

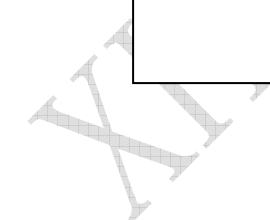


Elaborations

- Small
- Low power consumption
- Instant available
- High stability

Applications

- Avionics
- Communications
- Guidance
- Military
- Precision GPS

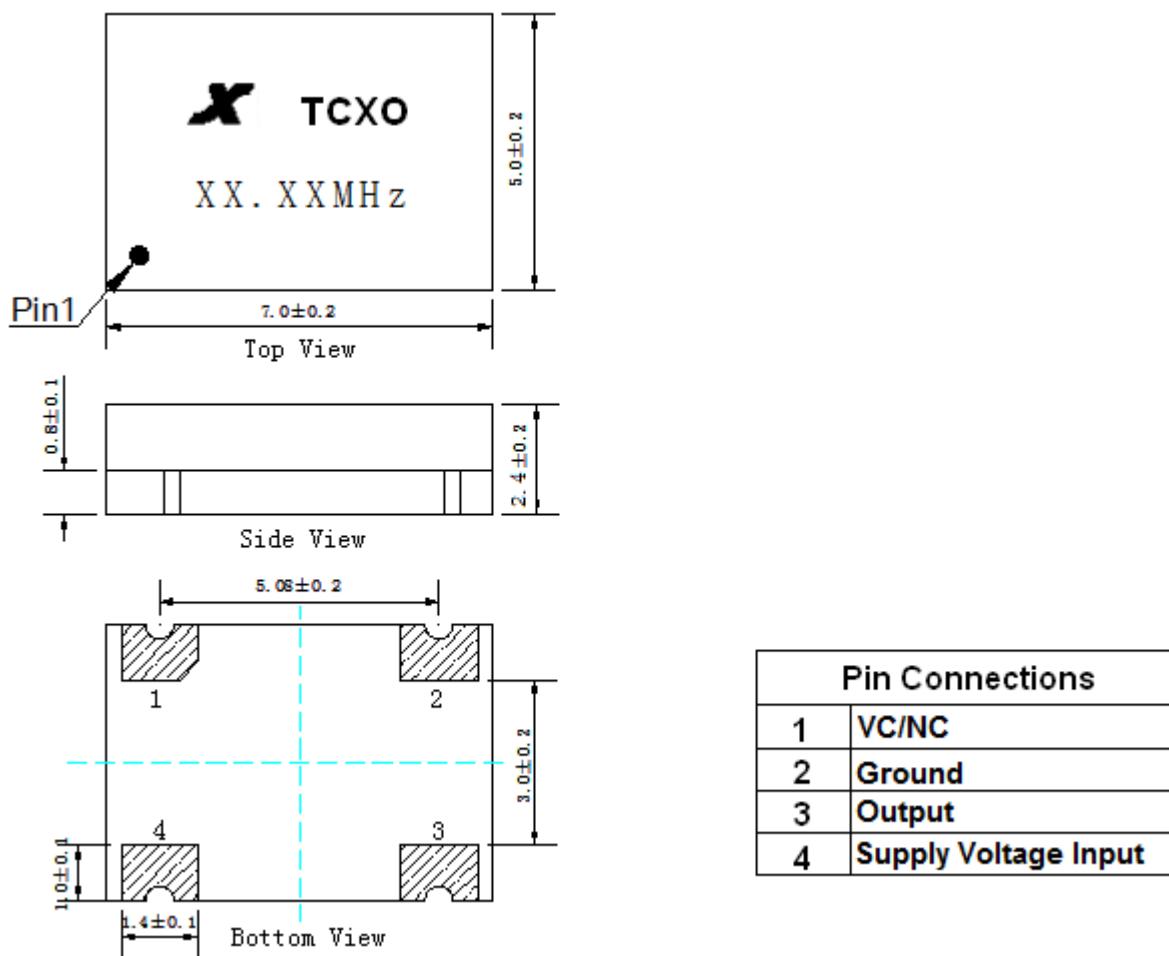


● Electrical Characteristics

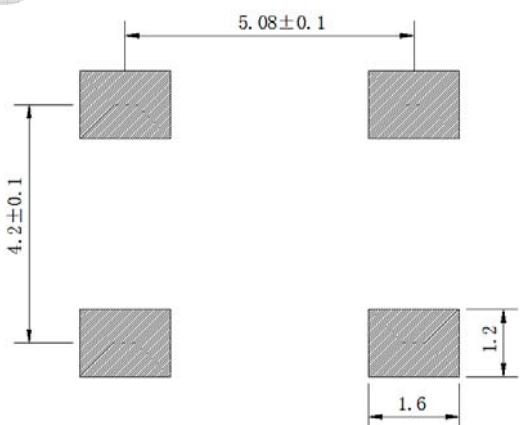
Description	Parameter
Oscillator Output	
Nominal Frequency	1.2~200MHz
Output Waveform	Sinewave 、 HCMOS、 Clipped Sinewave
Signal (Option)	Sinewave
Level	+0dBm min
Harmonics Suppression	-30dBc max
Spurious Suppression	-60dBc max
Load	50Ω
Signal (Option)	HCMOS
Output High Voltage	V _{OH} : 2.4V min
Output Low Voltage	V _{OL} : 0.4V max
Rise / Fall Time (10%~90%)	6ns max
Duty Cycle	45% ~55%@50%
Load	15pF
Signal (Option)	Clipped Sinewave
Peak to peak	0.8V min
Load	10kΩ//10pF
Supply Voltage	
Operation Voltage	3.3V±5%、 5.0V±5%
Current consumption	15mA max@25°C
Frequency Characteristics	
Frequency Tolerance	±1.0ppm max @25°C±3°C
Frequency Stability over Operating Temperature Range	±0.28ppm max @-20°C~+70°C
	±0.5ppm max @-40°C~+85°C

		$\pm 1.0\text{ppm}$ max @ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
		$\pm 2.0\text{ppm}$ max @ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Frequency Stability / Supply Voltage		$\pm 0.2\text{ppm}$ max @ $V_s \pm 5\%$
Frequency Stability/ Load		$\pm 0.2\text{ppm}$ max @Load $\pm 5\%$
Aging Tolerance Per Day		$\pm 0.02\text{ppm}$ max
Aging Tolerance 1 Year		$\pm 1.0\text{ppm}$ max
Phase Noise		
Phase Noise (Typical) 10MHz@ 25°C	10Hz	-95dBc/Hz
	100Hz	-120dBc/Hz
	1KHz	-138dBc/Hz
	10KHz	-145dBc/Hz
	100KHz	-150dBc/Hz
Frequency Tuning		
Voltage Characteristics	Control voltage Range	0Vdc ~5.0Vdc (Center voltage=2.5Vdc)@ $V_s = 5.0\text{Vdc}$
		0Vdc ~3.3Vdc (Center voltage=1.65Vdc)@ $V_s = 3.3\text{Vdc}$
	Slope	Positive
	Linearity	10% max
	Adjustment Range	$\pm 8.0\text{ppm}$ min
	Input Impedance	100K Ω min
Environmental Information		
Vibration	IEC 68-2-06 test Fc, 10g acceleration, 10 - 2000Hz, 0.75mm displacement./severity 500 / 10	
Shock	IEC 68-2-27 test Ea, Half sine 100g 6ms / 3 per direction. / severity 100A	
Storage Temperature range	$-55^{\circ}\text{C} \sim +105^{\circ}\text{C}$	

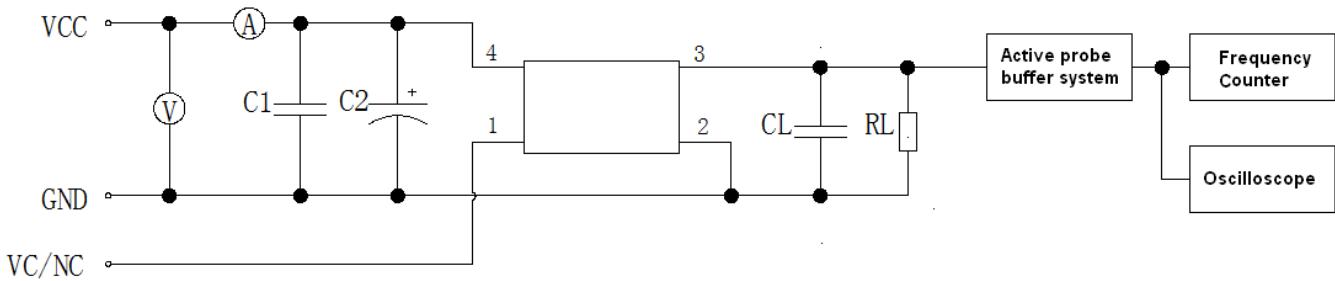
● Mechanical Structure(mm)



● Recommended Pad(mm)



● Testing circuit diagram



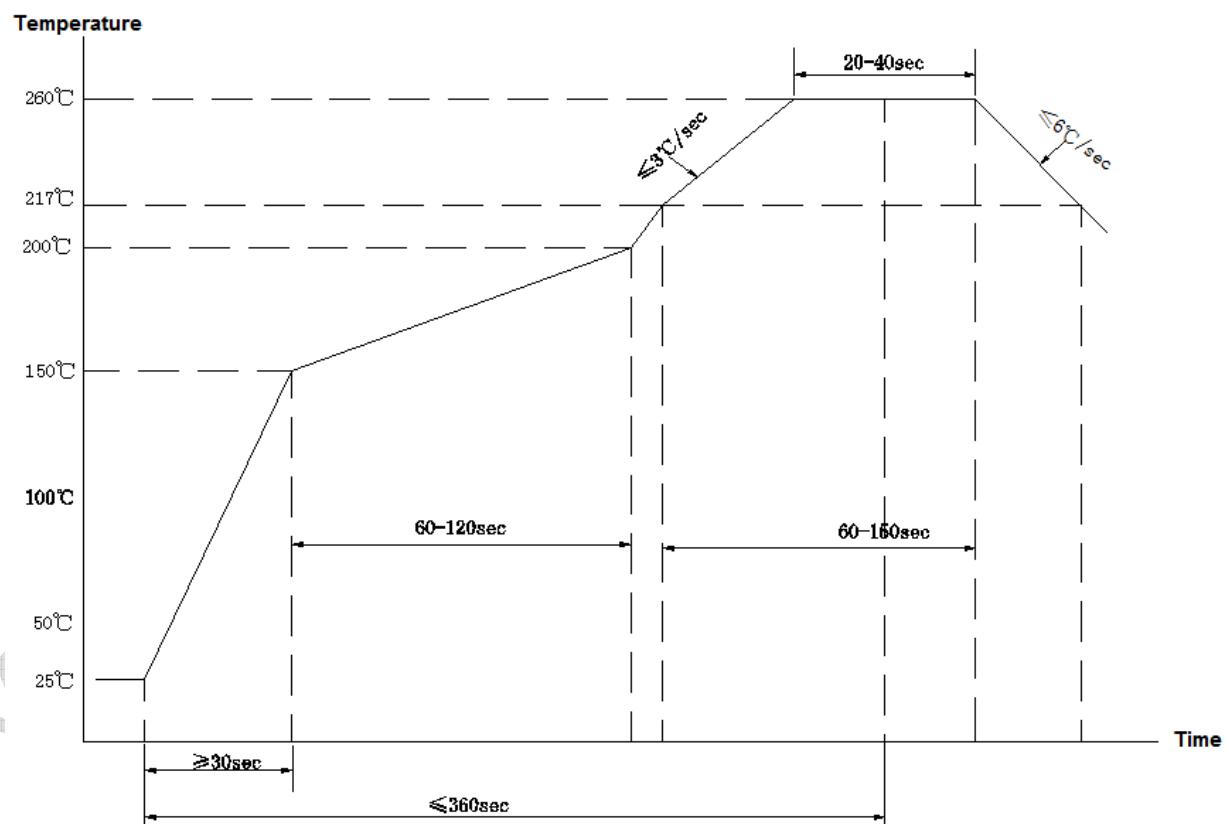
Note: C1=0.1μF; C2=10μF;

Clipped Sinewave: CL=10pF, RL=10KΩ;

Sinewave: CL=NC, RL=50Ω;

HCMOS: CL=15pF, RL =NC;

● Reflow Soldering Curve (RoHS)



● Type Designation Information

