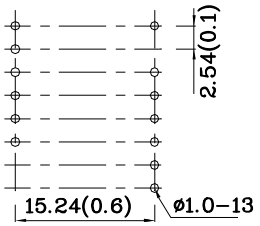
Part Number: XDUR20A-B

20.32mm (0.8") SINGLE DIGIT NUMERIC DISPLAY

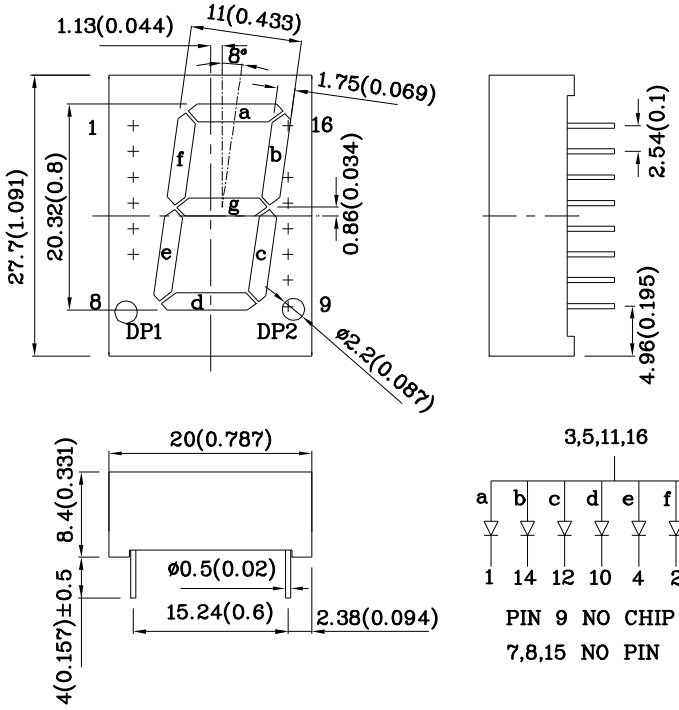
Features

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

RECOMMENDED PCB LAYOUT



Package Schematics



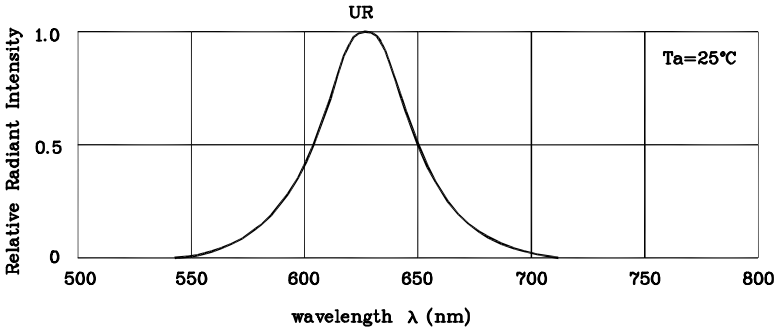
Notes:
1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change without notice.

Absolute Maximum Ratings (T_A=25°C)		UR (GaAsP/GaP)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	160	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)		UR (GaAsP/GaP)	Unit
Forward Voltage (Typ.) (I_F=10mA)	V_F	1.9	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 (Typ.) (I_F=10mA)	λP	627	nm
Wavelength of Dominant Emission (Typ.) (I_F=10mA)	λD	625	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=10mA)	△λ	45	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	15	pF

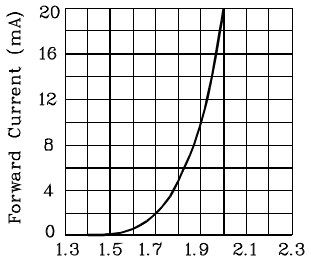
Part Number	Emitting Color	Emitting Material	Luminous Intensity (I_F=10mA) ucd		Wavelength nm λP	Description
			min.	typ.		
XDUR20A-B	Red	GaAsP/GaP	3600	7990	627	Common Anode, Lt Hand Decimal.

Mar 19,2011 XDSA0327 V7 Layout: Maggie L.

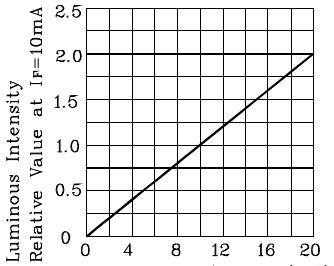


RELATIVE INTENSITY Vs. WAVELENGTH

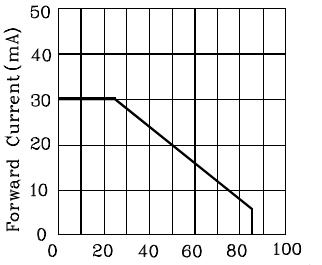
❖ UR



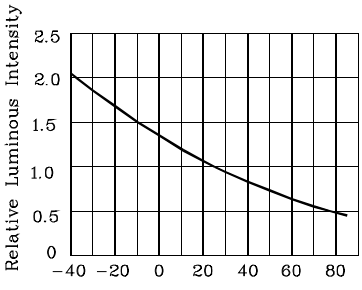
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

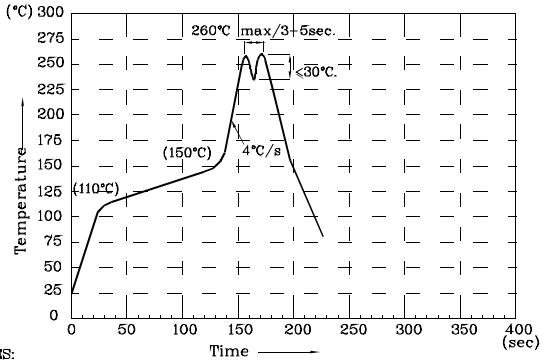


FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

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



NOTES:

1. Recommend the wave temperature 245℃~260℃.The maximum soldering temperature should be less than 260℃.
2. Do not apply stress on epoxy resins when temperature is over 85℃.
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℃.
5. No more than once.

Remarks:

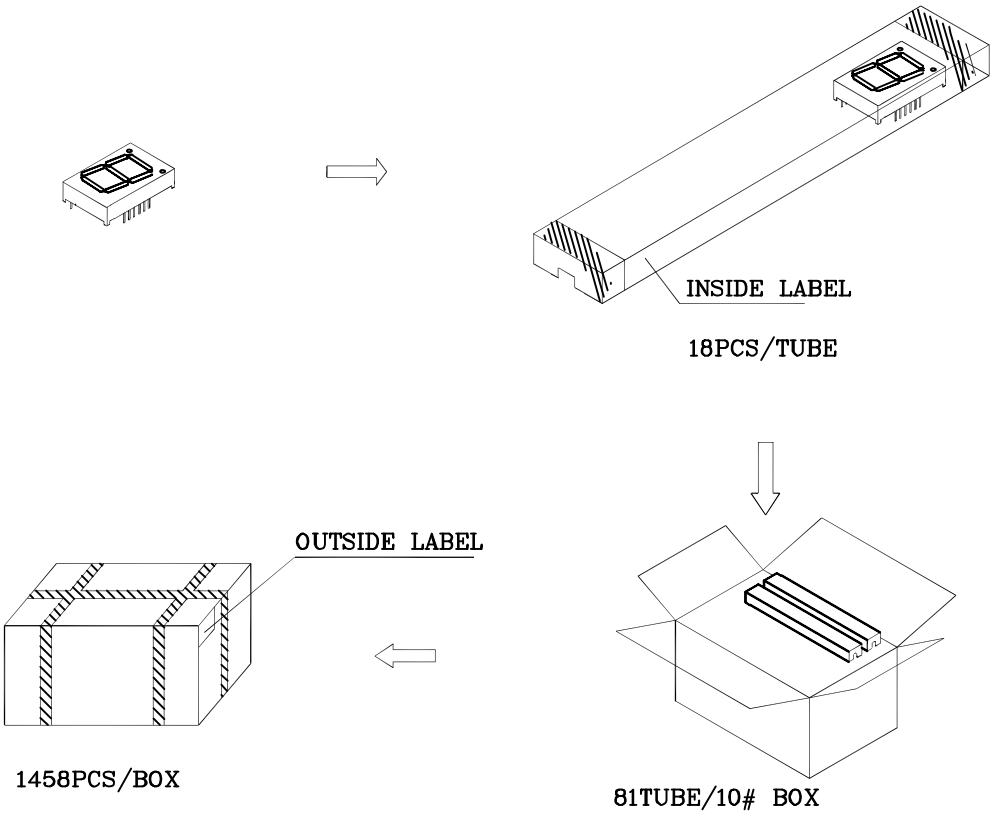
If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

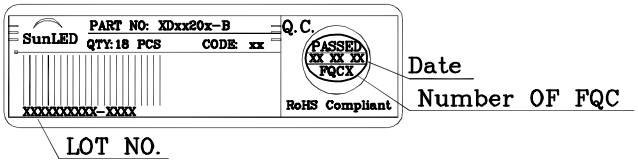
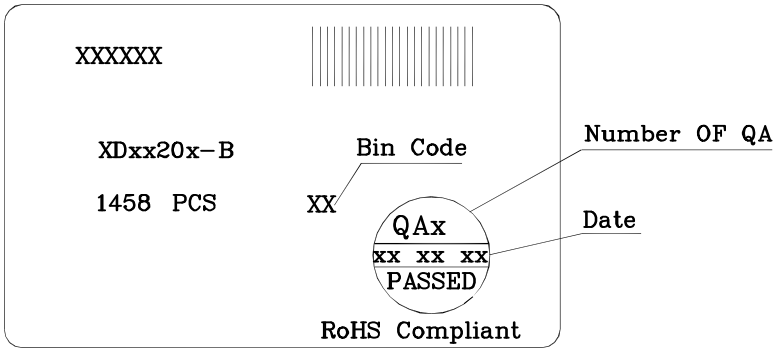
1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS



Inside Label on IC-tube



Outside Label on Box