

8mm (0.32") SINGLE DIGIT NUMERIC DISPLAY

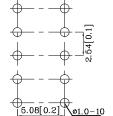
#### **Features**

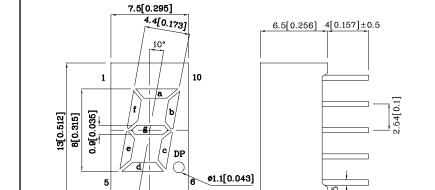
- Low power consumption
- ullet Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- $\bullet$  Optional black face provides superior color contrast
- RoHS Compliant

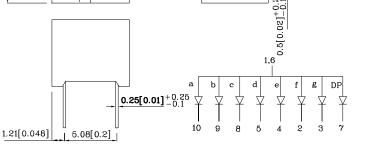




RECOMMENDED PCB LAYOUT







#### Notae

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.

**Package Schematics** 

Absolute Maximum Ratings (T <sub>A</sub> =25°C)		UG (GaP)	Unit	
Reverse Voltage	$V_{\mathrm{R}}$	5	V	
Forward Current	$I_{\mathrm{F}}$	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	$T_{A}$	-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)		UG (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2	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	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λD	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	30	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	15	pF

Part Number	Emitting Color	Emitting Material	Luminous CI 2007* Inter (I <sub>F</sub> =10mA ucd	nsity CIE12 A)	elength 27-2007* nm λΡ	Description
			min.	typ.		
XDUG06A	Green	GaP		7090 2490* 5	665*	Common Anode, Rt.Hand Decimal.

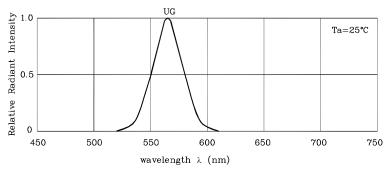
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

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XDSA0131 V9-X Layout: Maggie L.

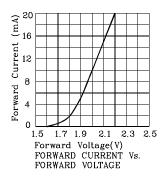


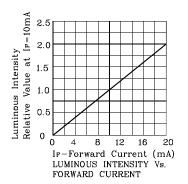


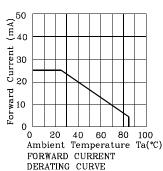


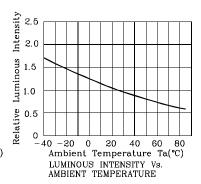
RELATIVE INTENSITY Vs. CIE WAVELENGTH

#### **♦ UG**

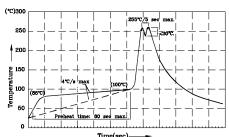








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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 netwernax).
  3.Do not apply stress to the epoxy resin relative 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:

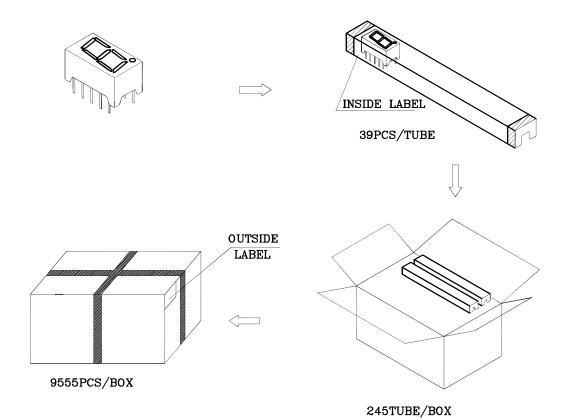
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.





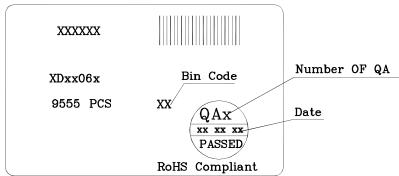
# PACKING & LABEL SPECIFICATIONS



### Inside Label On IC-tube



## Outside Label On Box



## TERMS OF USE

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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.
- 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 http://www.SunLEDusa.com/TechnicalNotes.asp

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