

VOLTAGE CONTROLLED TEMPERATURE COMPENSATED SMD CRYSTAL OSCILLATOR



3.2 X 2.5 X 0.9mm

ASTX-11, ASVTX-11



RoHS
Compliant

FEATURES:

- 3.2 x 2.5 x 0.9mm compact package
- Low current consumption
- Suitable for high-density SMT
- Vc function corresponds to PLL circuits
- IR reflow possible

APPLICATIONS:

- Cellular and cordless phones
- Standard OSC for exact equipment
- Mobile communication equipment
- Portable radio equipment and music player.
- PLL

STANDARD SPECIFICATIONS:

PARAMETERS

ABRACON P/N	ASTX-11 Series or ASVTX-11 Series
Frequency Range	10.0000 MHz to 40.0000 MHz
Standard Frequencies (MHz)	10, 13, 14.4, 16.3676, 19.2, 19.8, 20, 24.5535, 26, 33.6, 38.4, 39, 40
Frequency Stability $\Delta f/f_0$ vs. Tolerance (at 25° C) Temperature (ref to +25° C) Supply Voltage Change Load Change	± 0.5 ppm ± 2.5 ppm (- 30° C ~ + 75° C) ± 0.2 ppm (Vdd $\pm 5\%$) ± 0.2 ppm (ZL $\pm 10\%$)
Aging (first year at +25° C)	± 1.0 ppm
Operating Temperature	- 30° C to + 75° C
Storage Temperature	- 40° C to + 85° C
Supply Voltage (Vdd)	3.3V $\pm 5\%$ (See options)
Voltage Control Function (for ASVTX-11) Control Voltage (Vcc) Frequency Tuning Range Frequency Tuning Transition Input Impedance	+1.5 $\pm$ 1.0Vdc ± 8 ppm min. Positive 500kohms min (650kohms typ.)
Supply Current (Icc)	1.5mA Max/(~19.68MHz), 2.0mA Max/(~32MHz), 2.5mA Max/(~40MHz)
Output Voltage Load Waveform	0.8 V p-p min. 10k Ω // 10 pF Clipped Sine Wave
Phase Noise	-135dBc typ at 1kHz

OPTIONS & PART IDENTIFICATION:

[Left blank if standard]

ASTX-11 or ASVTX - 11 - ☐ - Frequency - ☐

Vdd (V)		Frequency	Packaging	
Blank	3.3V $\pm 5\%$	XX.XXX MHz	Blank	Bulk
A	3.0V $\pm 5\%$		T	Tape and Reel 1,000pcs
B	2.8V $\pm 5\%$			
C	2.5V $\pm 5\%$			

Please contact ABRACON if parts are intended for life dependent applications.

ABRACON IS
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ASTX-11, ASVTX-11

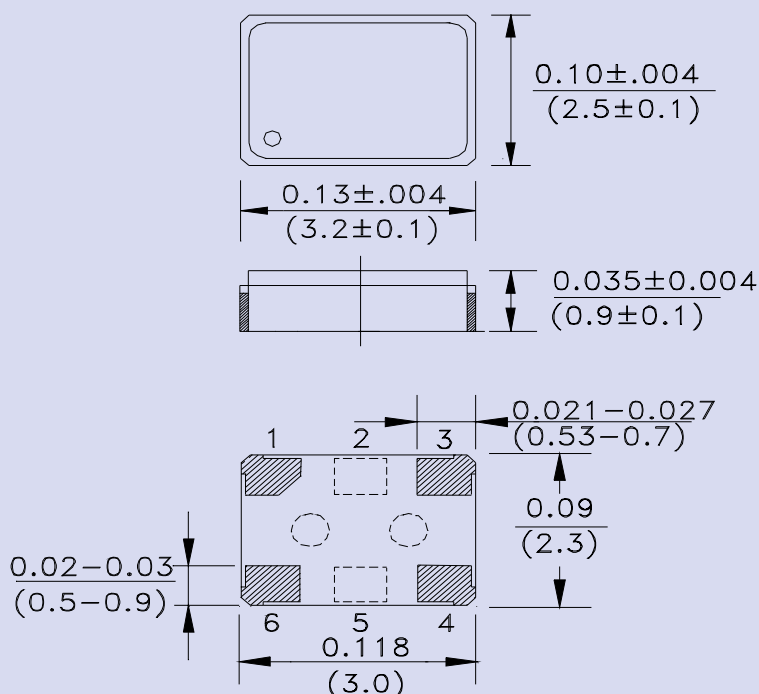


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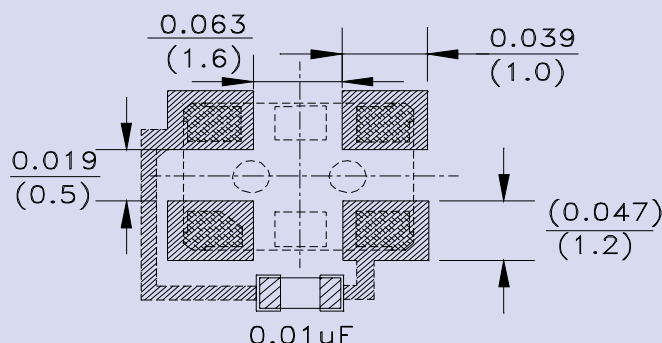
3.2 X 2.5 X 0.9mm

OUTLINE DRAWING:



Dimensions: Inches (mm)

Recommended land pattern

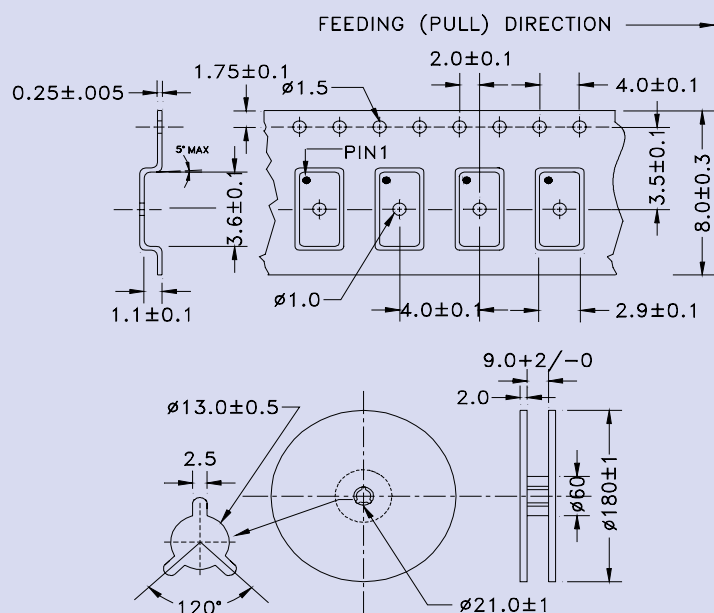


Note: It is recommended to use an approximately $0.01 \mu F$ bypass capacitor between PIN 3 and 6. It is not recommended that paths go underneath the oscillator. If needed, please use multi-layer PCB board or resist coating.

PIN	FUNCTION	
	VCTCXO	TCXO
1	Vcc	GND
2	N.C.	
3	GND	
4	OUTPUT	
5	N.C.	
6	Vdd	

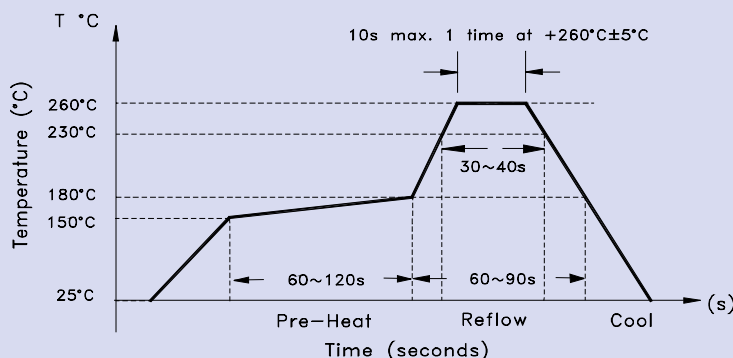
TAPE & REEL:

T= tape and reel (1,000 pcs/reel or 2000 pcs/reel)



Dimensions: mm

REFLOW PROFILE:



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