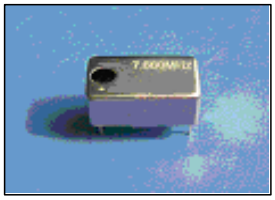
Tel : 0044 (0)118 979 1238
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email : info@actcrystals.com

Compatible with Eu Directive 2002/EC - RoHS

ACT3A01T (TCXO)
ACT3A01VT (VCTCXO)



The ACT3A01T/ VT family is a range of TC/ VCTCXOs housed in through hole packages, with various height options, and provides for high frequency stabilities across a wide operating temperature and supply voltage range. Parts are available with internal trimmer options and clipped sine / sine and square wave outputs. The devices offer good reliability at a low cost and, whilst primarily developed for Telecommunications Applications, they are also very suitable for many other Networking, Set Top Box, Phase Locked Loops, Video Game & many Consumer Applications.

Specification

Parameter	Symbol	Specification	Conditions
Supply Voltage	Vcc	3.0V DC, 5.0VDC & 8.0VDC(±5%)	VCTCXO 3.0 & 5.0V Only
Frequency Range	fo	8.00 ~ 50.00 MHz	Please specify
Temp Operating Range	Topr	See table below for available range	
Temp Storage Range	Tstg	-55 to +85°C	
Initial Calibration Tolerance	Δf/fo	Adjust to the nominal frequency	With internal trimmer
		±1.0ppm Typical @ 25°C ±2.0°C	Without internal trimmer
Frequency Stability			
vs Operating Temp	Δf/fo	See table below for available stabilities	Please specify
vs Change in Vcc	Vin	±0.3ppm for 5% change	
vs Change in Load		±0.3ppm for 10% change	
Aging	Fa	±1ppm / year max @25°C	
Supply Current (max)	Iop	3mA max (Clipped sine), 20mA max (Square wave),10mA max (Sine)	
Output		Clipped sine : 0.8V p~p min, 10KΩ//10pf Load	(
		Sine : 1.0V p~p Minimum	<(Please specify
		Square Wave ; 5TTL / 15pf	(
Harmonic suppression (Sine)		-30dB max	
Non-Harmonic suppression (Sine)		-70dB max	
Frequency Tuning Range (Mech')		±3ppm Typical (25°C ±2.0°C)	By internal trimmer
Frequency Tuning Range (Voltage)		±5ppm ~ ±30ppm, ±15ppm Typical	VCTCXO Only
Control Voltage Range	Vcont	1.5V ±1.0V @ 3.0Vcc, 2.5V ±2.0V @ 5.0Vcc	VCTCXO Only
Slope Polarity		Positive	VCTCXO Only
Linearity		10% max	VCTCXO Only
Start-up Time	Tosc	2ms max	
SSB Phase Noise (Typical)		-135dBc/Hz max @ 1KHz offset	(Typical for 10.0Mhz Device)

STABILITY Vs OPERATING TEMPERATURE
(Referenced to 25°C)

Deg C	±1.0ppm	±1.5ppm	±2.0ppm	±2.5ppm	±3.0ppm	±5.0ppm
-0 ~ +50	★	★	★	★	★	★
-10 ~ +60	★	★	★	★	★	★
-20 ~ +70	★	★	★	★	★	★
-30 ~ +75		★	★	★	★	★
-40 ~ +85					★	★

For package details / options, please see following page.

Please note that all parameters can not necessarily be specified in the same device

Customer to specify : Frequency, Supply Voltage, Frequency Stability, TCXO or VCTCXO (T or VT) & Package 1,2,3 or 4 & Output

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

ISO9001:2000 Registered

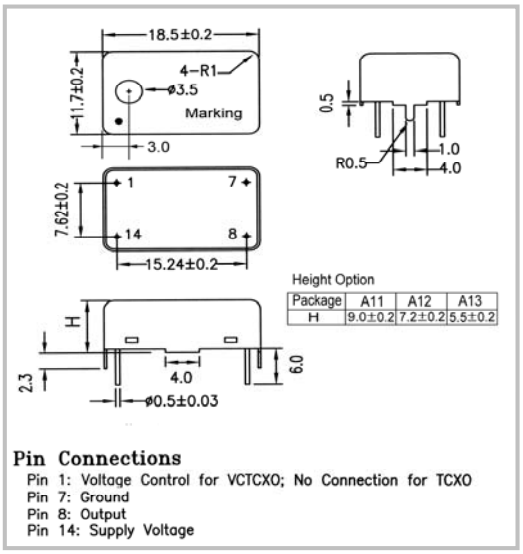
For quotations or further information please contact us at:
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK
http://www.actcrystals.com

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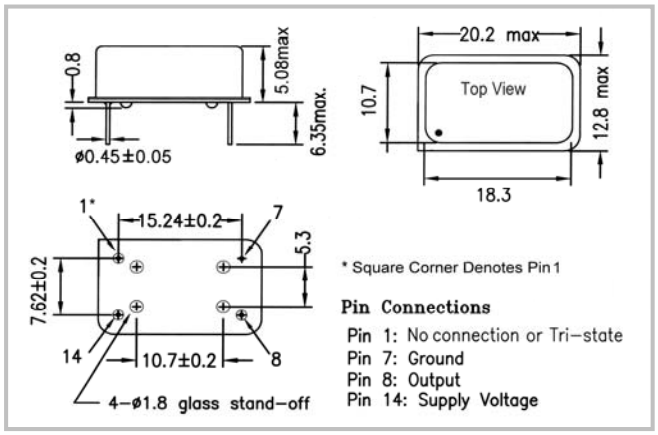
ACT3A01T (TCXO)
ACT3A01VT (VCTCXO)

PACK ONE



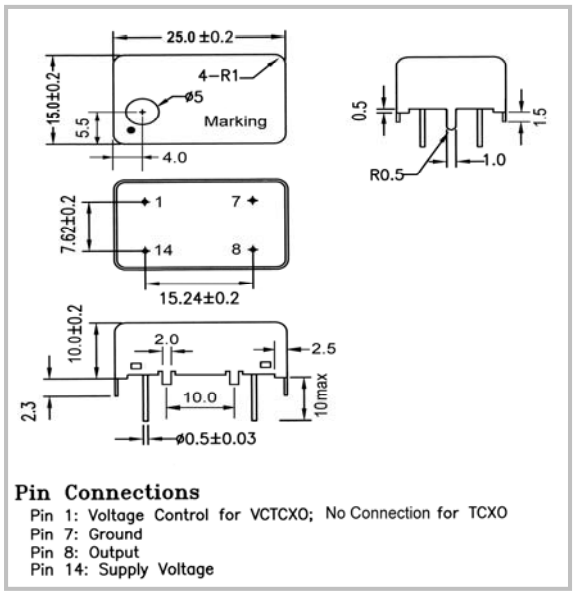
Pin Connections
Pin 1: Voltage Control for VCTCXO; No Connection for TCXO
Pin 7: Ground
Pin 8: Output
Pin 14: Supply Voltage

PACK TWO



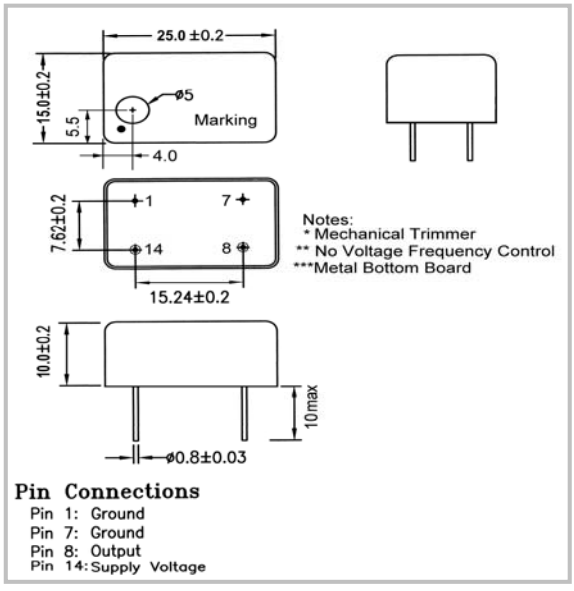
Pin Connections
Pin 1: No connection or Tri–state
Pin 7: Ground
Pin 8: Output
Pin 14: Supply Voltage

PACK THREE



Pin Connections
Pin 1: Voltage Control for VCTCXO; No Connection for TCXO
Pin 7: Ground
Pin 8: Output
Pin 14: Supply Voltage

PACK FOUR



Pin Connections
Pin 1: Ground
Pin 7: Ground
Pin 8: Output
Pin 14: Supply Voltage

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