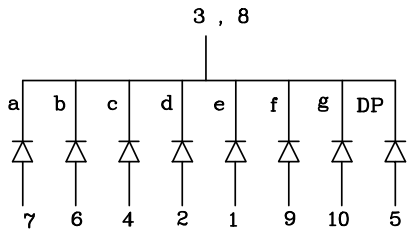
SunLED
www.SunLEDusa.com

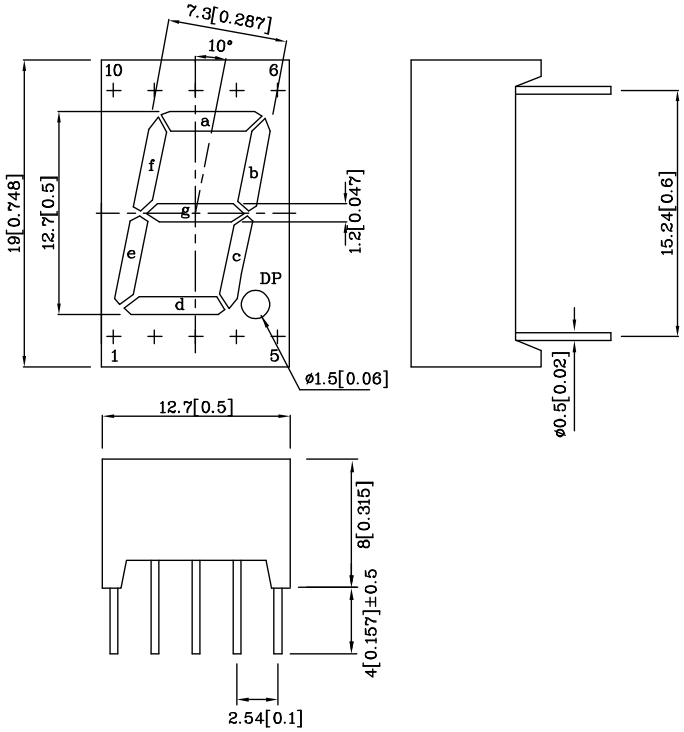
Part Number: **XDUY12C**

12.7mm (0.5") SINGLE DIGIT NUMERIC DISPLAY

Features

- 0.5 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- STANDARD : GRAY FACE, WHITE SEGMENT.
- RoHS COMPLIANT.





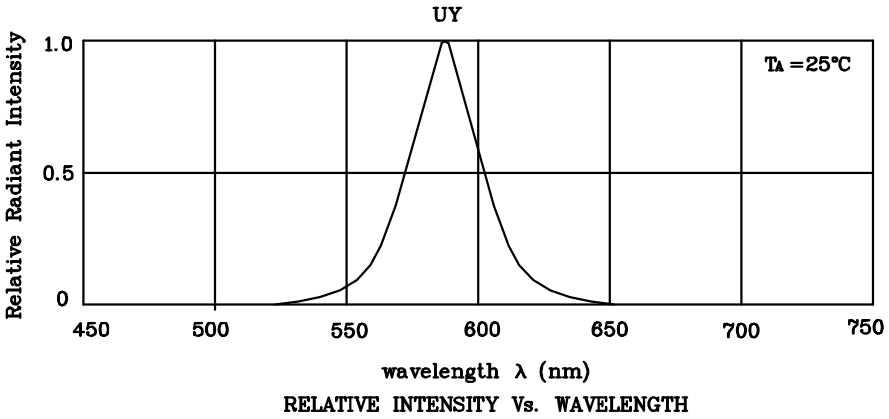
Notes:

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

Absolute Maximum Ratings (TA=25°C)		**UY (GaAsP/GaP)**	**Unit**
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (peak) 1/10Duty Cycle 0.1ms Pulse Width	iFS	140	mA
Power Dissipation	PT	75	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm below package base]	260°C For 3~ 5 Seconds		

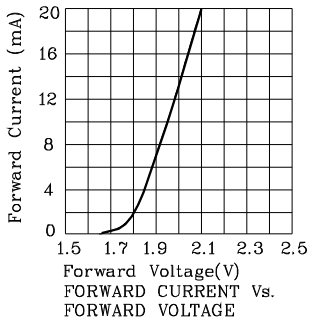
Operating Characteristics (TA=25°C)		**UY (GaAsP/GaP)**	**Unit**
Forward Voltage (Typ.) (IF=10mA)	VF	1.95	V
Forward Voltage (Max.) (IF=10mA)	VF	2.5	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=10mA)	λ P	590	nm
Wavelength Of Dominant Emission (Typ.) (IF=10mA)	λ D	588	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=10mA)	Δλ	35	nm
Capacitance (Typ.) (VF=0V, f=1MHz)	C	20	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity (IF=10mA) ucd		Wavelength nm λ P	Description	
			min.	typ.			
XDUY12C	Yellow	GaAsP/GaP	1200	4690	590	Common	Cathode,Rt.Hand Decimal

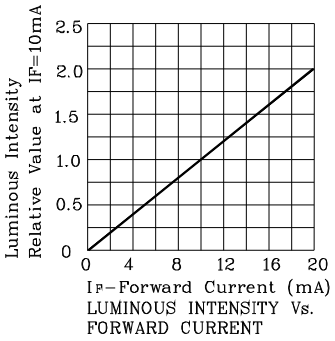


RELATIVE INTENSITY Vs. WAVELENGTH

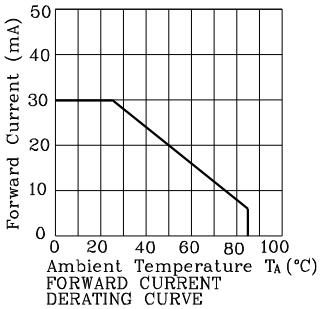
❖ **UY**



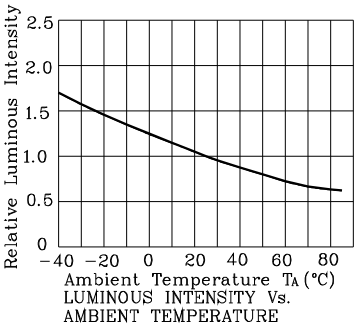
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT

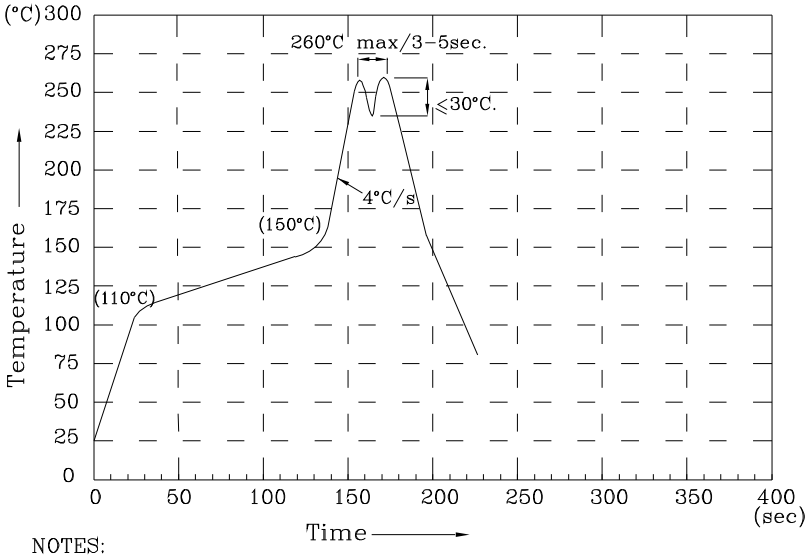


FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

Wave Soldering Profile For Lead-free Through-hole LED.



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 degree°C.
3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4.No more than once.

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

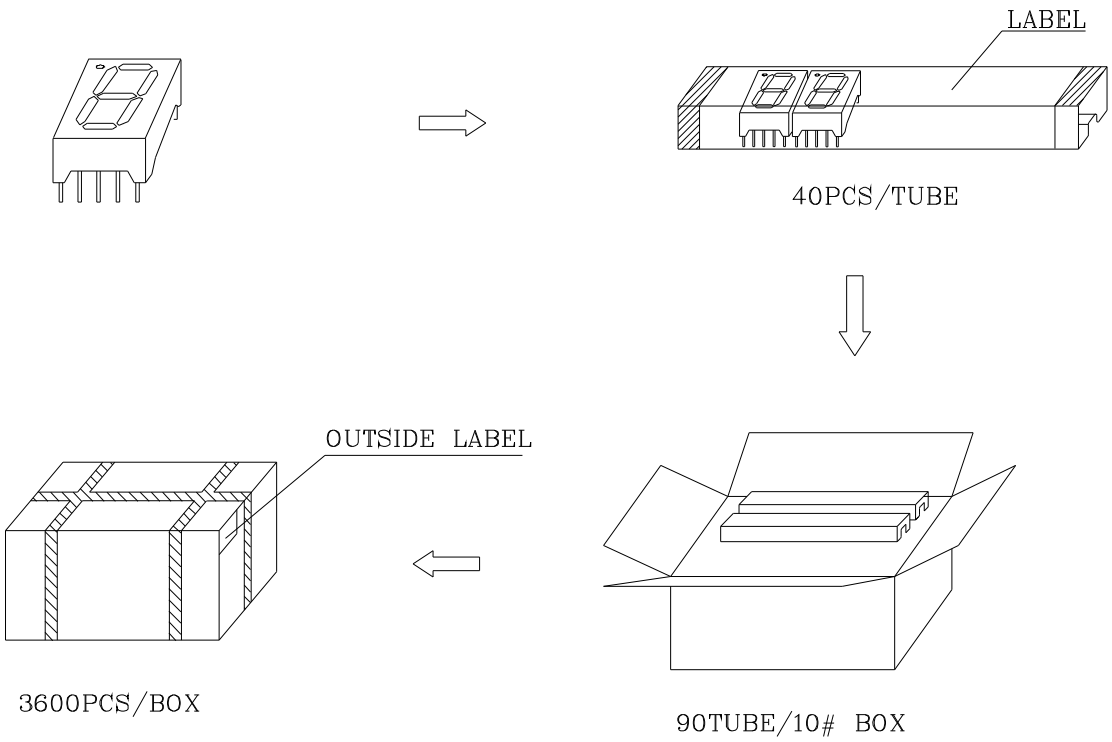
1. Wavelength: +/-1nm

2. Luminous intensity / luminous flux: +/-15%

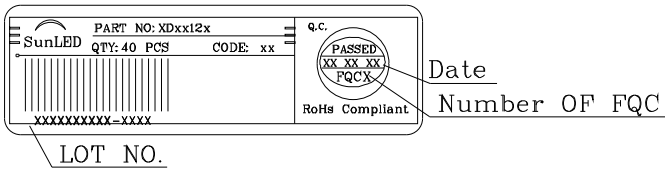
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS **XDUY12C**



Inside LABEL Paste On The IC-tube



Outside LABEL Paste On The Box