

The VC-TXO-30SM is a VC (Voltage Controlled) TCXO (Temperature Compensated Crystal Oscillator) featuring a very tight stability over a wide temperature range. The miniature SMD ceramic package measures 5.0 x 7.0 x 2.0 mm. The voltage control feature has a frequency control range of ± 5 ppm. The low profile package is ideal for wireless communications applications.

Request a Sample

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS



- Highly stable output
- RoHS Compliant
- Voltage control function
- 5 x 7 mm Footprint

Parameters	Conditions	VC-TXO-30SM			Units
		MIN	TYP	MAX	
Frequency Range		12.600		19.800	MHz
Frequency Tolerance	Typical @+25° ±2°C	-0.5		+0.5	PPM
Frequency Stability	Option A -10 ~ +60°C	-2.0		+2.0	PPM
	Option B -20 ~ +75°C	-2.0		+2.0	PPM
	Option D -30 ~ +80°C	-2.5		+2.5	PPM
Supply Voltage Change	+3V ±5%	-0.2		+0.2	PPM
Load Change	10k Ω ±10%/10pF ±10%	-0.3		+0.3	PPM
Aging	First Year @ +25°C	-1.0		+1.0	PPM
Storage Temperature		-40		+85	°C
Supply Voltage	+3.0V DC Nominal	+2.85		+3.15	V DC
Current Consumption	10k Ω ±10%/10pF ±10%			2.0	mA
Output Voltage	Clipped Sine Wave (DC-Cut)	0.8			Vp-p
Output Load	10k Ω ±10%/10pF ±10%				
Frequency Control		±5.0			PPM
Control Voltage	+1.5 VDC ±1V Positive Slope	0.5		2.5	V
SSB Phase Noise	-120 dBc/Hz @ 1 Khz Offset				
Harmonic Distortion				-3.0	dBc

Ultrasonic or Dip cleaning not to be used.

Preliminary outline drawing. Consult factory for latest revision. (Rev.01/03)

Part Numbering Guide: Example VC-TXO-30SM-B

Series	-	Frequency Abbreviations	-	Frequency Stability
VC-TXO-30SM		128 = 12.800 MHz		A = ± 0.5 PPM -10 ~ +60°C B = ± 2.0 PPM -20 ~ +75°C D = ± 2.5 PPM -30 ~ +20°C

Package Dimensions (mm)

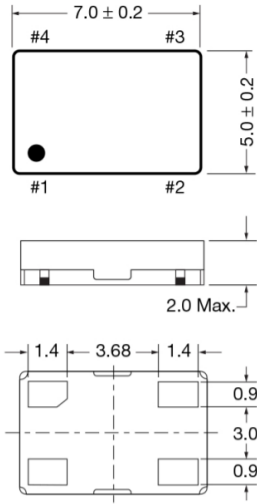


Figure 1) Top, Side, and Bottom views

Pin Connections	
#1	V Control
#2	Ground
#3	Output
#4	V _{CC}

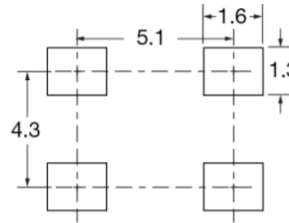


Figure 2) Land Pattern