

8mm (0.32") Single Digit Numeric Display

## **Features**

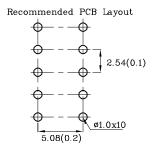
- Low power consumption
- ullet Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white

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- Optional black face provides superior color contrast
- RoHS Compliant

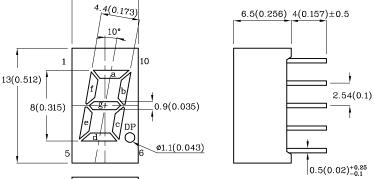


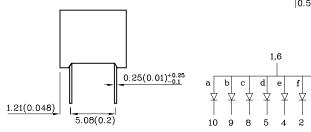




# 7.5(0.295) 4.4(0.173

**Package Schematics** 





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)		Green (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	-0	
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)		Green (GaP)	Unit
Forward Voltage (Typ.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2	V
Forward Voltage (Max.) (I <sub>F</sub> =10mA)	$V_{\mathrm{F}}$	2.4	V
Reverse Current (Max.) (V <sub>R</sub> =5V)	$I_R$	10	μA
Wavelength of Peak Emission CIE127-2007* (Typ.) $(I_F=10\text{mA})$	on CIE127-2007* (Typ.) λP 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

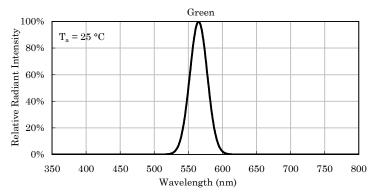
Part Number	Emitting Color	Emitting Material	$\begin{array}{c} Luminous\ Intensity\\ CIE127\text{-}2007^*\\ (I_F\text{=}10\text{mA})\\ ucd \end{array}$	Wavelength CIE127-2007* nm λP	Description
			min. typ.		
XDUG06A	Green	GaP	3600 7090 1400* 2490*	565*	Common Anode, Rt.Hand Decimal.

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

Dec 10,2020

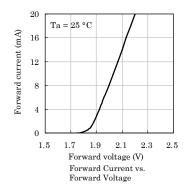


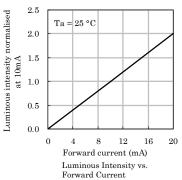


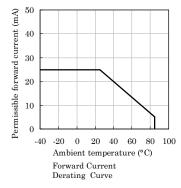


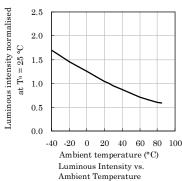
Relative Intensity Vs. CIE Wavelength

### Green

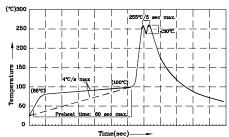








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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
- 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.

### 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:

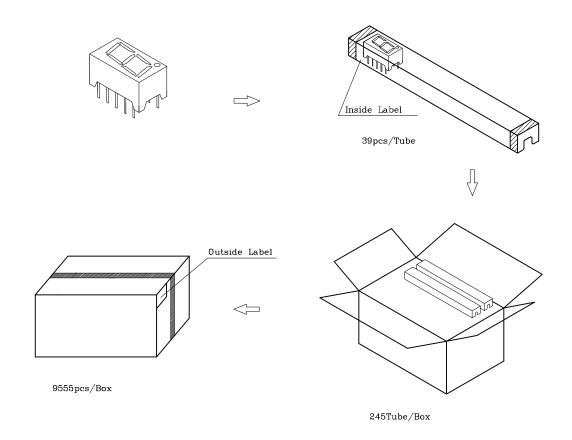
- 1. Wavelength: +/-1nm
- 2. Luminous Intensity / Luminous Flux: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.





## PACKING & LABEL SPECIFICATIONS





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- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
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