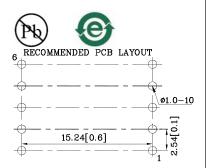


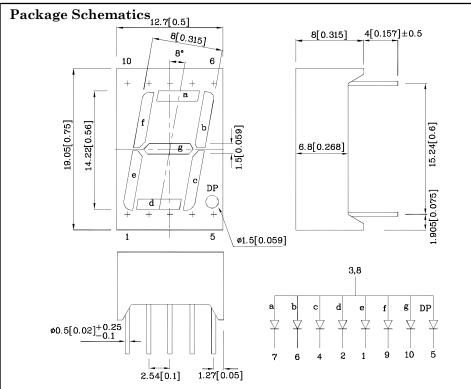


 $14.2\mathrm{mm}$  (0.56") SINGLE DIGIT NUMERIC DISPLAY

### **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





### 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)		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	$T_{\rm A}$	-40 ~ +85	°C	
Storage Temperature	Tstg	-40 ~ +85	1 -0	
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)		2.5	V
Reverse Current (Max.) $(V_R=5V)$	$I_{\mathrm{R}}$	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I <sub>F</sub> =10mA)	λΡ	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	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 CIE127- (I <sub>F</sub> =10m	2007*	Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XDUG14A	Green	GaP	3600 2200*	10990 4490*	565*	Common Anode, Rt. Hand Decimal.

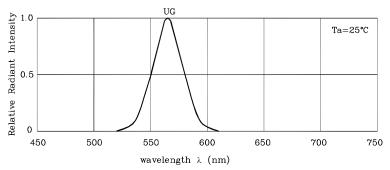
<sup>\*</sup>Luminous intensity value and wavelength are in accordance with CIE127-2007 standards. Mar 25,2014

XDSA0223 V9-X Layout: Maggie L.

# Part Number: XDUG14A

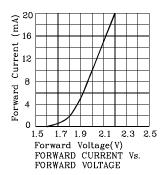
14.2mm (0.56") SINGLE DIGIT NUMERIC DIS-**PLAY** 

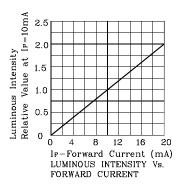


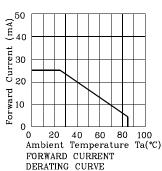


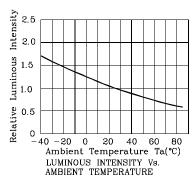
RELATIVE INTENSITY Vs. CIE WAVELENGTH

### **♦ UG**

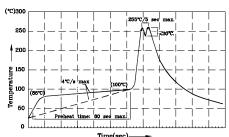








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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:

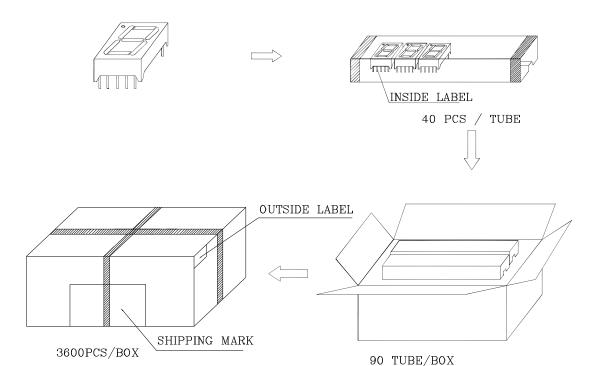
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

 $14.2\mathrm{mm}$  (0.56") SINGLE DIGIT NUMERIC DIS-

PLAY

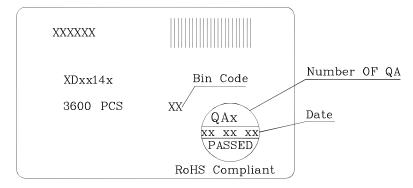
## PACKING & LABEL SPECIFICATIONS



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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