

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



Applications

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

Electrical Specifications

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Frequency Range	F		10		40	MHz	
Frequency Stability	$\Delta F/F$	Vs. Operating Temperature				ppm	See "How to Order"
		Vs. Supply Voltage Vs. Aging / Year			± 0.2 ± 1	ppm/V ppm	
Operating Temperature Range	T		-40°		+85°	°C	Order Code G See "How to Order"
Output		Clipped Sine	0.8Vp-p minimum				
Load		10K Ω /10pF					
Supply Voltage	V _{cc}		2.85 2.35	3.0 2.5	3.15 2.625	V	Order Code F Order Code G
Supply Current	I _{cc}				2.0	mA	
Voltage Control	V _c		0.5	1.5	2.5	V	
Input Impedance			500			K Ω	
Pullability						ppm	See "How to Order"
SSB Phase Noise		@100 Hz @ 1 KHz @10 KHz		-115 -135 -148		dBc/Hz	Fo=13MHz
Start up				2	10	ms	

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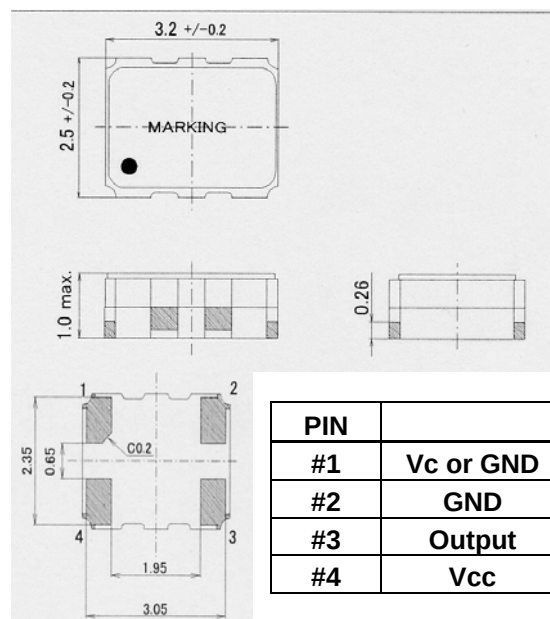
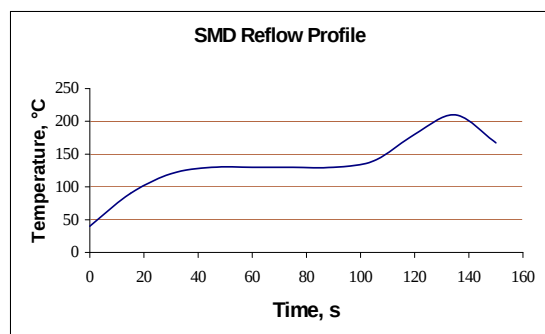
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Absolute Maximum Ratings

Parameter	Symbol	Condition	Min	Typ	Max	Unit	Note
Supply Break Down Voltage	V _{CC}		-0.6		6.0	V	
Storage Temperature	T _s		-55°		+125°	°C	
Control Voltage	V _c		-0.6		V _{CC} +0.6	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	230°C for 90s max
Hermetic Seal	Leak rate less than 5×10^{-8} atm.cc/s of helium (crystal only)



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How to Order

