

The VC-TXO-35SM is a VC (Voltage Controlled) TCXO (Temperature Compensated Crystal Oscillator) featuring very tight stability over a wide temperature range. The small subminiature SMD ceramic package measures 3.2 x 5.0 x 1.5 mm. The voltage control has a tuning range of  $\pm 5$  ppm minimum. The low profile package is ideal for wireless communications applications.

## FEATURES

- Highly stable output
- Wide temperature
- Voltage control function
- Small footprint
- Tape and Reel (1,000 pcs.)
- PbFree/RoHS Compliant

## PART NUMBERING GUIDE

SERIES	FREQUENCY	STABILITY / TEMPERATURE OPTION
VC-TXO-35SM	- 128	- B

Sample Part Number: VC-TXO35SM-128-B, 128=12.8 MHz, B= $\pm 2.5$  ppm -30 to +75°C

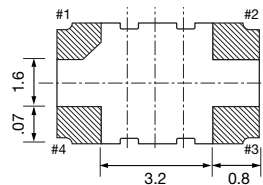
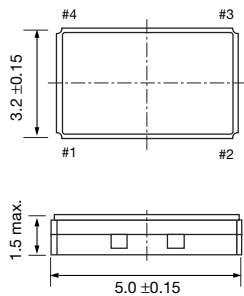
## STANDARD FREQUENCIES

13.000, 14.400, 16.800 AND 19.440 MHz

## OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	VC-TXO-3SM (5V)			UNITS
		MIN	TYP	MAX	
FREQUENCY RANGE		12.000		26.000	MHz
FREQUENCY STABILITY/TEMP	(OPTION A) OPER. TEMP. -20 ~ +75°C			$\pm 1.5$	PPM
	(OPTION B) OPER. TEMP. -30 ~ +75°C			$\pm 2.5$	PPM
	(OPTION C) OPER. TEMP. -20 ~ +75°C			$\pm 2.5$	PPM
	(OPTION D) OPER. TEMP. -30 ~ +80°C			$\pm 2.5$	PPM
SUPPLY VOLTAGE CHANGE	+3.0 V $\pm 5\%$			$\pm 0.3$	PPM
LOAD CHANGE	10k $\Omega$ $\pm 10\%$ / 10pF $\pm 10\%$			$\pm 0.2$	PPM
AGING	Per Year @ +25°C $\pm 3$ °C			$\pm 1$	PPM
STORAGE TEMPERATURE		-40		+85	°C
SUPPLY VOLTAGE	+3.0 V DC Nominal	+2.85	+3.0	+3.15	V DC
INPUT CURRENT	Without Load			1.5	mA
OUTPUT VOLTAGE	Clipped sine wave (DC-Cut)	0.8			Vp-p
OUTPUT LOAD	10k $\Omega$ $\pm 10\%$ / 10pF $\pm 10\%$				
FREQUENCY CONTROL RANGE	+1.5 V DC $\pm 1$ V Positive Slope	$\pm 9$		$\pm 15$	PPM
CONTROL VOLTAGE		+0.5	+1.5	+2.5	V

## PACKAGE DIMENSIONS (mm)



PAD CONNECTIONS	
#1	VCONTROL
#2	GND
#3	OUTPUT
#4	VCC

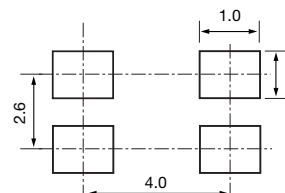


Figure 1) VC-TXO-35SM Top, Side and Bottom views

Figure 2) Land Pattern