

The ECS-VXO-73 (3.3V) and ECS-VXO-75 (5.0V) are miniature VCXO's Voltage Controlled Crystal Oscillator with tri-state in a ceramic SMD package. The low profile package is ideal for today's advanced portable PC and instrumentation applications.

Request a Sample

### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

#### ECS-VXO-73/ VXO-75



- 3.3V & 5.0V versions
- 1.6 mm profile
- Low power consumption
- Tri-State
- Seam welded package
- Tape & Reel (1,000 pcs standard)
- PbFree/RoHS Compliant

Parameters	Conditions	ECS-VXO-73 (3.3V)			ECS-VXO-75 (5.0V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
<b>Frequency Range</b>		3.000		77.760	3.000		77.760	MHz
<b>Temperature Range</b>	Operating	-10		+70	-10		+70	°C
	Storage	-40		+85	-40		+85	°C
<b>Supply Voltage</b>		+3.14	+3.3	+3.465	+4.75	+5.0	+5.25	V DC
<b>Frequency Stability*</b>	All Conditions			±50			±50	PPM
<b>Frequency Pulling Range</b>		±90			±100			PPM
<b>Control Voltage</b>		0	+1.65	+3.3	+0.5	+2.5	+4.5	V DC
<b>Frequency Linearity</b>	Positive Slope			±15			±10	%
<b>Input Current</b>	No Load			20			40	mA
<b>Output Symmetry</b>	@ ½ V <sub>CC</sub> Level	40/60		60/40	40/60		60/40	%
<b>Rise and Fall Times</b>				5			5	nS
<b>Logic "0" Level</b>				10% V <sub>CC</sub>			10% V <sub>CC</sub>	V DC
<b>Logic "1" Level</b>		90% V <sub>CC</sub>			90% V <sub>CC</sub>			V DC
<b>Load</b>	CMOS			15			15	pF
<b>Start-Up Time</b>				10			10	ms
<b>Modulation Bandwidth</b>	(-3 dB)	10			10			KHz
<b>Disable Time</b>				100			100	ns

\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging shock and vibration.

Note: A 0.01–0.1 μF bypass capacitor should be placed between V<sub>CC</sub> (Pad 6) and GND (Pad 3) for stable oscillation to minimize power line noise.

### Part Numbering Guide: Example ECS-VXO-73-270

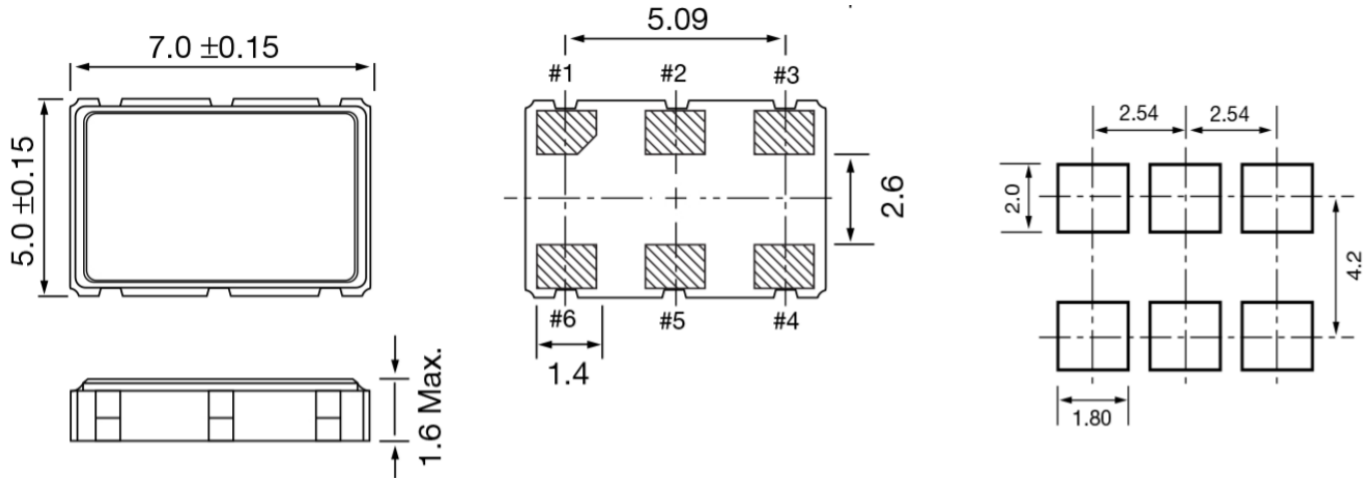
ECS - Series - Frequency Abbreviations

ECS

VXO-73 = +3.3V  
VXO-75 = +5.0V

270 = 27.000 MHz

**Package Dimensions (mm)**



**Figure 1)** Top, Side, and Bottom views

**Figure 2)** Land Pattern

Pin Connections	
#1	V Control
#2	Tri-State
#3	Ground
#4	Output
#5	NC
#6	V <sub>CC</sub>

ECS-VXO-73/VXO-75 Tri-State Control Voltage		
VXO-73, Pad 2	VXO-75, Pad 2	Pad 4
Open	Open	Oscillation
+2.2V Min	+3.5V Min	Oscillation
+0.8V Min	+1.5V Min	High