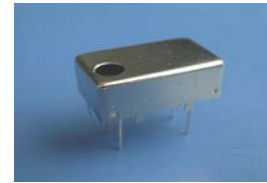


## ACT3A11T (TCXO) ACT3A11VT (VCTCXO)

Compatible with Eu Directive  
 2002/EC - RoHS

The ACT3A11T/VT family is a range of TC/ VCTCXOs housed in a through hole package and provides a high frequency stability across a wide 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 and, whilst primarily developed for Telecommunications Applications, they have been found to be very suitable for many other Networking, Ethernet, Audio & Modem Clocks, Set Top Boxes, Phase Locked Loops, Video Games & many Consumer Applications.



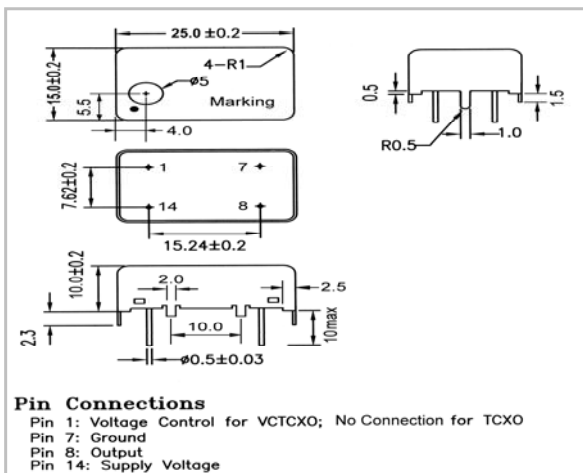
### Specification

Parameter	Symbol	Specification	Conditions
Supply Voltage	Vcc	5.0VDC, 8.0VDC & 12.0VDC ( $\pm 5\%$ )	( 3A11T = 5V0 only )
Frequency Range	fo	10.00 ~ 40.00 MHz	Please specify
Temp Operating Range	Topr	-40 to +85°C	
Temp Storage Range	Tstg	-55 to +85°C	
Initial Calibration Tolerance	$\Delta f/fo$	Adjust to the nominal frequency	With internal trimmer
		$\pm 1.0\text{ppm}$ Typical @ 25°C $\pm 2.0^\circ\text{C}$	Without internal trimmer
<b>Frequency Stability</b>			
vs Operating Temp	$\Delta f/fo$	See table below for available stabilities	
vs Change in Vcc	Vin	$\pm 0.2\text{ppm}$ for 5% change	
vs Change in Load		$\pm 0.2\text{ppm}$ for 10% change	
Aging	Fa	$\pm 1\text{ppm}$ / year max @ 25°C	
Supply Current (max)	Iop	20mA max	
Output	Clipped Sine / Sine : 0.8V p-p min, 10K $\Omega$ /10pf Load		
	Square Wave ; 10TTL / 15pf		
Frequency Tuning Range ( Mech' )		$\pm 3\text{ppm}$ Typical (25°C $\pm 2.0^\circ\text{C}$ )	By internal trimmer
Frequency Tuning Range (Voltage)		$\pm 5\text{ppm}$ ~ $\pm 30\text{ppm}$ , $\pm 15\text{ppm}$ Typical	VCTCXO Only
Control Voltage Range	Vcont	2.5V $\pm 2.0\text{V}$ @ 5v0Vcc	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)

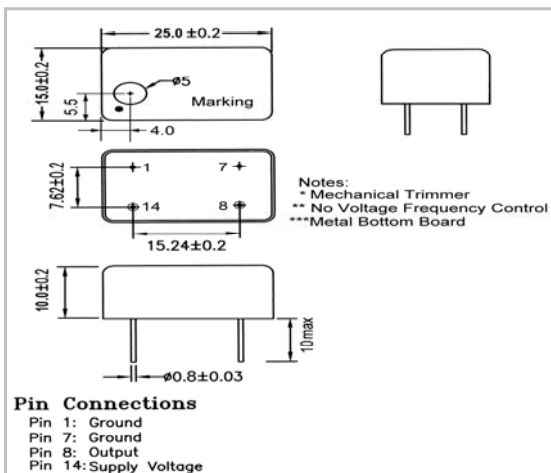
### STABILITY Vs OPERATING TEMPERATURE ( Referenced to 25°C )

Deg C	$\pm 1.0\text{ppm}$	$\pm 1.5\text{ppm}$	$\pm 2.0\text{ppm}$	$\pm 2.5\text{ppm}$
-40 ~ +85	★	★	★	★

#### PACK ONE ( TC/VCTCXO )



#### PACK TWO ( TCXO ONLY )



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 or 2 for TCXO ( Pack 1 = T only )

In line with our ongoing policy of product evolution 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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