



5.0 x 3.2 x 1.5 mm

# 3Vdc • CERAMIC SURFACE MOUNT CRYSTAL OSCILLATORS VOLTAGE-CONTROLLED TEMPERATURE-COMPENSATED ASTX-09 and ASVTX-09 Series

## FEATURES:

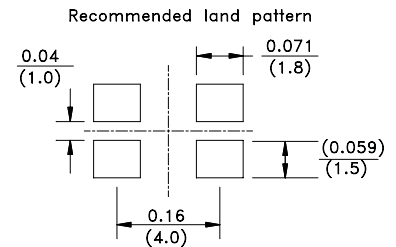
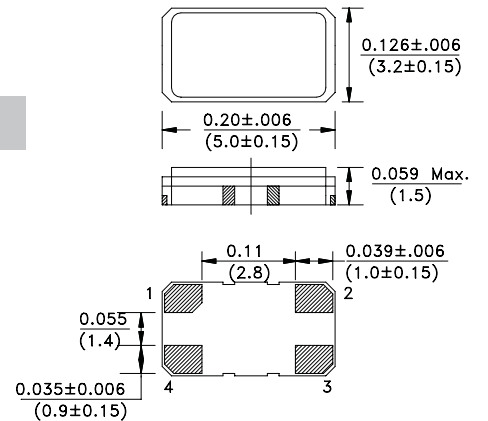
- Leadless surface mount size 5.0 x 3.2 x 1.5 mm max.
- Compact and low in height.
- Suitable for high-density SMT.
- SMD makes reflow soldering possible.
- Low current consumption.
- Vc Function corresponds to PLL circuits.

## APPLICATIONS:

- Cellular and cordless phones.
- GPS and communication equipment.
- Portable radio equipment.
- Mobile communication.

## STANDARD SPECIFICATIONS

PARAMETERS	ASTX-09	ASVTX-09
Frequency Range (F <sub>o</sub> )	12.800MHz - 19.680MHz*	
Operating Temperature (T <sub>OPR</sub> )	-30°C to +75°C (See Options)	
Storage Temperature (T <sub>STO</sub> )	-40°C to +85°C	
Frequency Stability -vs- 25°C -vs- Temperature -vs- Aging -vs- Supply Voltage	±0.5ppm max. ±2.5ppm max. ±1ppm per year max. ±0.2ppm max. (V <sub>cc</sub> ± 5%)	
Supply Voltage (V <sub>CC</sub> )	3.0Vdc ±5% (operating at 2.7V ~ 5V)	
Input Current (I <sub>CC</sub> )	2mA max.	
Output Load	10k Ω // 10pF	
Output Voltage	0.8V <sub>pp</sub> min. Clipped Sine	
Transfer Function (V series)	Positive	
Voltage Control (V Series) (Vc)	-	1.5V ±1Vdc
Frequency Pulling (V Series)	-	±8ppm min.



Dimensions: Inches (mm)

Test circuit, waveforms, please see appendix B.  
Environmental and mechanical specifications see appendix C. Group 4.  
Marking, see appendix G.  
Tape and Reel, see appendix H (1,000 pcs./reel).  
Application notes, see appendix A.  
Recommended handling, see appendix F.

\* Please call us for other frequencies, pulling specs. or control voltage range.

PIN #	FUNCTION
1	Vc or NC
2	GND
3	Output
4	Vcc

## ORDERING OPTIONS

ASXTX-09 - Frequency - Packaging

Blank or V

XX.XXXXX MHz

-T Tape and Reel



NOTE: Left blank if standard • All specifications and markings subject to change without notice

