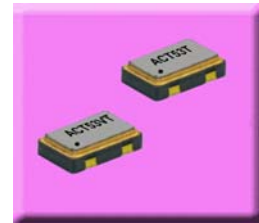


ACT53T- 4 (TCXO) ACT53VT- 4 (VCTCXO)

The ACT53VT 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, WIFI, GPS & many Consumer Applications.



Specification

Parameter	Symbol	Specification	Conditions
Supply Voltage	Vcc	3.0VDC $\pm 5\%$	Please specify
Frequency Range	fo	See table 1	Please specify
Temp Operating Range	Topr	See table 2	Please specify
Temp Storage Range	Tstg	-40 to +85°C	
Initial Calibration Tolerance	$\Delta f/f_0$	$\pm 1.0\text{ppm}$ Typical @ 25°C $\pm 2.0^\circ\text{C}$	
Frequency Stability			
vs Operating Temp	$\Delta f/f_0$	See table below for available stabilities	Please specify
vs Input Voltage	Vin	$\pm 0.3\text{ppm}$ max for 5% change	
vs Load		$\pm 0.3\text{ppm}$ max for 10% change	
Aging	Fa	$\pm 1\text{ppm}$ / year max @ 25°C	
Supply Current (max)	Iop	2mA max	
Output Load	N/CL	Clipped Sine : 0.8V p-p, 10K Ω /10pf Load	
Frequency Tuning Range		$\pm 12\text{ppm}$ Typical	VCTCXO Only (VT53)
Control Voltage Range	Vcont	1.5V ± 1.0	VCTCXO Only (VT53)
Slope Polarity		Positive	VCTCXO Only (VT53)
Linearity		10% max	VCTCXO Only (VT53)
Start-up Time	Tosc	2ms max	
SSB Phase Noise (Typical)		-135dBc/Hz max @ 1KHz offset	(For 13.0Mhz Device)

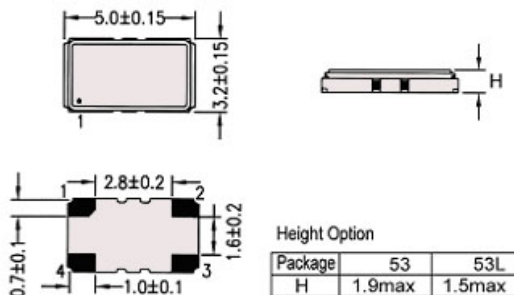
TABLE 1

10MHz, 12.8MHz, 13.0MHz, 14.4MHz, 15.36MHz, 19.2MHz, 19.68MHz
 20MHz, 26MHz

TABLE 2

STABILITY Vs OPERATING TEMPERATURE

Deg C	$\pm 1.0\text{ppm}$	$\pm 1.5\text{ppm}$	$\pm 2.0\text{ppm}$	$\pm 2.5\text{ppm}$	$\pm 3.0\text{ppm}$
0~50	★	★	★	★	★
-10~60	★	★	★	★	★
-20~70		★	★	★	★
-30~75		★	★	★	★



Pad surface
 material Au.

53L is low height option - available to custom order.

Pad Connections:

- Pad 1: NC for TCXO; Voltage Control for VCTCXO
- Pad 2: Ground
- Pad 3: Output
- Pad 4: Supply Voltage

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, Output Type & 53T or 53VT
 ISO9001:2000 Registered

For quotations or further information please contact us at:

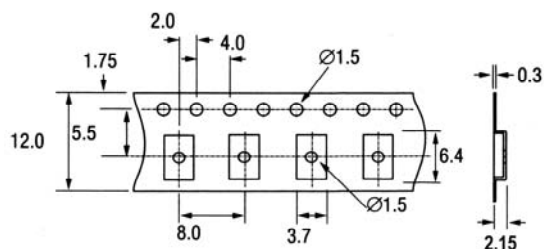
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

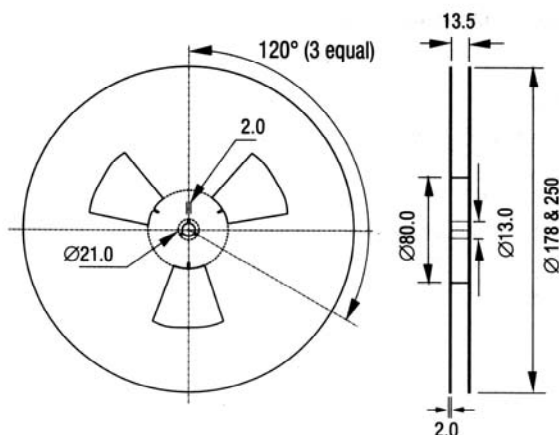
ACT53T / VT -4 TAPE & REEL SPECIFICATIONS

Tape Dimensions (Units in mm)

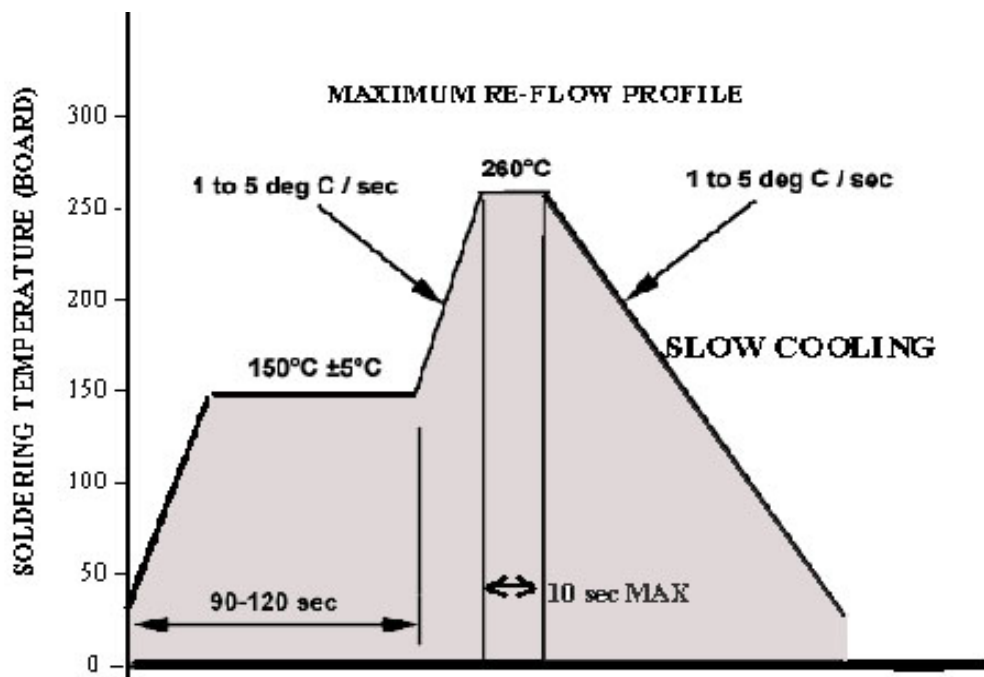
Outline in mm - Tape



Outline in mm - Reel



SOLDERING CONDITIONS



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

ISO9001:2000 Registered

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