

Compatible with Eu Directive
 2002/EC - RoHS

ACTSTE01 - VCTCXO / TCXO

The ACT STE01 is a TCXO/ VCTCXO housed in a Surface Mount package, offering good reliability at reasonable cost across a frequency range of 1.20 to 44.545MHz. Internal (Trimmer) adjustment is available. **Applications** include Communications, Instrumentation, GPS, Measurement and many more. Output is available as TTL/CMOS and Clipped Sinewave.



Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	1.20~44.545MHz 10~35MHz	HCMOS/TTL Please specify Clipped Sine Please specify
Temp Operating Range	Topr	Please refer to Table 1	Please specify
Storage Temp Range	Tstg	,-40 ~ 85°C	
Frequency Stability			
vs Operating Temp.	$\Delta f/fo$	Please refer to Table 1	Please specify
vs Input Voltage	$\Delta f/V_{dd}$	$\pm 0.3\text{ppm max}$	
vs Load	$\Delta f/N_{CL}$	$\pm 0.3\text{ppm max}$	
Aging	Fa	$\pm 1.0\text{ppm max}$	Per year
Supply Voltage	Vdd	3.3VDC $\pm 5\%$ 5.0VDC $\pm 5\%$	Please specify
Supply Current	Iop	20mA max 2mA max	HCMOS/TTL Clipped Sine
Rise and Fall times	tr/tf	5ns max 4ns max	HCMOS/TTL
Voltage Control (pin2)	Vc	1.65Vdc $\pm 1.65\text{V}$ 2.5VDC $\pm 2.0\text{V}$	VCTCXO Only
Linearity/Slope		4% typical 5% max / Positive slope	VCTCXO Only
Frequency Adjustment (pin2)	$\Delta f/V$	$\pm 5\text{ppm}$ or 10ppm min	VCTCXO Only Specify
Output Voltage	Vout	0.8V p-p $\pm 5\%$ 1.0V p-p $\pm 5\%$	Clipped Sine
	VOL	10%of VDD max	HCMOS
	VOH	90%of VDD min	
	VOL	2.4Vdc min	TTL
	VOH	0.4Vdc max	
Mechanical Frequency Adjustment	Δfc	$\pm 3\text{ppm min}$	Internal trimmer
Output Load	N/CL	10TTL/15pF 10K Ω //10pF	HCMOS/TTL Clipped Sine
Duty Cycle		60/40% 55/45% option	HCMOS/TTL Please specify

Table 1

Stability Temp	ppm								
	± 1.0	± 1.5	± 2.0	± 2.5	± 3.0	± 3.5	± 4.0	± 4.5	± 5.0
0 ~ 50°C	*	*	*	*	*	*	*	*	*
-10 ~ 60°C		*	*	*	*	*	*	*	*
-10 ~ 70°C		*	*	*	*	*	*	*	*
-20 ~ 70°C			*	*	*	*	*	*	*
-30 ~ 60°C				*	*	*	*	*	*
-30 ~ 70°C				*	*	*	*	*	*
-30 ~ 75°C				*	*	*	*	*	*
-40 ~ 80°C						*	*	*	*
-40 ~ 85°C						*	*	*	*

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

Customer to specify : Frequency, Output, Supply Voltage, Frequency Stability, Operating Temperature Range, Polarity & Package

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:

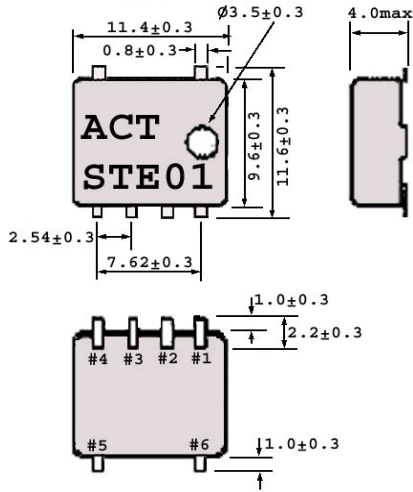
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

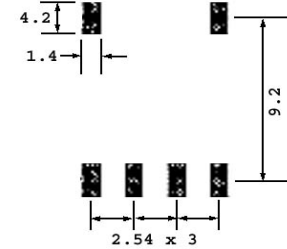
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ACTSTE01 - VCTCXO / TCXO
DIMENSIONS (mm)

Pad Surface Material Au



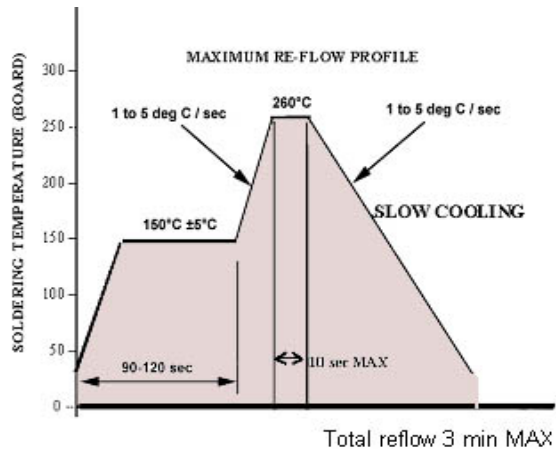
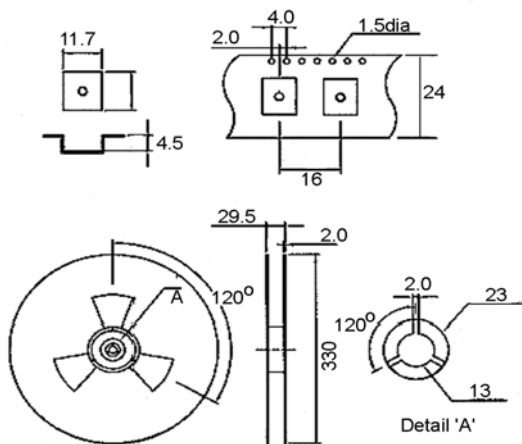
- Pin connection**
- #1 Vdd
 - #2 NC (TCXO)
V Control (VCTCXO)
 - #3 Ground
 - #4 Output
 - #5 Ground
 - #6 Ground



Recommended footprint

TAPE AND REEL DIMENSIONS (mm)
STANDARD REEL SIZE 500PCS

MAXIMUM RECOMMENDED REFLOW



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