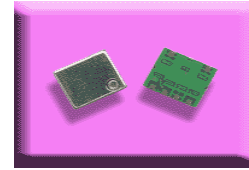


Compatible with Eu Directive  
 2002/EC - RoHS



### ACT381T-4(6) ACT381VT-4(6) TCXO / VCTCXO(Clipped Sinewave)

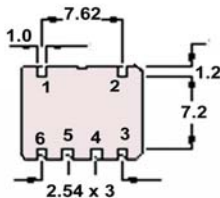
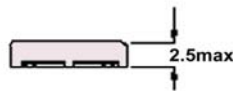
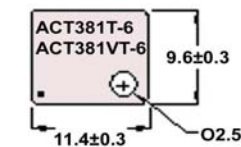
The ACT381 family is a range of four and six pad TCXOs and VCTCXOs housed in a Metal PCB based SMD package. In addition to this data sheet there is a separate TCXO data sheet for a HCMOS/TTL version. It is therefore necessary to select the output and the function to ensure that you receive the correct part. e.g. Clipped Sinewave and TCXO or VCTCXO.

### Specification

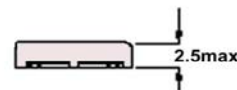
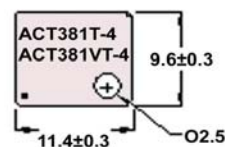
Parameter	Symbol	Specification	Condition
Supply Voltage	Vdd	3.3V <sub>dc</sub> ±5%      5.0V <sub>dc</sub> ±5%	Please specify
Frequency Range	fo	10.00 ~ 30.00 MHz	Please specify
Temp Operating Range	Topr	Please refer to Table 1	Please specify
Storage Temp Range	Tstg	-55 ~ 125°C	
<b>Frequency Stability</b>			
vs Operating Temp	Δf/fo	Please refer to Table 1	Please specify
vs Input Voltage	Vin	±0.3ppm max	
vs Load		±0.3ppm max	
Aging	Fa	±1ppm max Per year	
Supply Current	Iop	3mA max	
Frequency Adjustment	Δf/Vcntrl	±5ppm      ±15ppm	VCTCXO Only
Control Voltage	Vcntrl	1.65V <sub>dc</sub> ±1.35V      2.5V <sub>dc</sub> ±2.0V	VCTCXO Only
Polarity / Linearity		Positive / 5% or 10%	VCTCXO Only
Output Load	N/CL	10KΩ//10pF	
Mechanical Frequency Trimming		±3.0ppm min	Internal Trimmer
Output Voltage	Vout	0.7V p-p      1.0V p-p	

Table 1 Frequency stability v temperature.

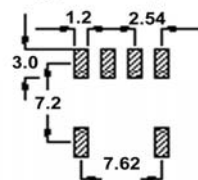
Temp	Stability ppm					
	±1.5	±2.0	±2.5	±3.0	±3.5	±5.0
0 ~ 50°C	✓	✓	✓	✓	✓	✓
-10 ~ 60°C		✓	✓	✓	✓	✓
-20 ~ 70°C			✓	✓	✓	✓
-30 ~ 75°C				✓	✓	✓
-30 ~ 80°C						✓



Pin Connections  
 #1 Ground  
 #2 Ground  
 #3 Output  
 #4 Ground  
 #5 TCXO: No connection  
 VCTCXO: V Control  
 #6 Vdd



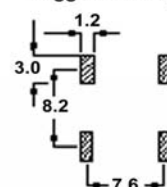
Suggested Footprint



Pad surface material  
 Au

Pin connections  
 #1 TCXO: No connection  
 VCTCXO: V control  
 #2 Ground  
 #3 Output  
 #4 Vdd

Suggested footprint



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

Customer to specify : Outline, Frequency, Output Type, Stability, Operating Temperature Range, Supply Voltage, Tuning Range.  
 In line with our ongoing policy of product evolution and improvement, the above specification may be subject to change without notice

ISO9001:2000 Registered

Issue: 6 D2  
 Date 15/11/05

For quotations or further information please contact us at:

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<http://www.actcrystals.com>