

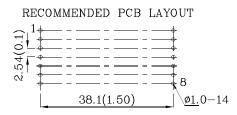
50mm (2.0 ") 5x7 DOT MATRIX DISPLAY

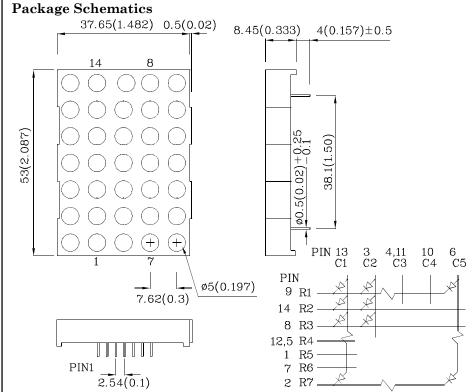
Features

- Low power consumption
- ullet Robust package
- I.C. Compatible
- Standard configuration: Gray face w/ white dots
- \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)		VG (AlGaInP)	Unit	
Reverse Voltage	V_{R}	5	V	
Forward Current	I_{F}	30	mA	
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	ifs	150	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			

Operating Characteristics (T _A =25°C)		VG (AlGaInP)	Unit
Forward Voltage (Typ.) (I _F =10mA)	V_{F}	2	V
Forward Voltage (Max.) (I _F =10mA)	V_{F}	2.5	V
Reverse Current (Max.) (V _R =5V)	I_{R}	10	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I _F =10mA)	λΡ	574*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I _F =10mA)	λD	570*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I _F =10mA)	$\triangle \lambda$	20	nm
Capacitance (Typ.) (V _F =0V, f=1MHz)	С	15	pF

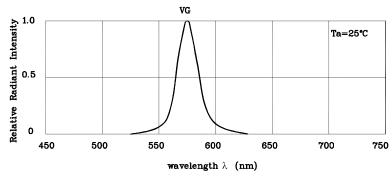
Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* $(I_F=10 \mathrm{mA})$ ucd		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XMVG50A	Green	AlGaInP	21000 9000*	51990 19990*	574*	Column Anode

^{*}Luminous intensity value and wavelength are in accordance with CIE127-2007

Mar 04,2014 XDSB7826 V1-X Layout: Maggie L.

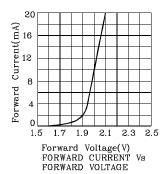


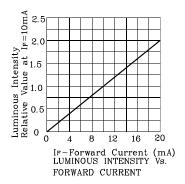


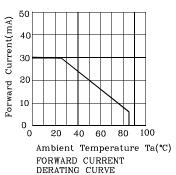


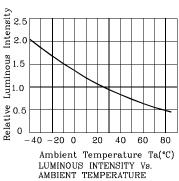
RELATIVE INTENSITY Vs. CIE WAVELENGTH

♦ VG

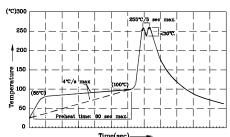








Wave Soldering Profile for Thru-Hole Products (Pb-Free Components)



- 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),

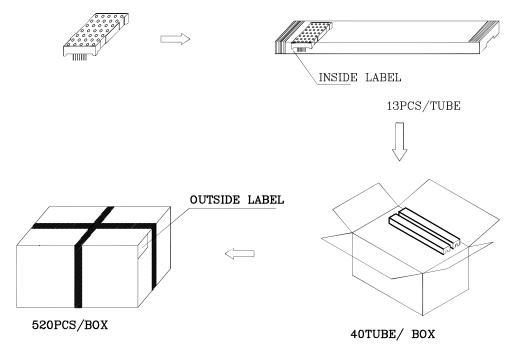
the typical accuracy of the sorting process is as follows:

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

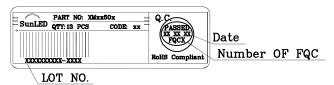
Note: Accuracy may depend on the sorting parameters.



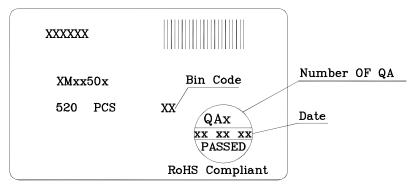
PACKING & LABEL SPECIFICATIONS



Inside Label On IC-tube



Outside Label On Box



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- $2. \ Contents \ within \ this \ document \ are \ subject \ to \ improvement \ and \ enhancement \ changes \ without \ notice.$
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- $6. \ Additional\ technical\ notes\ are\ available\ at\ \underline{http://www.SunLEDusa.com/TechnicalNotes.asp}$

Mar 04,2014