

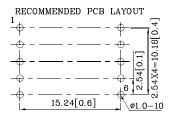
# 13.2mm(0.52") SINGLE DIGIT NUMERIC DISPLAY

### **Features**

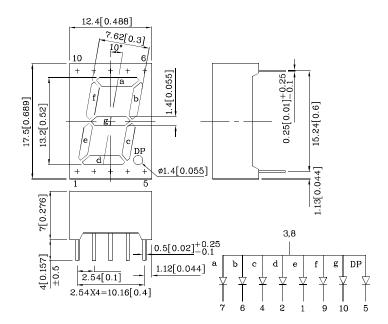
- Low power consumption
- ullet Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white segments
- $\bullet$  Optional black face provides superior color contrast
- RoHS Compliant







# 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)		UY (GaAsP/GaP)	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	140	mA
Power Dissipation	$P_{D}$	P <sub>D</sub> 75	
Operating Temperature	$T_{A}$	$T_A$ -40 ~ +85	
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)	UY (GaAsP/GaP)	Unit	
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	1.95	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	590*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	λD	588*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I <sub>F</sub> =10mA)	$\triangle \lambda$	35	nm
Capacitance (Typ.) (V <sub>F</sub> =0V, f=1MHz)	С	20	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.		
XDUY13A	Yellow	GaAsP/GaP	3600 900*	6890 2190*	590*	Common Anode, Rt.Hand Decimal.

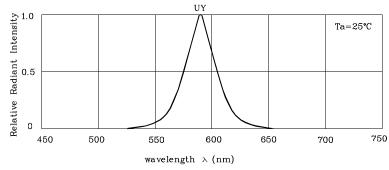
 $<sup>\</sup>hbox{$^*$Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.}$ 

Jan 17,2014

XDSA0213 V8-X Layout: Maggie L.

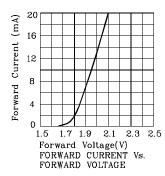


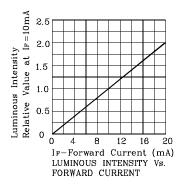


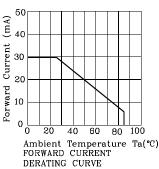


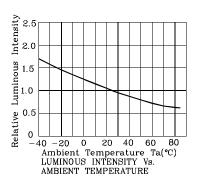
RELATIVE INTENSITY Vs. CIE WAVELENGTH

### **\$** UY

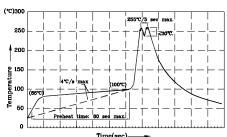








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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 between 240 to 7 650 to 1 5 50 to 1 27 max).
  3.Do not apply stress to the epoxy resin while the temperature is abd. 4.Pixtures 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.

### 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:

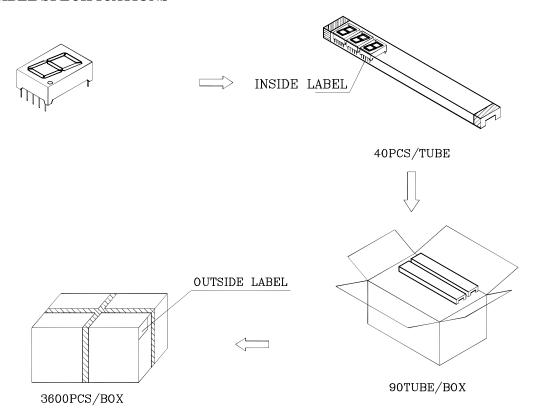
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

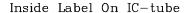
Note: Accuracy may depend on the sorting parameters.

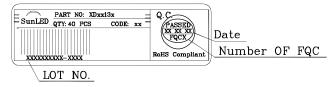




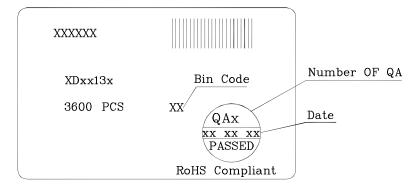
## PACKING & LABEL SPECIFICATIONS







## Outside Label On Box



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- $6. \ Additional\ technical\ notes\ are\ available\ at\ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$

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