

FCom TCXO

Series FVT-5S-HP

High Precision TCXO 5.0×3.2 mm

Feature

- Typical 5.0 x 3.2 x 1.85 mm ceramic SMD package
- $\pm 0.28\text{ppm}$ @ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- $\pm 0.05\text{ppm}$ @ $-10^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- CMOS and Clipped Sine wave output optional

Application

- Base Stations
- Stratum 3
- Femtocell

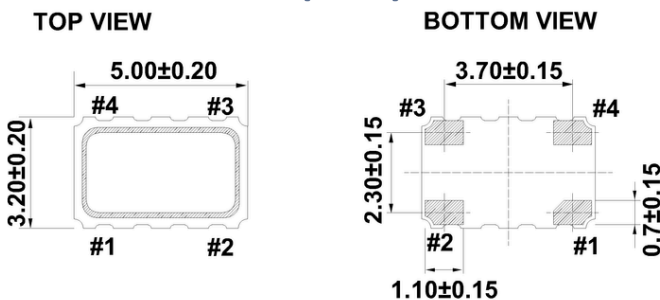


ELECTRICAL SPECIFICATIONS

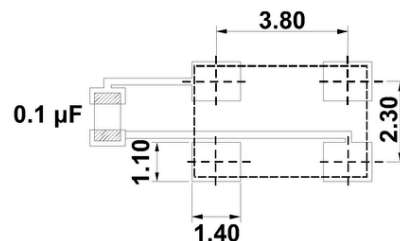
Parameters		Symbol	3.3V		2.5V		Units	Notes
			Min.	Max.	Min.	Max.		
Supply Voltage Variation		Vdd	2.66	3.465	2.375	2.625	V	
Frequency Range		F	10~52				MHz	
Standard Frequency		F	10, 12.8,13, 19.2, 20, 25, 26, 30.72				MHz	
Supply Current (Clipped Sine Wave)		Icc	-	5.0	-	5.0	mA	
Supply Current (CMOS)	10 ≤ Fo ≤ 40 MHz	Icc	-	6.0	-	6.0	mA	
	40 ≤ Fo ≤ 52 MHz		-	8.0	-	8.0		
Frequency Tolerance		Ft	-	±2.0	-	±2.0	ppm	
Frequency stability	vs. Vdd	Fs	-	±0.2	-	±0.2	ppm	±5%
	vs. Load		-	±0.2	-	±0.2		±10%
	vs. Aging		-	±1.0	-	±1.0		@1st year
Control Voltage Range			0.5	2.5	0.4	2.4	V	VCTCXO
Pulling Range			±5.0	-	±5.0	-	ppm	VCTCXO
Vc Input Impedance			100	-	100	-	kΩ	VCTCXO
Phase Noise @ 10 MHz	100 Hz	PN	-125		-125		dBc/Hz	
	1 kHz		-145		-145			
	10 kHz		-150		-150			
Clipped Sine Wave	Output Level	V	0.8	-	0.8	-	V	
	Load	RL // CL	10 KΩ // 10pF				KΩ // pF	
CMOS	Output High	V	90%VDD	-	90%VDD	-	V	
	Output Low	V	-	10%VDD	-	10%VDD	V	
	Load	pF	-	15	-	15	pF	
	Duty	TH/T	45	55	45	55	%	
Start-up Time		Tosc	2				mSec	Max

! Note : The table shows common spec. if you have special spec. requirement , please feel free to contact our salesperson.

DIMENSION(mm)



Solder Pad Layout(mm)



To ensure optimal oscillator performance, place a by-pass capacitor of 0.1μF as close to the part as possible between Vdd and GND pads.

PIN#	Function
1	VCON: VC-TCXO GND/NC: TCXO
2	GND
3	Output
4	VDD

○: Available △: Conditional ×: Not available
 Inclusive of calibration @25°C, operating temperature range, input voltage variation, load variation, aging (1st year), shock, and vibration.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C) \ ppm	± 0.05	± 0.1	± 0.2	± 0.28	± 0.5
@-10~70°C	○	○	○	○	○
@-20~70°C	×	○	○	○	○
@-40~85°C	×	×	△	○	○