

11.4 x 9.6 x 4.0 mm

# 5.0Vdc OR 3.3Vdc SURFACE MOUNT CRYSTAL OSCILLATORS VOLTAGE-CONTROLLED TEMPERATURE-COMPENSATED ASTX-01 and ASVTX-01 Series

## FEATURES:

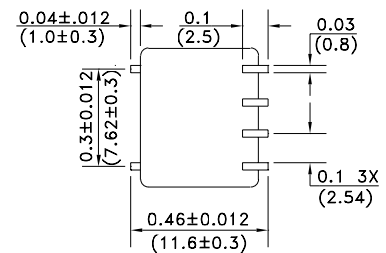
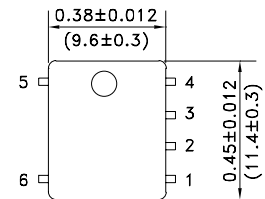
- Compact and low in height.
- Suitable for high-density SMT.
- SMD makes reflow soldering possible.
- Low current consumption.
- Vc function corresponds to PLL circuits.
- Low voltage supply on option "-A".
- HCMOS/TTL or sine output.

## APPLICATIONS:

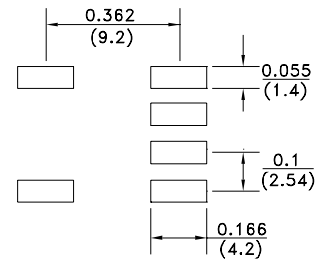
- Cellular and cordless phones.
- Standard OSC for exact equipment.
- Portable radio equipment.
- Car telephones.

## STANDARD SPECIFICATIONS

Parameters	ASTX-01/ 01A ASVTX-01/ 01A	ASTX-01H ( 01HA) ASVTX-01H ( 01HA)
Frequency Range (F <sub>0</sub> )	10MHz ~ 27.0MHz	1.25MHz ~ 27.0MHz
Operating Temperature (T <sub>OPR</sub> )	-30°C to +75°C (See table)	
Storage Temperature (T <sub>STO</sub> )	-40°C to +85°C	
Frequency Stability -vs- 25°C	±0.5ppm max.	
-vs- Temperature	±2.5ppm max. (See table)	
-vs- Aging	±1.0ppm max./ year.	
-vs- Supply Voltage (±5%)	±0.3ppm max.	
-vs- load (±10%)	±0.3ppm max.	
Supply Voltage (V <sub>CC</sub> )	5Vdc ±5% or 3.3Vdc ±5% (-A)	
Input Current (I <sub>CC</sub> )	2mA max. (5V) 1.5mA max. (3.3V)	20mA max. (5V) 15mA max. (3.3V)
Output Load	10k Ω // 10pF	10TTL or 15pF
Output Voltage	1.0Vpp min. (5V) 0.8Vpp min. (3.3V)	VOH 0.9 *V <sub>CC</sub> min. VOL = 0.1*V <sub>CC</sub> max.
Transfer Function (V Series)	Positive	
Voltage Control (Vc)	2.5Vdc ±2V (for 5V) or 1.5Vdc ±1V (for 3.3V)	
Frequency Pulling (V Series)	±10ppm min	
Frequency Adjustment (Internal Trimmer)	±3ppm min.	



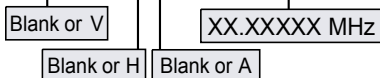
### RECOMMENDED LAND PATTERN



Dimensions:  
Inches (mm)

## ORDERING OPTIONS

ASXTX-01X X - Frequency - Temperature & Frequency Stability - Packaging -T Tape and Reel



Test circuit, waveforms, see appendix H.  
Environmental and mechanical specifications, see appendix C. Group 4.  
Marking, see see appendix G.  
Tape and Reel, see appendix H. (1,000 pcs./reel) Recommended handling, see appendix F. Application notes, see appendix A. Please call us for higher frequencies, other pulling specs. or control voltage range.

Operating Temperature Range	code	Frequency stability (± ppm) (0) Denotes availability							
		1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
0°C~50°C	I	0	0	0	0	0	0	0	0
-10°C~60°C	D	0	0	0	0	0	0	0	0
-10°C~70°C	C		0	0	0	0	0	0	0
-20°C~70°C	E		0	0	0	0	0	0	0
-30°C~60°C	H			0	0	0	0	0	0
-30°C~70°C	F			0	0	0	0	0	0
-30°C~75°C	N			STD	0	0	0	0	0
-40°C~80°C	M			0			0	0	0
-40°C~85°C	L						0	0	0

PIN #	FUNCTION
1	Output
2	GND
3	NC or Vc *
4	Vcc
5, 6	GND / Case

\* V Series Only



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

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