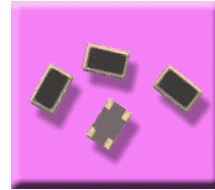


Compatible with Eu Directive
 2002/EC - RoHS

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.



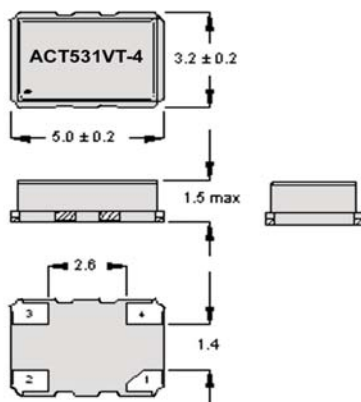
Specification

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
Frequency Stability			
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.

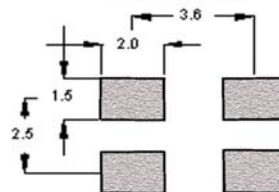
	+/-1.5ppm	+/-2.0ppm	+/-2.5ppm	+/-3.0ppm	+/-3.5ppm	+/-4.0ppm	+/-4.5ppm	+/-5.0ppm
0~50°C	+	+	+	+	+	+	+	+
-10~60°C		+	+	+	+	+	+	+
-10~70°C		+	Standard	+	+	+	+	+
-20~70°C			+	+	+	+	+	+
-30~60°C			+	+	+	+	+	+
-30~70°C			+	+	+	+	+	+
-30~75°C			+	+	+	+	+	+
-30~80°C			+	+	+	+	+	+
-30~85°C			+	+	+	+	+	+
-40~80°C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

Dimensions(mm)



Pad Connections	
1	Voltage Control
2	Ground
3	Output
4	Vdd

N.B. Lid is connected to Ground
 Suggested Footprint



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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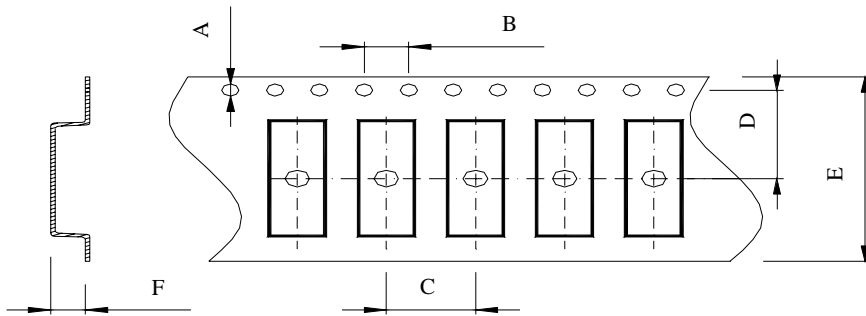
For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

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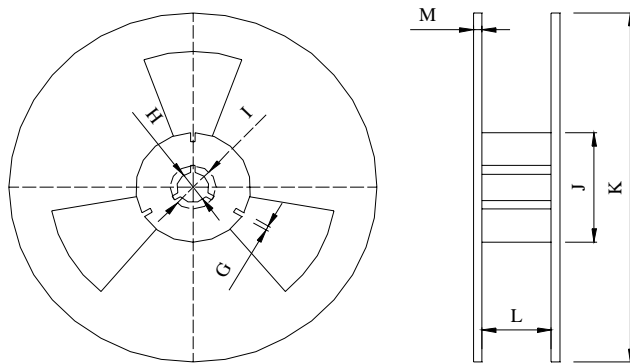
ACT531VT-4 Tape Dimensions (Units in mm)



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

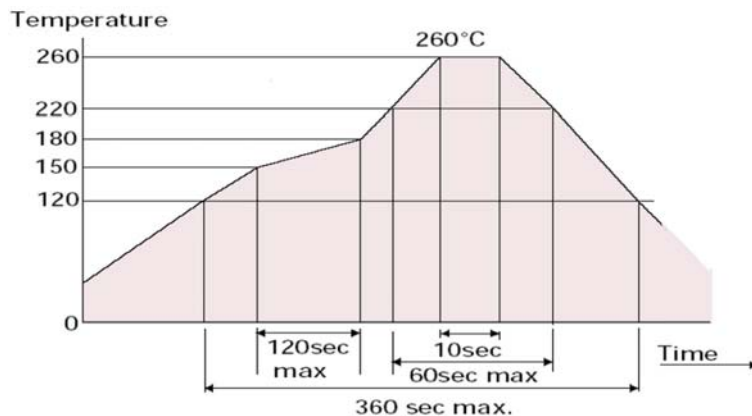
Reel Dimensions (Units in mm)

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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