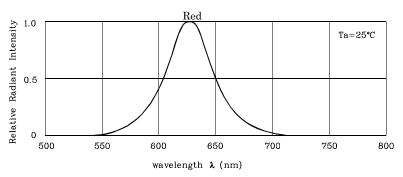
Part Number	Emitting Color	Emitting Material	$\begin{array}{c} Luminous\ Intensity\\ CIE127\text{-}2007^*\\ (I_F\text{=}10\text{mA})\\ ucd \end{array}$		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XDUR06A	Red	GaAsP/GaP	3600 1400*	9890 3290*	627*	Common Anode, Rt.Hand Decimal.

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

Oct 17,2016

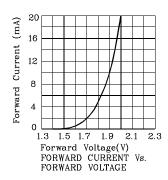


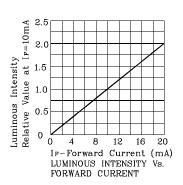


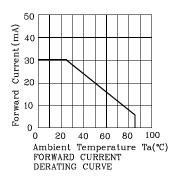


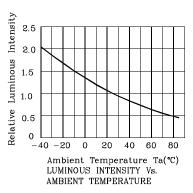
RELATIVE INTENSITY Vs. CIE WAVELENGTH

#### ❖ Red

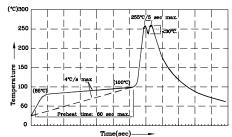








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- Notes:

  1. Recommend pre-heat temperature of 105°C or less (as measured w thermocouple attached to the LED pins) prior to immersion in the wave with a maximum solder bath temperature of 250°C

  2. Peak wave soldering temperature between 245°C ~ 255°C for 3 sec max).

  3. Do not apply stress to the epoxy resin while the temperature is al 4.Fixtures should not incur stress on the component when mounting during soldering process.

  5.AGC 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. mmend pre-heat temperature of  $105^{\circ}\mathrm{C}$  or less (as measured with a noccuple attached to the LED pins) prior to immersion in the solder with a maximum solder bath temperature of  $250^{\circ}\mathrm{C}$  wave soldering temperature between  $245^{\circ}\mathrm{C}$   $\sim 255^{\circ}\mathrm{C}$  for 3 sec (5 se

### 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:

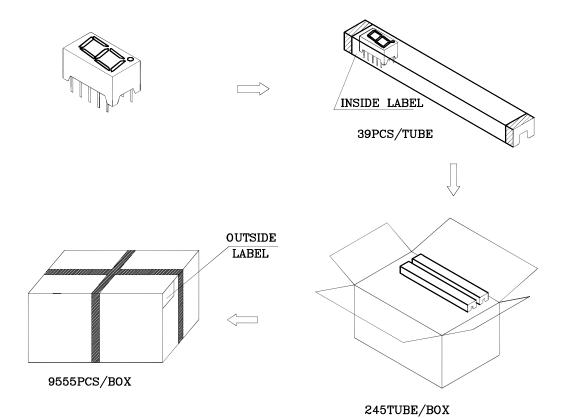
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

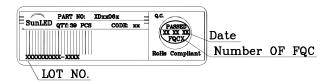




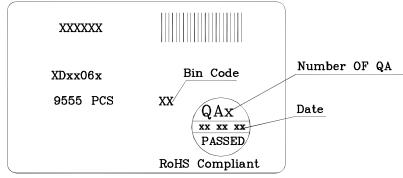
# PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube



# Outside Label On Box



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

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