3.3V LOW PROFILE SMD VCXO

VCSAXT SERIES

FEATURES

- 3.3V Operation
- HCMOS Output
- Enable/Disable
- Tape and Reel (2,000 pcs. STD)
- Pb Free

OPTIONS

- Many Stability/Pullability Options
- -40ºC ~ +85ºC Option ('R' Version)

• MODEL NUMBER SELECTION

Model Number	Frequency Stability[1]	Frequency Pullability	Operating Temperature (ºC)	Frequency Range (MHz)
VCS12AXT	±25PPM	±50PPM	-10 ~ +70	1.000 ~ 77.760
VCS12AXTR[3]	±25PPM	±50PPM	-40 ~ +85	1.000 ~ 77.760
VCS15AXT	±50PPM	±50PPM	-10 ~ +70	1.000 ~ 77.760
VCS15AXTR	±50PPM	±50PPM	-40 ~ +85	1.000 ~ 77.760
VCS22AXT	±25PPM	±100PPM	-10 ~ +70	1.000 ~ 77.760
VCS22AXTR[3]	±25PPM	±100PPM	-40 ~ +85	1.000 ~ 77.760
VCS25AXT	±50PPM	±100PPM	-10 ~ +70	1.000 ~ 77.760
VCS25AXTR	±50PPM	±100PPM	-40 ~ +85	1.000 ~ 77.760
VCS20AXT	±100PPM	±100PPM	-10 ~ +70	1.000 ~ 77.760
VCS20AXTR	±100PPM	±100PPM	-40 ~ +85	1.000 ~ 77.760

• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	1.000 ~ 77.760[4] MHz
Storage Temperature Range (Tstg)	-40ºC ~ +85ºC
Supply Voltage (Vdd)	3.3V ± 10%
Control Voltage (Vc)	1.65V ± 1.5V
Input Current (Idd)	
1.000 ~ 30.000 MHz	15mA
30.000+ ~ 45.000 MHz	25mA
45.000+ ~ 77.760 MHz	50mA
Output Symmetry (50% Vdd)	40% ~ 60%
Rise Time (10% ~ 90% Vdd) (Tr)	5nS
Fall Time (90% ~ 10% Vdd) (Tf)	5nS
Output Voltage (Vol)	10% Vdd
(Voh)	90% Vdd Min
Output Current (Iol)	4.0mA Min
(Ioh)	-1.0mA Min
Output Load (HCMOS)	15pF
Start-up Time (Ts)	10mS
Enable/Disable Time [2]	150nS
Frequency Linearity	±10%
Modulation Bandwidth	20 kHz

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

[2] An internal pullup resistor from pin 1 to pin 4 allows active output if pin 1 is left open.

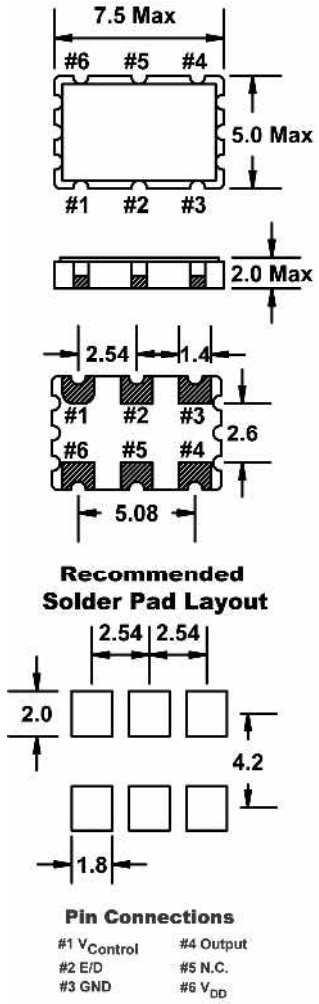
[3] Available on an individual inquiry basis.

[4] Custom specifications from 45.000 to 77.760 MHz available on an individual inquiry basis.

Note: A 0.01µF bypass capacitor should be placed between Vdd (Pin 6) and GND (Pin 3) to minimize power supply line noise.

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

All specifications subject to change without notice. *Rev. 02/10/03*



All dimensions are in millimeters.

• ENABLE / DISABLE FUNCTION

INH (Pin 2)	OUTPUT (Pin 4)
OPEN [2]	ACTIVE
'1' Level VIH ≥ 70% Vdd	ACTIVE
'0' Level VIL ≤ 30% Vdd	High Z

See page 79 for tape and reel specifications.