

Elaborations

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

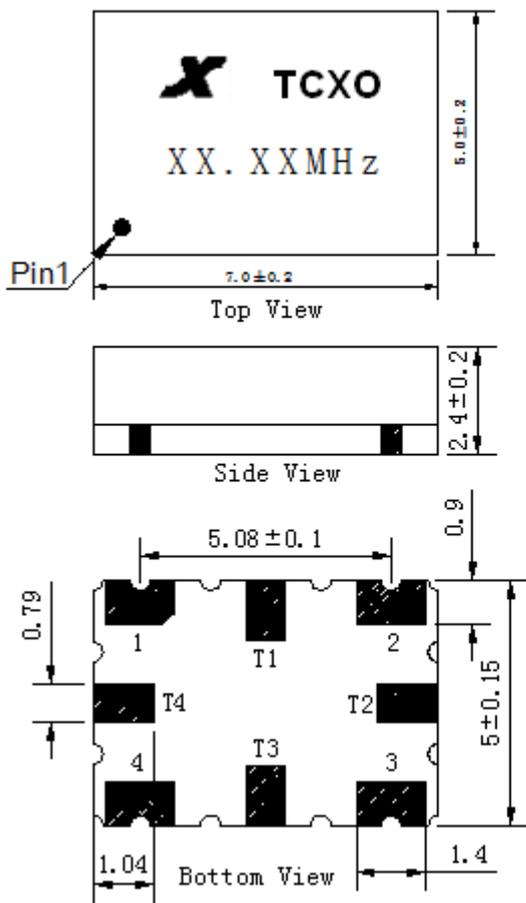
Applications

- **Base stations**
- **Communications**
- **DSL/ADSL**
- **Femtocell**
- **IP timing**
- **LTE networks**
- **Precision GPS**
- **WiMAX/WiBro**
- **WLAN**
- **GPS**
- **Handset**
- **SONET/SDH**
- **Satellite Communication**

| ● Electrical Characteristics | |
|---|---------------------------------|
| Description | Parameter |
| Oscillator Output | |
| Nominal Frequency | 1.2~200MHz |
| Output Waveform | Sinewave、HCMOS、Clipped Sinewave |
| Signal(Optional) | Sinewave |
| Level | +0dBm min |
| Harmonics Suppression | -30dBc max |
| Spurious Suppression | -60dBc max |
| Load | 50Ω |
| Signal (Optional) | 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 (Optional) | 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 |

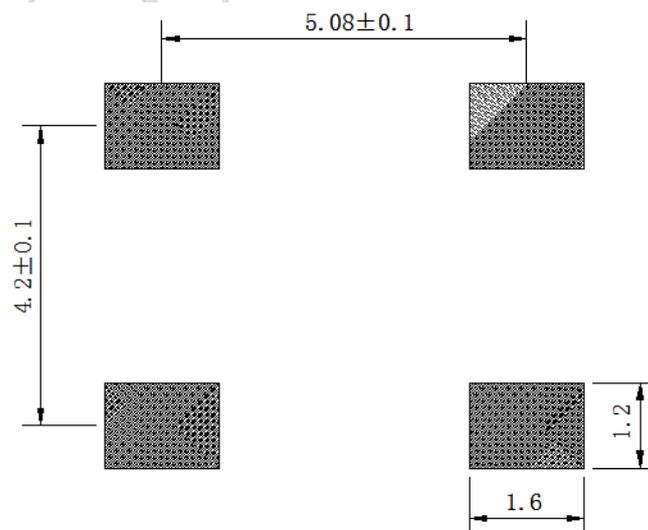
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|--------------------------------------|-----------------------|--|
| | | ±1.0ppm max @-40°C~+85°C |
| | | ±2.0ppm max @-40°C~+85°C |
| Frequency Stability / Supply Voltage | | ±0.2ppm max @Vs±5% |
| Frequency Stability/ Load | | ±0.2ppm max @Load±5% |
| Aging Tolerance Per Day | | ±0.02ppm max |
| Aging Tolerance 1 Year | | ±1.0ppm 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 Control Characteristics | Control voltage Range | 0Vdc ~5.0Vdc (Center voltage=2.5Vdc)@Vs=5.0Vdc |
| | | 0Vdc ~3.3Vdc (Center voltage=1.65Vdc)@Vs=3.3Vdc |
| | Slope | Positive |
| | Linearity | 10% max |
| | Adjustment Range | ±8.0ppm min |
| | Input Impedance | 100KΩ 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°C~+105°C |

● Mechanical Structure(mm)

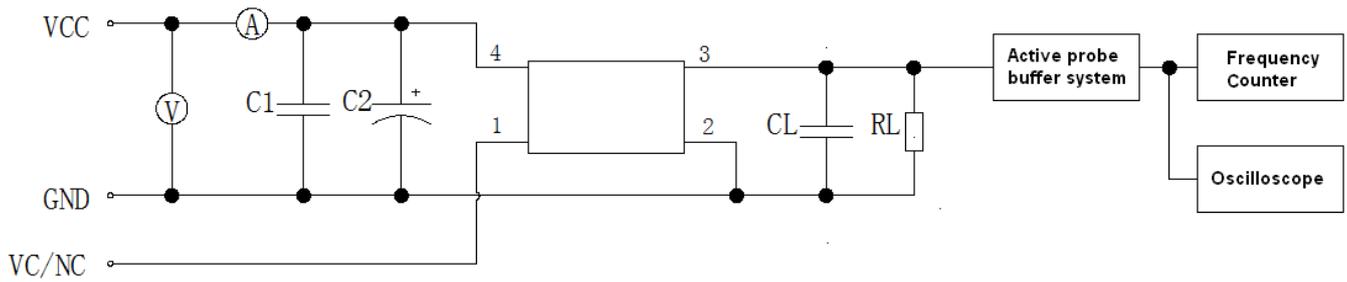


| Pin Connections | |
|------------------|----------------------|
| T1, T2 T3, T4 | NC |
| 1 | VC/NC |
| 2 | Ground |
| 3 | Output |
| 4 | Supply Voltage Input |

● Recommended Pad(mm)

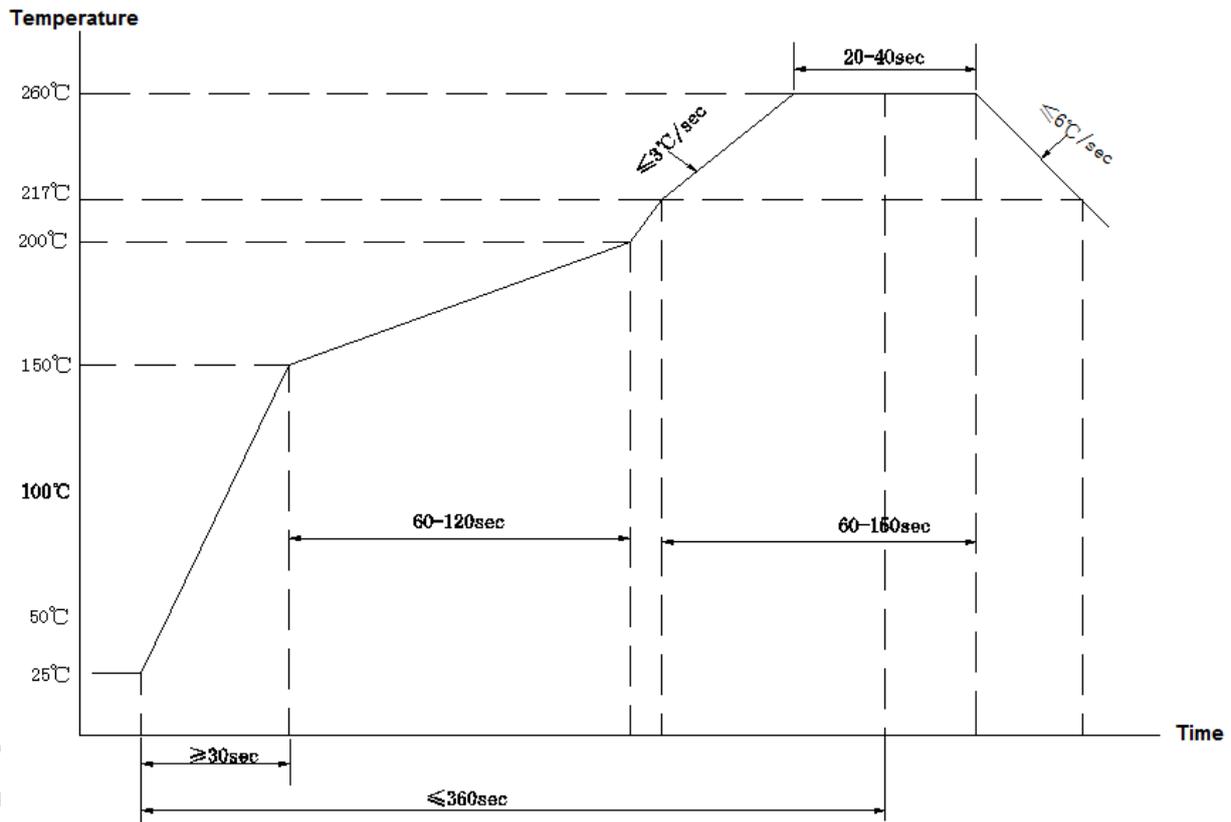


● Testing circuit diagram



Note: C1=0.1 μ F; C2=10 μ F;
 Clipped Sinewave: CL=10pF, RL=10K Ω ;
 Sinewave: CL=NC, RL=50 Ω ;
 HCMOS: CL=15pF, RL=NC;

● Reflow Soldering Curve (RoHS)



● Type Designation Information

