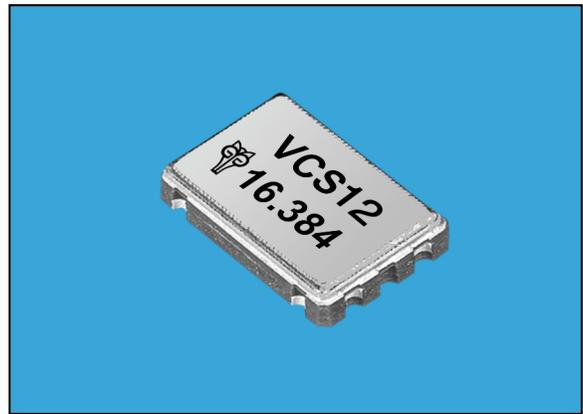


VCXO SMD LOW PROFILE/VOLTAGE CONTROLLED CRYSTAL OSCILLATOR VCSAXT SERIES

The Fox VCS Series VCXO is an SMD, tight stability, voltage controlled oscillator available in a wide range of stability and pullability options. It is intended to be a general purpose VCXO with minimum utilization of board space.

FEATURES

- 3.3 Volt VDD
- HCMOS
- Enable/Disable
- Many Stability/Pullability Options
- -40 ~ +85°C Temp Range Option



ELECTRICAL CHARACTERISTICS (VDD = 3.3V, CL = 15pF)

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)			1.000	45.000 ³ 77.760	MHz
Temperature Range Operating (TOPR)	1.000 ~ 77.760		-10 -40	+70 +85	°C
Storage (TSTG)			-40	+85	
Supply Voltage (VDD)	1.000 ~ 77.760		+3.0	+3.6	V
Control Voltage (Vc)	1.000 ~ 77.760		+0.15	+3.15	V
Input Current (IDD)	1.000 ~ 30.000 30.000+ ~ 45.000 45.000 ~ 77.760			15 25 50	mA
Output Symmetry	1.000 ~ 77.760	1.65V	40	60	%
Rise Time (TR)	1.000 ~ 77.760	0.66V ~ 2.64V		5	nS
Fall Time (TF)	1.000 ~ 77.760	2.64V ~ 0.66V		5	nS
Output Voltage (VOL) (VOH)	1.000 ~ 77.760	IOL = 4.0 mA IOH = -1.0 mA	2.97	0.33	V
Output Current (IOL) (IOH)	1.000 ~ 77.760	VOL = 0.33 V VOH = 2.97V		4.0 -1.0	mA
Output Load	1.000 ~ 77.760	HCMOS		15	pF
Start-up Time (Ts)	1.000 ~ 77.760			10	mS
Enable/Disable Time ⁴	1.000 ~ 77.760			150	nS
Frequency Linearity	1.000 ~ 77.760		-10	+10	%
Modulation Bandwidth	1.000 ~ 77.760		20		kHz

¹ Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, vibration, and Vc=1.65V.

² Available on an individual inquiry basis

³ Custom specifications from 45.000 to 77.760MHz available on an individual inquiry basis.

Note: An alternative pin connection with E/D on pin #5 is available.

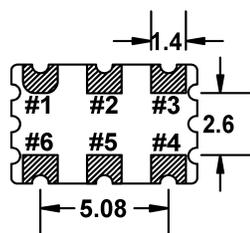
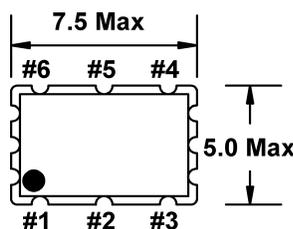
All specifications subject to change without notice. Rev. 11/26/01

MODEL SELECTION

Model Number		Stability (PPM) (MAX) ¹	Pullability (PPM) (MIN) Vc = 1.65 ± 1.5V
-10°C ~ +70°C	-40°C ~ +85°C		
VCS12AXT	VCS12AXTR ²	±25	±50
VCS15AXT	VCS15AXTR	±50	±50
VCS22AXT	VCS22AXTR ²	±25	±100
VCS25AXT	VCS25AXTR	±50	±100
VCS20AXT	VCS20AXTR	±100	±100

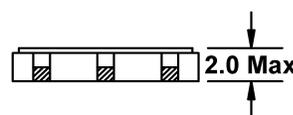
ENABLE / DISABLE FUNCTION⁴

Pin 2	OUTPUT (Pin 4)
OPEN	ACTIVE
≥ 2.7 V	ACTIVE
≤ 0.3 V	High Z

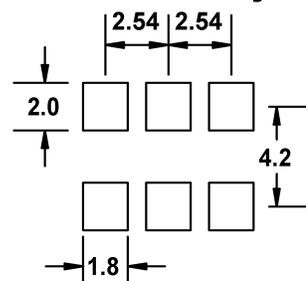


Pin Connections

- #1 V_{Control} #4 Output
#2 E/D #5 N.C.
#3 GND #6 V_{DD}



Recommended Solder Pad Layout



All dimensions are in millimeters.
See page 74 for tape and reel specifications.