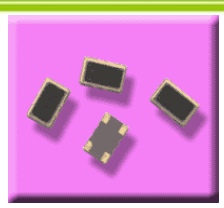
Tel : 0044 (0)118 979 1238
Fax : 0044 (0)118 979 1283
email : info@actcrystals.com

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.

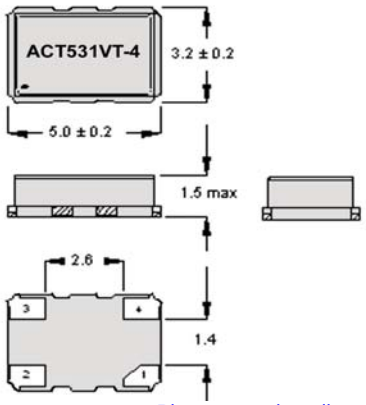
Specification

Parameter	Symbol	Specification	Options
Supply Voltage	Vcc	3.0VDC ±5% | 5.0VDC ±5%	Please specify
Frequency Range	fo	10.00 ~ 40.00 MHz	Please specify
Temp Operating Range	Topr	0 ~ +50°C, -30 ~ +85°C	Please specify
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	Please specify
Output Voltage	Vout	0.7V p-p min | 1.0Vp-p min	
Frequency tuning		±3ppm min at control voltage limit & ±10ppm typical	
Slope / Linearity		Positive / 5 or 10% max	Please specify
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				✦	✦	✦	✦	✦

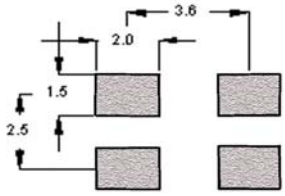
Dimensions(mm)



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 & Packag
ISO9001:2000 Registered

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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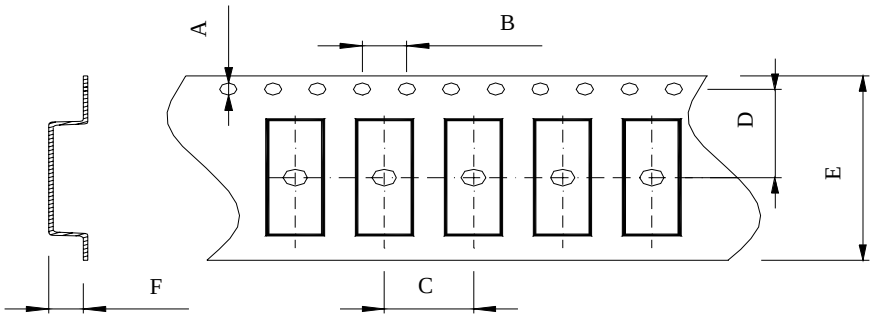
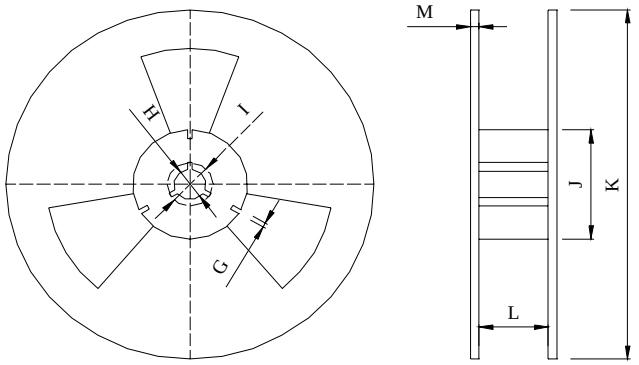
ACT531VT-4 Tape Dimensions (Units in mm)



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

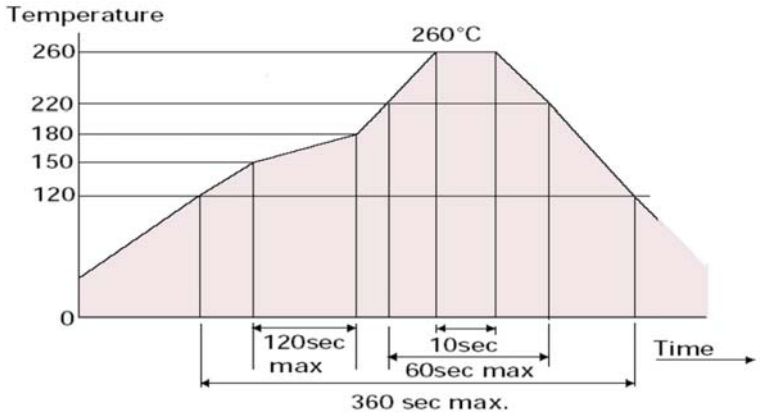
Reel Dimensions (Units in mm)

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 evolvement and improvement, the above specification may be subject to change without notice