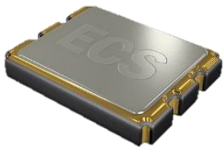


ECS-2532VXO offers a 2.8V and 3.3V version, subminiature SMD VCXO. Ideal for today's high density applications.

Request a Sample

### OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

#### ECS-2532VXO



- Smallest VCXO in the Industry
- 3.2 x 2.5 mm Footprint
- Low current consumption
- PbFree/RoHS Compliant

Parameters	Conditions	ECS-2532VXO (+2.8V)			ECS-2532VXO (+3.3V)			Units
		MIN	TYP	MAX	MIN	TYP	MAX	
Frequency Range		2.000		54.000	2.000		54.000	MHz
Temperature Range	Operating	-10		+70	-10		+70	°C
	Storage	-40		+85	-40		+85	°C
Supply Voltage	VDD	+2.66	+2.8	+2.94	+3.135	+3.3	+3.465	VDC
Frequency Stability* V <sub>CO</sub> = ½ VDD	Option A			±50			±50	PPM
	Option B			±30			±30	PPM
Frequency vs. Input Voltage	VDD ±5%			±5			±5	PPM
Frequency Pulling Range		±90			±90			PPM
Control Voltage	V <sub>CON</sub> = Pin #1	0	+1.4	+2.8	0	+1.65	+3.3	VDC
Frequency Slope	Positive							
Frequency Linearity				15			15	%
Modulation Bandwidth	-3 dB	10			10			KHz
V <sub>CON</sub> input impedance	V <sub>CON</sub> - GND	100K			100K			Ω
Output Symmetry	@ 50% VDD Level			40/60			60/40	%
Rise and Fall Times 20% to 80% VDD Level	2.0 MHz to 10.0 MHz			10			10	ns
	10.1 MHz to 54.0 MHz			6			6	ns
"0" Level	VOL			10% V <sub>DD</sub>			10% V <sub>DD</sub>	VDC
"1" Level	VOH	90% V <sub>DD</sub>			90% V <sub>DD</sub>			VDC
Output Load	CMOS			15			15	pF
Start-Up Time				10			10	ms
Input Current	No Load			5			8	mA
SSB Phase Noise	at 1 KHz offset			-120			-120	dBc/Hz
Aging (first year)	at +25°C ±3°C			±5			±5	PPM

### Part Numbering Guide: Example ECS-2532VXO-270B-2.8

ECS - Series - Frequency Abbreviations - Stability Tolerance - Voltage

ECS

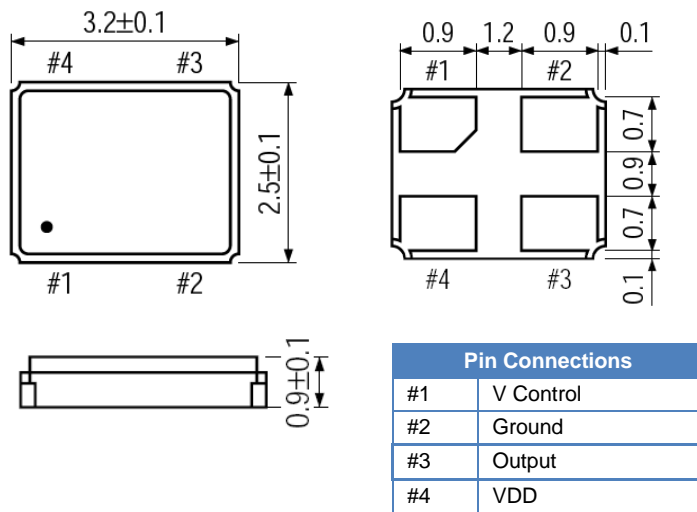
2532VXO

200 = 20 MHz  
270 = 27 MHz  
540 = 54 MHz

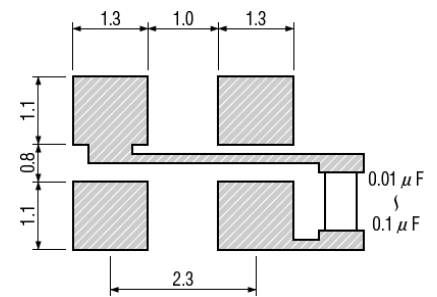
A = ±100 ppm  
B = ±50 ppm

2.8 = +2.8 VDC  
3.3 = +3.3 VDC

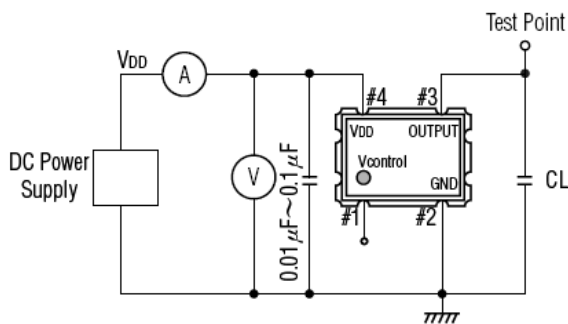
**Package Dimensions (mm)**



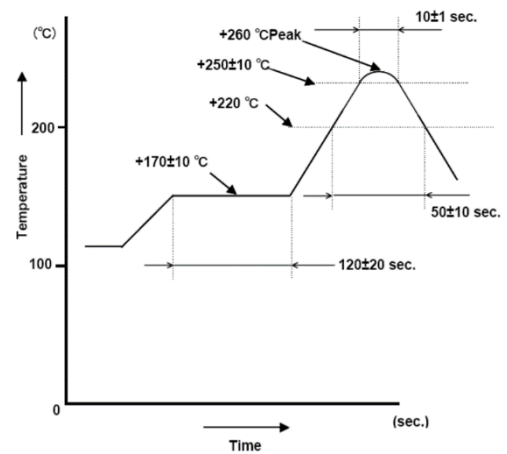
**Figure 1) Top, Side, and Bottom views**



**Figure 2) Land Pattern**

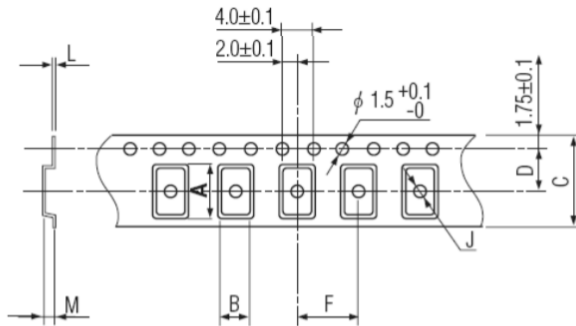


**Figure 3) Test Circuit**



**Figure 4) Suggested Reflow Profile**

**Tape Dimensions (mm)**



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
3.5	2.8	8.0	3.5	4.0	1.1	0.25	1.0	180	1000

**Figure 5) Pocket Tape Dimensions**

Package Data	
Item	Description
Lid	Metal
Base	Ceramic
Sealing	Seam
Terminal	Tungsten (metalized)
Plating	Gold/Nickel (Surface)/(Under)
RoHS	Compliant (PbFree)