VFTX300

TCXO with Voltage Control Option

3.2x2.5mm Surface Mount, Clipped Sine

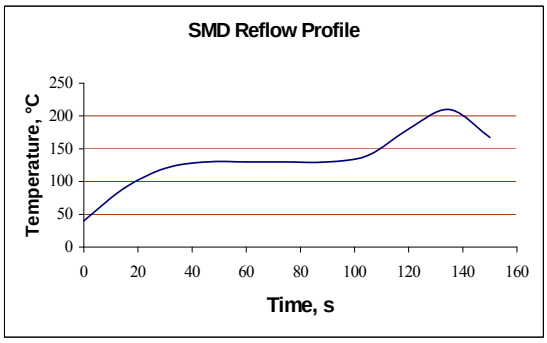
Features

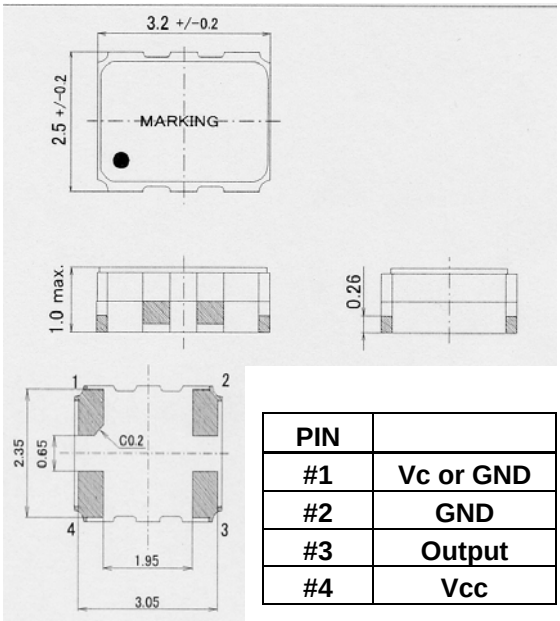
- Frequency range of 10MHz to 40MHz
- Very Low Phase Noise
- Excellent Frequency Stability
- Clipped Sine Wave Output
- Low Aging, Vacuum sealed Crystal
- Available as a VCXO

RoHS 6/6

Applications

- Optical Networking, SONET/SDH
- 10 Gbit Ethernet
- Frequency Translation





PIN	
#1	Vc or GND
#2	GND
#3	Output
#4	Vcc

How to Order

VFTX300 — [ ][ ][ ][ ] — **FREQUENCY, MHz**

Stability

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
G	2.5V

Pulling

Code	Specification
T	TCXO
A	±5ppm
B	±8ppm
C	±10ppm
D	±12ppm
E	±15ppm
F	±18ppm
G	±20ppm

Freq. Vs Temp Availability

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	♦	♦	♦	♦	♦
-30°C to +85°C	o	♦	♦	♦	♦
-40°C to +85°C		♦	♦	♦	♦

o case by case
♦ available

75 South Street, Hopkinton, MA 01748 • 800-982-5737 • 508-435-6831 • FAX 508-435-5289 • www.valpeyfisher.com RevD0909

VFTX300
TCXO with Voltage Control Option
3.2x2.5mm SMD
Clipped Sine Wave

Valpey Fisher Corporation
High Frequency, Low Phase Noise Timing Solutions

Specifications

Parameter	Symb	Condition	Min	Typ	Max	Unit	Note
Absolute Maximum Ratings							
Input Break Down Voltage	Vcc		-0.5		7.0	V	
Storage temp.	Ts		-55		125	° C	
Contr. Voltage	Vc		-1		9	V	
Electrical							
Frequency range	F		10		40	MHz	
Input Voltage	Vcc		2.375 2.8	2.5 3.0	2.625 3.3	V	
Input Current	Icc	50 Ohm Load			2.5	mA	
Frequency Stability	ΔF/F	vs. Temperature vs. Vcc aging	0.5		±5 ±0.2 ±1	ppm ppm/V ppm/year	Refer to selection table
Output	Clipped Sine, 0.8Vp-p minimum						
Load	10KΩ//10pF						
Start up time	Ts			2	10	ms	
SSB Phase Noise		@100 Hz @1 KHz @10 KHz		-115 -135 -150		dBc/Hz	Fo=13MHz
Input Impedance			10				MΩ
Control voltage	Vc		0.5 0.5		4.55 2.5	V	5Vcc 3Vcc

Environmental and Mechanical

Operating temp. range	-20°C to 70°C (-40°C to 85°C available) refer to selection table
Mechanical Shock	Per MIL-STD-202, Method 213, Cond. E
Thermal Shock	Per MIL-STD-883, Method 1011, Cond. A
Vibration	Per MIL-STD-883, Method 2007, Cond. A
Soldering Conditions	230°C for 90s Max
Hermetic Seal	Leak rate less than $5x10^{-8}$ atm.cc/s of helium (crystal only)

Electrical Connections

Pin Out	Pin #1- Voltage Control or GND Pin #3 – Output	Pin #2 - GND Pin #4 - Vcc