

The ECS-VXO-143X (Full Size) and ECS-VXO-83X (Half Size) 3.3V Voltage Controlled Crystal Oscillator offers a wide range of pull ranges from  $\pm 50$  ppm to  $\pm 150$  ppm. The ECS-VXO-83 is available with a gull wing option for surface mount applications.

[Request a Sample](#)

### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS



- 3.3V supply voltage
- Wide pull range
- Gull wing option
- PbFree/RoHS Compliant

Parameters	Conditions	VXO-143X/VXO-83X			Units
		MIN	TYP	MAX	
Frequency Range		1.000		52.000	MHz
Frequency Stability *	Option A			$\pm 25$	PPM
	Option B			$\pm 50$	PPM
Operating Temperature		0		+70	$^{\circ}\text{C}$
Storage Temperature		-40		+85	$^{\circ}\text{C}$
Frequency Control Range	Option 1	$\pm 50$			PPM
	Option 2	$\pm 100$			PPM
	Option 3 **	$\pm 150$			PPM
Input Voltage		+2.97	+3.3	+3.63	V DC
Control Voltage		+0.0	+1.65	+3.3	V DC
Input Current				20	mA
Absolute Clock Jitter				$\pm 100$	pS
Symmetry	@ $\frac{1}{2} V_{CC}$ Level	40/60		60/40	%
Rise and Fall Times				5	ns
Output Voltage	VOL			$V_{CC} \times 0.1V$	V DC
	VOH	$V_{CC} \times 0.9V$			V DC
Load			15		pF
Frequency Linearity				$\pm 20\%$	
Start-Up Time				10	ms

\* Inclusive of +25 $^{\circ}\text{C}$  tolerance, operating temperature range, input voltage change and load change.

\*\* Not available at all frequencies

### Part Numbering Guide: Example ECS-VXO-83X-A-2-270

Series - Frequency Stability - Frequency Control - Frequency

ECS-VXO-83X = Half Size  
ECS-VXO-143X = Full Size

A =  $\pm 25$  ppm  
B =  $\pm 50$  ppm

1 =  $\pm 50$  ppm  
2 =  $\pm 100$  ppm  
3 =  $\pm 150$  ppm

270 = 27.000 MHz

**Package Dimensions (mm)**

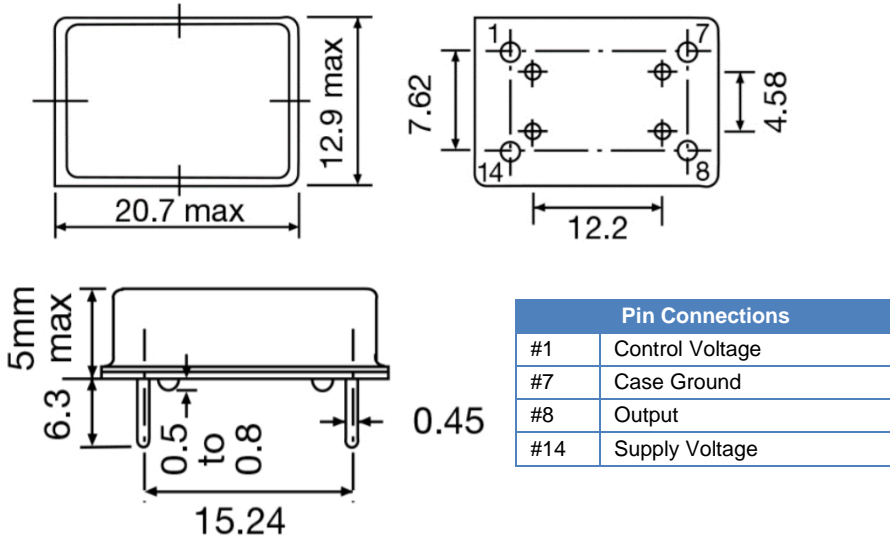


Figure 1) ECS-VC-VXO-143X Top, Side, and Bottom views

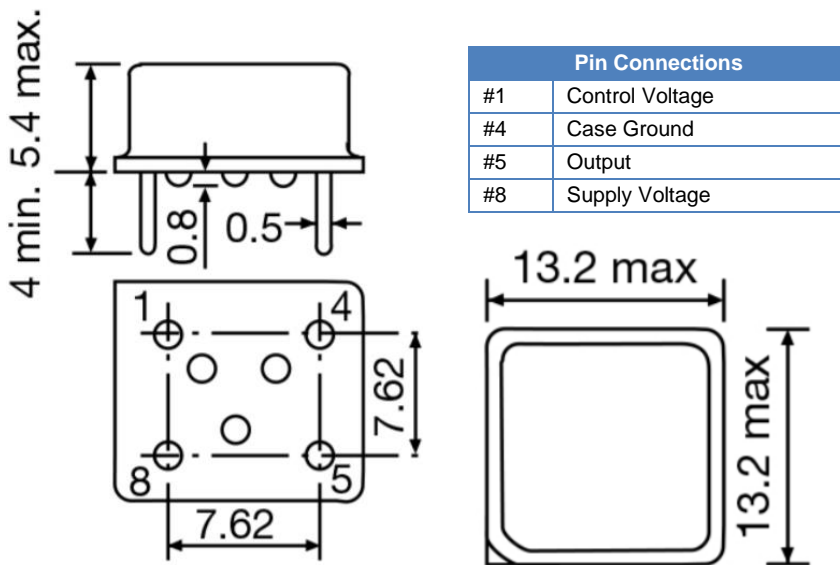


Figure 2) ECS-VC-VXO-83X Top, Side, and Bottom views