

3.3V, Low Profile SMD VCXO

Model: VCSAXT Series

RoHS Compliant / Pb Free

Rev. 10/19/2010

Page 1 of 1

FEATURES

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

OPTIONS

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

• PART NUMBER SELECTION [Learn More](#) - Internet Required

Part Number	Model Number	Frequency Stability ¹	Frequency Pullability(Min)	Operating Temperature	Frequency
421-Frequency-xxxxx	VCS12AXT	±25PPM	±50PPM	-10 ~ +70(°C)	1.000~80.000
437-Frequency-xxxxx	VCS12AXTR ³	±25PPM	±50PPM	-40 ~ +85(°C)	1.000~80.000
422-Frequency-xxxxx	VCS15AXT	±50PPM	±50PPM	-10 ~ +70(°C)	1.000~80.000
439-Frequency-xxxxx	VCS15AXTR	±50PPM	±50PPM	-40 ~ +85(°C)	1.000~80.000
423-Frequency-xxxxx	VCS22AXT	±25PPM	±100PPM	-10 ~ +70(°C)	1.000~80.000
443-Frequency-xxxxx	VCS22AXTR ³	±25PPM	±100PPM	-40 ~ +85(°C)	1.000~80.000
424-Frequency-xxxxx	VCS25AXT	±50PPM	±100PPM	-10 ~ +70(°C)	1.000~80.000
445-Frequency-xxxxx	VCS25AXTR	±50PPM	±100PPM	-40 ~ +85(°C)	1.000~80.000
425-Frequency-xxxxx	VCS20AXT	±100PPM	±100PPM	-10 ~ +70(°C)	1.000~80.000
441-Frequency-xxxxx	VCS20AXTR	±100PPM	±100PPM	-40 ~ +85(°C)	1.000~80.000

• ELECTRICAL CHARACTERISTICS

PARAMETERS	MAX (unless otherwise noted)
Frequency Range (Fo)	1.000 ~ 80.000 ⁴ MHz
Storage Temperature Range (T _{STG})	-40°C ~ +85°C
Supply Voltage (V _{DD})	3.3V ± 10%
Control Voltage (V _c)	1.65V ± 1.5V
Input Current (I _{DD})	
1.000 ~ 30.000 MHz	15mA
30.000+ ~ 45.000 MHz	25mA
45.000+ ~ 80.000 MHz	50mA
Output Symmetry (50% V _{DD})	40% ~ 60%
Rise Time (10% ~ 90% V _{DD}) (T _r)	5nS
Fall Time (90% ~ 10% V _{DD}) (T _f)	5nS
Output Voltage (V _{OL})	10% V _{DD}
(V _{OH})	90% V _{DD} Min
Output Current (I _{OL})	4.0mA Min
(I _{OH})	-1.0mA Min
Output Load (HCMOS)	15pF
Start-up Time (T _s)	10mS
Enable/Disable Time ²	150nS
Frequency Linearity	±10%
Modulation Bandwidth	20 kHz

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

² An internal pullup resistor from pin 2 to pin 6 allows active output if pin 2 is left open.

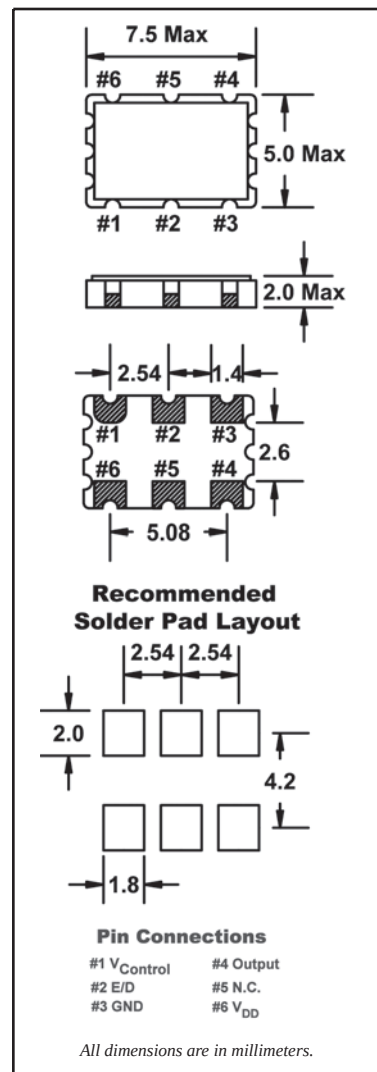
³ Available on an individual inquiry basis.

⁴ Custom specifications from 45.000 to 80.000 MHz available on an individual inquiry basis.

Note: A 0.01μF bypass capacitor should be placed between V_{DD} (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.



• ENABLE / DISABLE FUNCTION

INH (Pin 2)	OUTPUT (Pin 4)
OPEN ²	ACTIVE
'1' Level V _{IH} ≥ 70% V _{DD}	ACTIVE
'0' Level V _{IL} ≤ 30% V _{DD}	High Z

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[VCS22AXTR-32.768kHz](#)