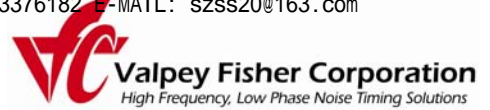


**VFTX301****TCXO with Voltage Control Option****5x3.2mm Surface Mount, Clipped Sine Wave****Features**

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

**RoHS Status**

RoHS  
6/6

**Applications**

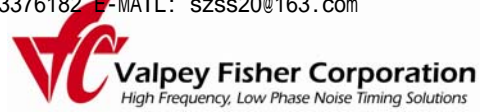
- Portable equipment
- Telecommunications
- Data acquisition

**Electrical Specifications**

Parameter	Sym bol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		10 10		26 40	MHz	5V Vcc 3V Vcc
Frequency Stability	$\Delta F/F$	Vs. Operating Temperature ref to +25°C A: 0°C to +50°C G: -40°C to +85°C			$\pm 0.5$ $\pm 2.5$	ppm	Select max. stability. See "How to Order"
		Vs. Supply Voltage (+/-10%) Vs. Aging / Year		$\pm 0.2$ $\pm 1$		ppm ppm	
Operating Temperature Range	T		0° -40°		+50° +85°	°C	Order Code A Order Code G See "How to Order"
Output			0.8			Vp-p	External 150 pF DC blocking capacitor required
Load		10K $\Omega$ //10pF					
Supply Voltage	Vcc		4.75 2.8	5.00 3.0	5.25 3.3	V	Order Code D Order Code F
Voltage Control	Vc		0.5 0.5		2.5 2.5	V	5.0V Vcc 3.0V Vcc
Input Impedance			500K			$\Omega$	
Pullability		VCTCXO Version	$\pm 5$		$\pm 12$	ppm	See "How to Order"
Deviation slope		Monotonic positive					
Initial Tolerance		TCXO Version			$\pm 2.0$	ppm	@ +25°C, 1hour after reflow



# VFTX301



## TCXO with Voltage Control Option

### 5x3.2mm Surface Mount, Clipped Sine Wave

#### Electrical Specifications

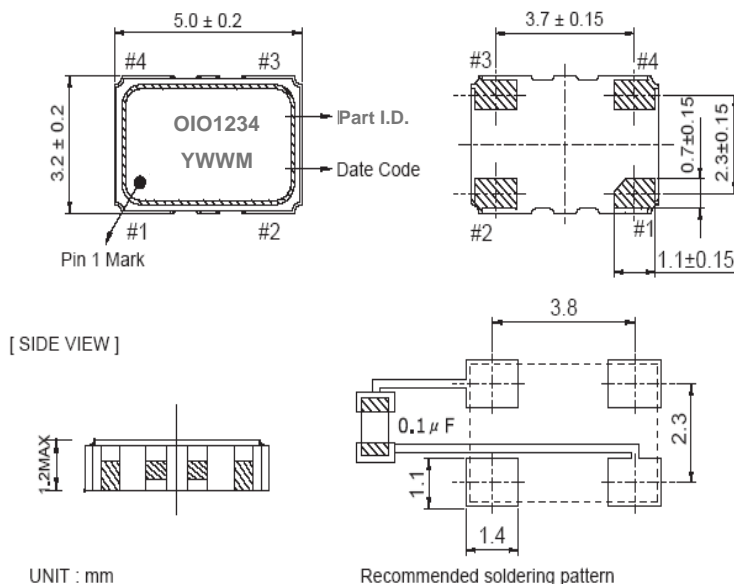
Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Linearity			-10		+10	%	
Modulation BW			3			KHz	3dB BW
SSB Phase Noise		@100 Hz @ 1 KHz @10 KHz		-115 -135 -148		dBc/Hz	Fo=13MHz
Start up					2	ms	

#### Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Break Down Voltage	Vcc		-0.5		6.0	V	
Storage Temperature	Ts		-55°		+125°	°C	

#### 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	230°C for 60s max
Hermetic Seal	Leak rate less than $5 \times 10^{-8}$ atm.cc/s of helium



PAD	Function
1	Vc (VCTCXO) or N/C (TCXO)
2	GND
3	Output
4	Vcc

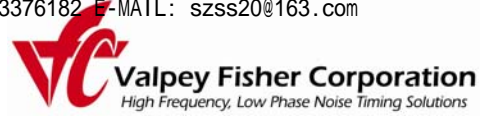
NOTE: External 150 pF series dc blocking capacitor is required at output (pad 3)



# VFTX301

## TCXO with Voltage Control Option

### 5x3.2mm Surface Mount, Clipped Sine Wave



### How to Order



Stability vs. Temp	
Code	Specification
L	±0.5ppm
K	±1.0ppm
J	±1.5ppm
H	±2.0ppm
G	±2.5ppm

Temperature Range	
Code	Specification
A	0°C to 50°C
C	-10°C to +60°C
D	-20°C to 70°C
F	-30°C to +85°C
G	-40°C to 85°C

Vcc	
Code	Specification
F	3.0V
D	5.0V

Pullability		
Code	Specification	Type
T	N/A	TCXO
A	±5ppm	VCTCXO
B	±8ppm	VCTCXO
C	±10ppm	VCTCXO
D	±12ppm	VCTCXO

**\*Freq. Stability Vs Temp Availability (for 10MHz – 26MHz frequency models)**

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

- ♦: Available
- o: Availability dependent on frequency - contact factory
- x: Not available

**\*Note: For 26.000MHz to 40.000MHz frequencies consult factory for availability**

