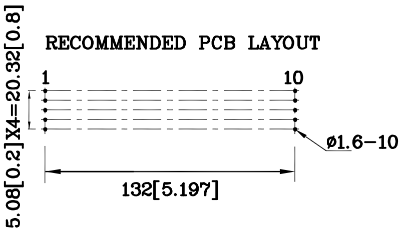
Part Number: XDUG127C-B

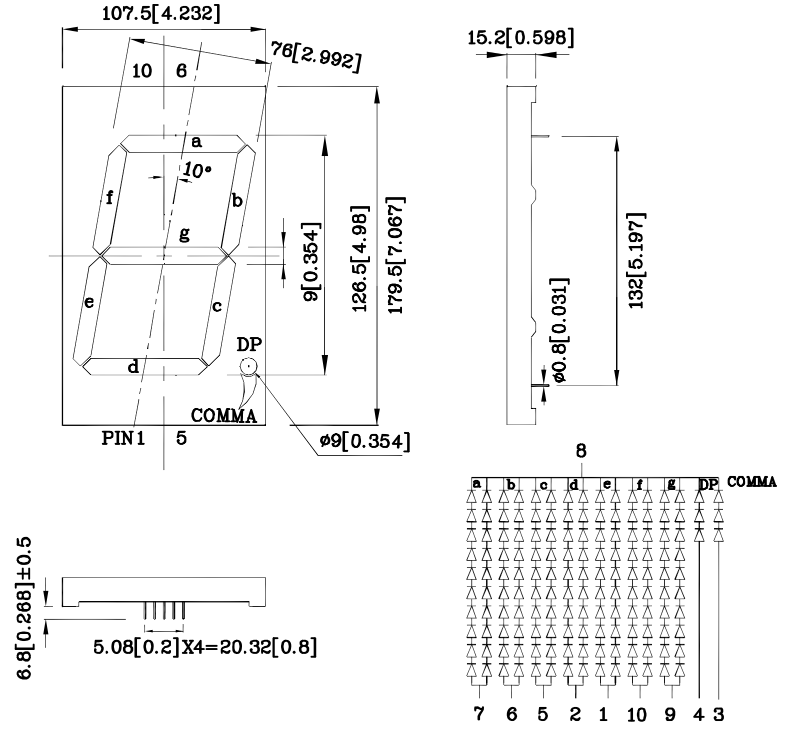
127mm (5.0") SEVEN SEGMENT DISPLAY

Features

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



Package Schematics



Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change without notice.

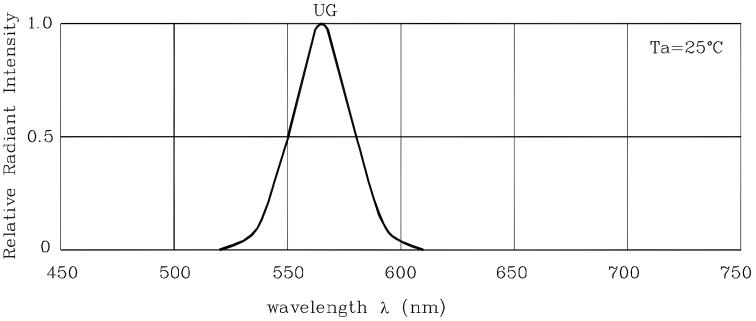
Absolute Maximum Ratings (T_A=25°C)		UG (GaP)	Unit
Reverse Voltage Per Segment Or (Dp And Comma)	V_R	5 (5)	V
DC Forward Current Per Segment Or (Dp And Comma)	I_F	50 (25)	mA
Forward Current (Peak) Per Segment Or (Dp And Comma) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	280 (140)	mA
Power Dissipation Per Segment Or (Dp And Comma)	P_D	1250 (187.5)	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_A=25°C)		UG (GaP)	Unit
Forward Voltage (Typ.) (I_F=10mA) Per Segment Or (Dp And Comma)	V_F	20 (6)	V
Forward Voltage (Max.) (I_F=10mA) Per Segment Or (Dp And Comma)	V_F	25 (7.5)	V
Reverse Current (V_R=5V) (Max.) Per Segment Or (Dp And Comma)	I_R	20 (10)	uA
Wavelength of Peak Emission CIE127-2007* (Typ.) (I_F=10mA)	λP	565*	nm
Wavelength of Dominant Emission CIE127-2007* (Typ.) (I_F=10mA)	λD	568*	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=10mA)	△λ	30	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	15	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity CIE127-2007* (I_F=10mA) ucd		Wavelength CIE127-2007* nm λP	Description
			min.	typ.		
XDUG127C-B	Green	GaP	31000 14000*	69990 23000*	565*	Common Cathode, Rt. Hand Decimal.

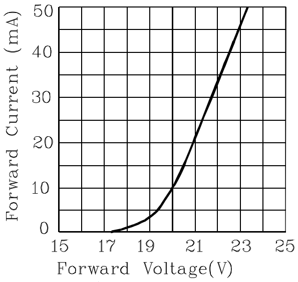
*Luminous intensity value and wavelength are in accordance with CIE127-2007 standards.

Jul 07,2012
XDSB6947 V1-X Layout: Maggie L.

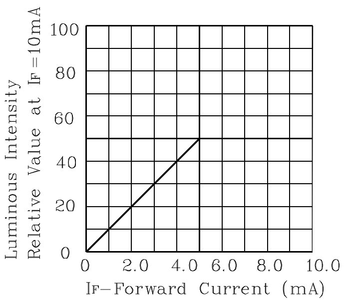


RELATIVE INTENSITY Vs. CIE WAVELENGTH

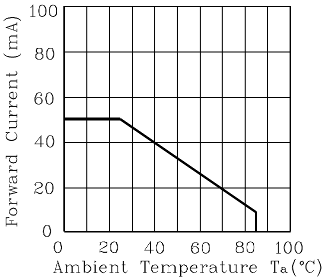
❖ UG



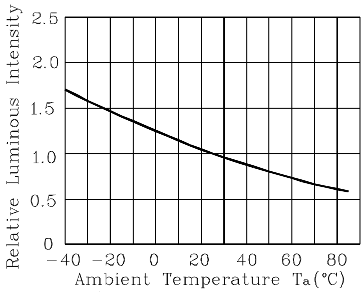
FORWARD CURRENT Vs.
FORWARD VOLTAGE



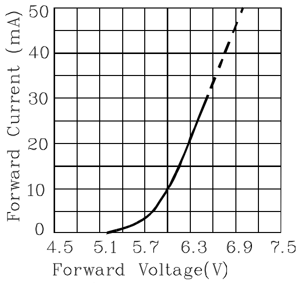
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



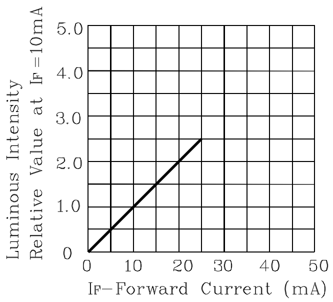
FORWARD CURRENT
DERATING CURVE



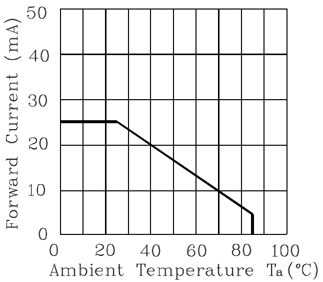
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



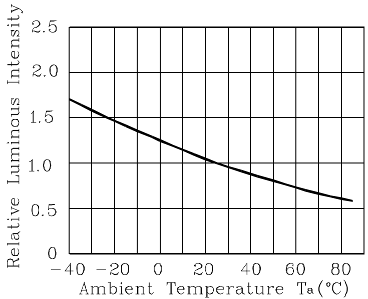
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

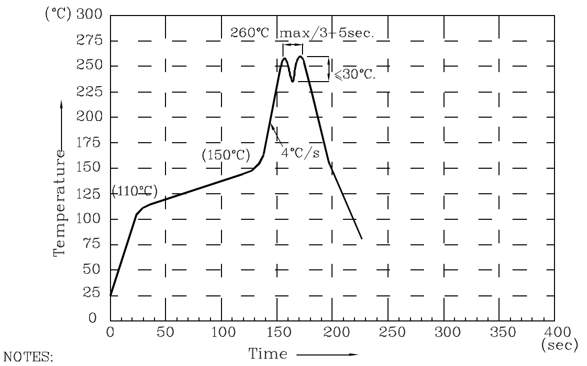


FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

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



NOTES:
1.Recommend the wave temperature 245°C~260°C.The
maximum soldering temperature should be less than 260°C.
2.Do not apply stress on epoxy resins when temperature is over 85°C.
3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4.During wave soldering, the PCB top-surface temperature should be kept
below 105°C.
5.No more than once.

Remarks:

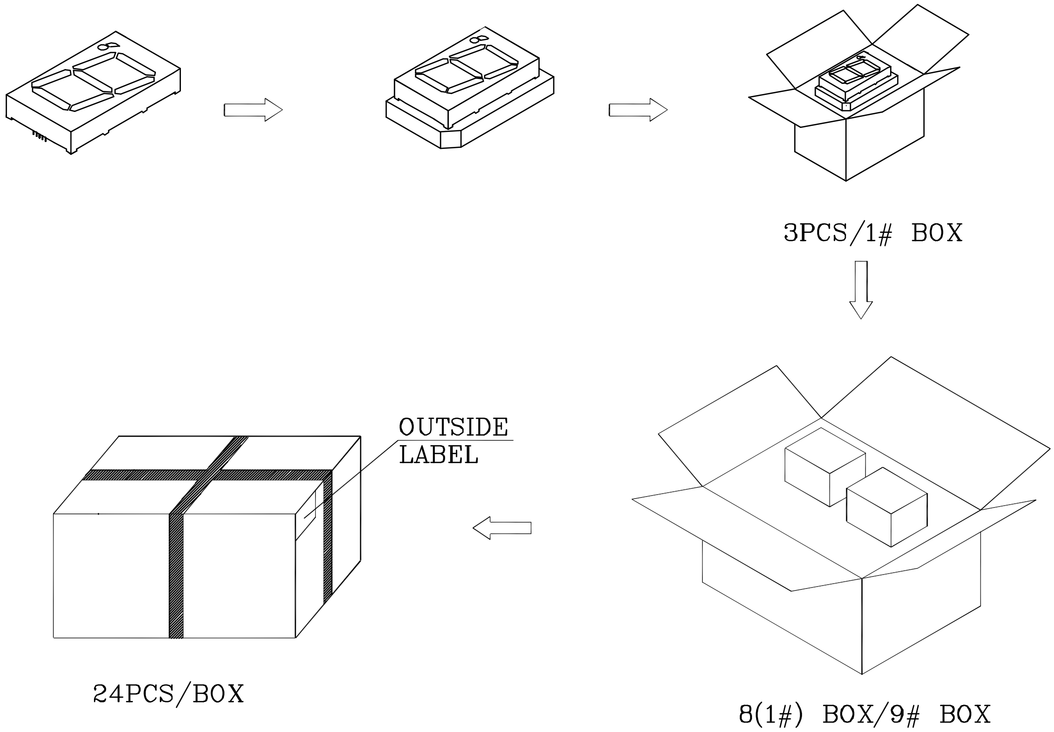
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

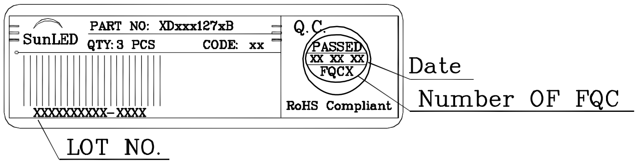
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



Inside Label On 1#BOX



Outside Label On Box