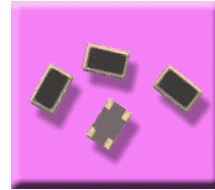


Compatible with Eu Directive  
 2002/EC - RoHS

## ACT531VT- 4 VCTCXO (Clipped Sinewave)

The ACT531VT family is a range of VCTCXOs housed in a ceramic package with a metal lid and is seam welded for good longer term stability. The pads are gold plated and the lid is grounded via the package to assist with EMI reduction.

**Applications** include Networking, Ethernet, Audio & Modem Clocks, Set Top Boxes, Phase Locked Loops, Telecomms, Video Games & many Consumer Applications.

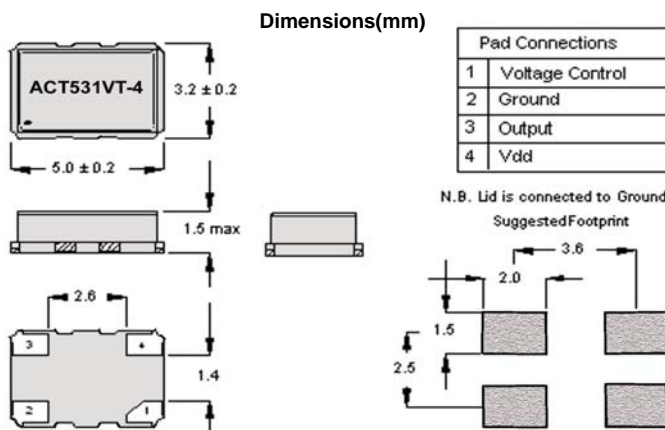


### Specification

Parameter	Symbol	Specification	Options
Supply Voltage	Vcc	3.0VDC ±5%	I 5.0VDC ±5%
Frequency Range	fo		10.00 ~ 40.00 MHz
Temp Operating Range	Topr		0 ~ +50°C, -30 ~ +85°C
Temp Storage Range	Tstg		-40 to +120°C
Frequency Tolerance	Δf/fo		±2.5ppm max at room temp
<b>Frequency Stability</b>			
vs Operating Temp	Δf/fo		Please refer to Table1
vs Input Voltage	Vin		±0.3ppm max for 5% change
vs Load			±0.2ppm max for 5% change
Aging	Fa		±1ppm / year max @25°C
Supply Current (max)	Iop		2mA max
Output Load	N/CL		10KΩ//10pF
Control Voltage Range	Vcont		1.5V ±1.0V
Output Voltage	Vout	0.7V p-p min	I 1.0Vp-p min
Frequency tuning		±3ppm min at control voltage limit & ±10ppm typical	
Slope / Linearity			Positive / 5 or 10% max
Start-up Time	Tosc		4mS max
Harmonics			-3dBc max - 2nd Harmonic -6dBc max - 3rd Harmonic -10dBc max - Other
Phase Noise (Typ)			-80dBc/Hz max @ 10Hz offset -115dBc/Hz max @ 100Hz offset -135dBc/Hz max @ 1KHz offset -140dBc/Hz max @ 10KHz offset -145dBc/Hz max @ 100KHz offset

**Table 1 Frequency stability v temperature.**

	+/-1.5ppm	+/-2.0ppm	+/-2.5ppm	+/-3.0ppm	+/-3.5ppm	+/-4.0ppm	+/-4.5ppm	+/-5.0ppm
0~50°C	+	+	+	+	+	+	+	+
-10~60°C		+	+	+	+	+	+	+
-10~70°C		+	Standard	+	+	+	+	+
-20~70°C			+	+	+	+	+	+
-30~60°C			+	+	+	+	+	+
-30~70°C			+	+	+	+	+	+
-30~75°C			+	+	+	+	+	+
-30~80°C			+	+	+	+	+	+
-30~85°C			+	+	+	+	+	+
-40~80°C			+	+	+	+	+	+
-40~86°C			+	+	+	+	+	+



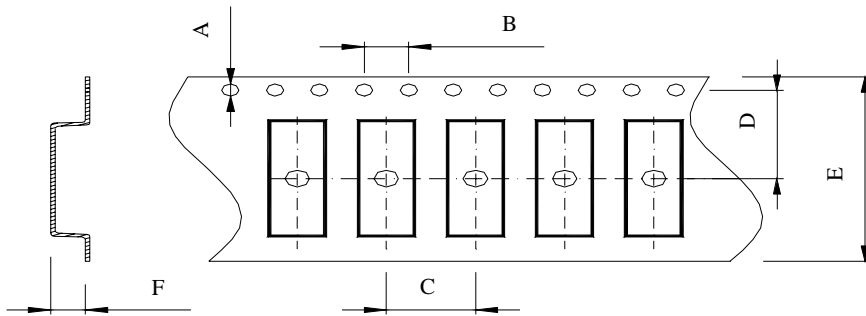
Pad surface material Au

Please note that all parameters can not necessarily be specified in the same device  
 Customer to specify : Frequency, Supply Voltage, Frequency Stability, Operating Temperature Range, Linearity & Packa  
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For quotations or further information please contact us at:  
 3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK  
<http://www.actcrystals.com>

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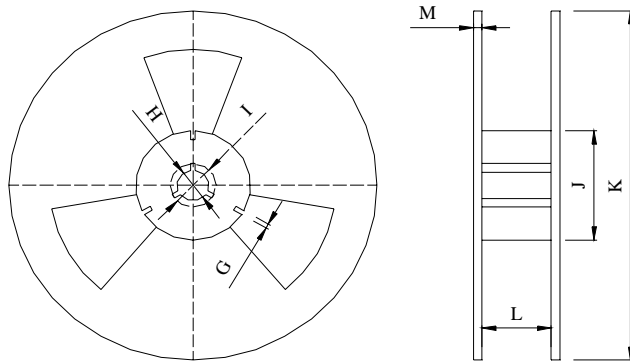
**ACT531VT-4 Tape Dimensions ( Units in mm )**



A	B	C	D	E	F
1.5	4.0	8.0	5.5	12.0	1.5

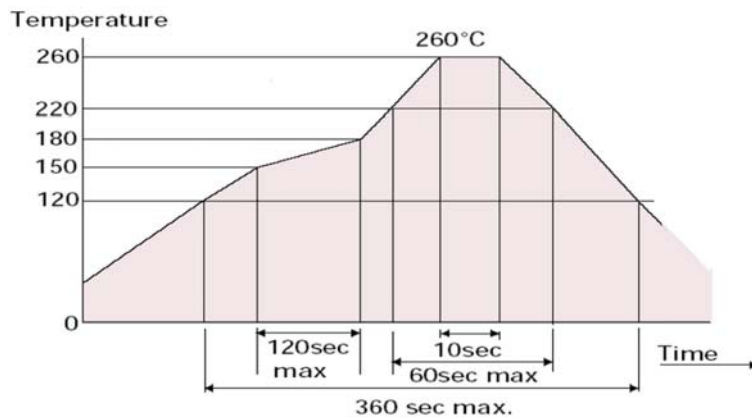
**Reel Dimensions ( Units in mm )**

1,000 piece reels



G	H	I	J	K	L	M
2.5	13.5	21.6	60	178	13.5	1.6

**Maximum reflow profile**



In line with our ongoing policy of product evolution and improvement, the above specification may be subject to change without notice

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