

VFTX302

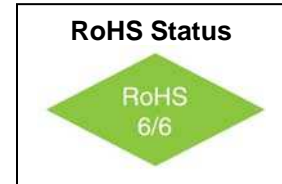
TCXO with Voltage Control Option

5x7mm Surface Mount, Clipped Sine Wave/CMOS



Features

- Frequency range of 10MHz to 40MHz
- Excellent Frequency Stability
- Low Phase noise
- Wide range of pullability options
- Low power consumption



Applications

- Portable equipment
- Telecommunications
- Data acquisition

Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		10 26		40 40	MHz	5V 3V
Frequency Stability	$\Delta F/F$	Vs. Operating Temperature				ppm	See "How to Order"
		Vs. Supply Voltage		± 0.2		ppm/V	Clipped Sine CMOS
		Vs. Supply Voltage Vs. Aging / Year		± 0.3 ± 1		ppm/V ppm	
Operating Temperature Range	T		0° -40°		+70° +85°	°C	Order Code B Order Code G
Output		Clipped Sine	0.8Vp-p minimum				
Load		10K Ω /10pF					
Supply Voltage	V _{cc}	External 150pF decoupling capacitor recommended	4.75 3.15	5.00 3.30	5.25 3.45	V	Order Code D Order Code E
Voltage Control	V _c		0.5 0.5		4.5 2.5	V	
Input Impedance			500K			Ω	
Pullability						ppm	See Ordering Information
Deviation slope		Monotonic positive					
Linearity			-10		+10	%	
Modulation BW			3			KHz	3dB BW
SSB Phase Noise		@100 Hz @ 1 KHz @10 KHz		-115 -135 -150		dBc/Hz	F _o =13MHz
Start up					2	ms	
Supply Current					3.5	mA	Clipped Sine
					10		CMOS



VFTX302

TCXO with Voltage Control Option

5x7mm Surface Mount, Clipped Sine Wave/CMOS



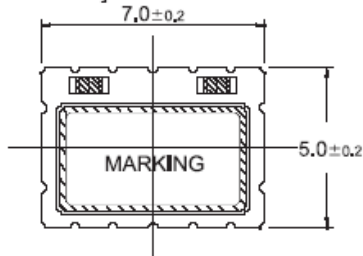
Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Break Down Voltage	V _{cc}		-0.5		6.0	V	
Storage Temperature	T _s		-55°		+125°	°C	
Control Voltage	V _c		-1		9	V	

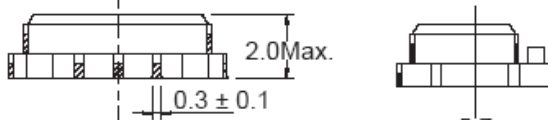
Environmental and Mechanical

Parameter	Specification
Mechanical Shock	Per MIL-STD-202, Method 213, Condition E
Thermal Shock	Per MIL-STD-883, Method 1011, Condition A
Vibration	Per MIL-STD-883, Method 2007, Condition A
Soldering Conditions	260°C for 10s max
Hermetic Seal	Leak rate less than 5x10 ⁻⁸ atm.cc/s of helium (crystal only)

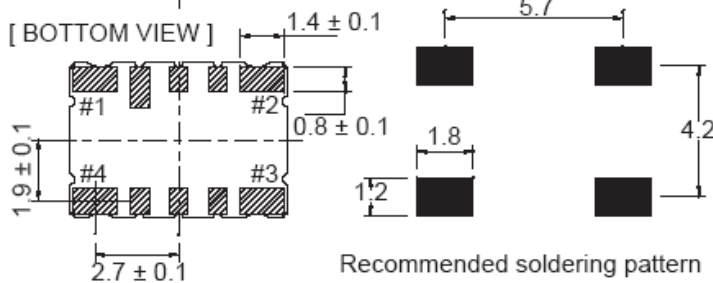
[TOP VIEW]



[SIDE VIEW]



[BOTTOM VIEW]



PIN	Specification
1	V _c or GND
2	GND
3	Output
4	V _{cc}



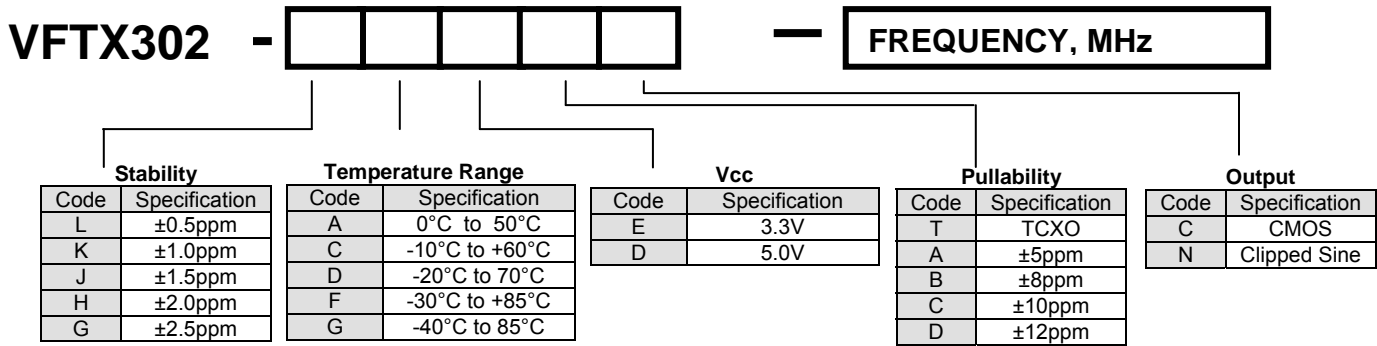
VFTX302

TCXO with Voltage Control Option

5x7mm Surface Mount, Clipped Sine Wave/CMOS



How to Order



Freq. Vs Temp Availability

Temp (°C)	L: ±0.5ppm	K: ±1.0ppm	J: ±1.5ppm	H: ±2.0ppm	G: ±2.5ppm
A: 0°C to +50°C	♦	♦	♦	♦	♦
C: -10°C to +60°C	♦	♦	♦	♦	♦
D: -20°C to +70°C	♦	♦	♦	♦	♦
F: -30°C to +85°C	o	♦	♦	♦	♦
G: -40°C to +85°C	o	o	♦	♦	♦

o case by case
♦ available

