

# A18CVT HCMOS THRU-HOLE VCTCXO

## FEATURES

- Thru-hole package
- Wide frequency range
- Many options available
- Applications: Reference clock, Test equipment,...

18.3 x 11.7 x 4.5 mm



Item	Specification							
Frequency Range	1.0 MHz to 125.0 MHz							
Output Logic	CMOS							
Supply Voltage V <sub>dd</sub> (see options)	+3.3 V ±5%		+5.0 V ±5%					
Supply Current I <sub>dd</sub>	40.0 mA max., frequency dependent							
Frequency Tolerance	±1.0 ppm max. at 25°C ±2°C (one hour after reflow)							
Frequency Stability vs Temperature ( see options )		<b>±0.5 ppm</b>	<b>±1.0 ppm</b>	<b>±1.5 ppm</b>	<b>±2.0 ppm</b>	<b>±2.5 ppm</b>	<b>±3.0 ppm</b>	
	0° to +50°C	o	o	o	o	o	o	
	-10° to +60°C	◇	o	o	o	o	o	
	-20° to +70°C	x	o	o	o	o	o	
	-30° to +75°C	x	◇	o	o	o	o	
	-30° to +85°C	x	◇	◇	o	o	o	
	-40° to +85°C	x	◇	◇	o	o	o	
		o = available	◇ = please contact us			x = not available		
Frequency Stability vs Aging	±1.0 ppm max. per year at 25°C							
Frequency Stability vs Voltage Change	±0.3 ppm max., for a ±5% input voltage change							
Frequency Stability vs Load Change	±0.3 ppm max., for a ±10% load condition change							
Output Level	VOH ≥ 0.9 V <sub>dd</sub>			VOL ≤ 0.1 V <sub>dd</sub>				
Output Load	15 pF							
Symmetry	45 / 55%							
Rise Time / Fall Time Fr / Ff	10 ns max.							
Start-up Time	5 ms typ., 10 ms max.							
Phase noise	Offset / dBc / Hz	<b>10 Hz</b>	<b>100 Hz</b>	<b>1 kHz</b>	<b>10 kHz</b>	<b>100 kHz</b>		
	(typical)							
	<b>10.000 MHz</b>	-95 dBc / Hz	-130 dBc / Hz	-140 dBc / Hz	-145 dBc / Hz	-150 dBc / Hz		
<b>20.000 MHz</b>	-80 dBc / Hz	-120 dBc / Hz	-135 dBc / Hz	-140 dBc / Hz	-145 dBc / Hz			
Mechanical Frequency Tuning (see options)	±3.0 ppm min. tuning							
Voltage Control Function (see options)	<b>Control Voltage Range</b>	Center voltage +1.65 V, range ±1.35V			Center voltage +2.50 V, range ±2.0V			
	<b>Frequency Pulling Range</b>	±5 ppm min. ~ ±10 ppm min.						
	<b>Linearity</b>	10 % max.						
	<b>Slope Polarity</b>	Positive						
<b>Input Impedance</b>	10 kΩ min.							
Packing Unit	100 pcs / box							

**Customer specifications on request**

## OPTIONS & ORDERING INFORMATION

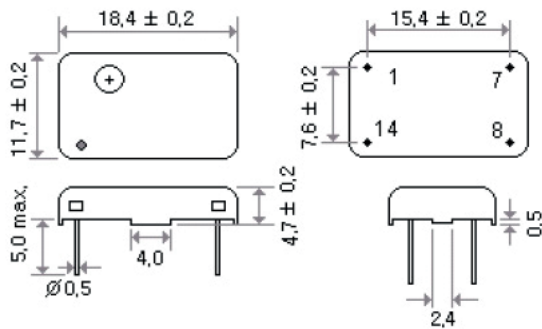
### A18CVT

Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Pulling **	Frequency in MHz	Mechanical Tuning
33 = +3.3V	C = 0° / +50°C	0.5 = ±0.5 ppm	F = No Tri-state	05 = ±5 ppm min.	Please specify the frequency in MHz	-T = Trimmer option
50 = +5.0V	D = -10° / +60°C	1.0 = ±1.0 ppm		10 = ±10 ppm min.		
	F = -20° / +70°C	1.5 = ±1.5 ppm				
	G = -30° / +75°C	2.0 = ±2.0 ppm				
	H = -30° / +85°C	2.5 = ±2.5 ppm				
	K = -40° / +85°C	3.0 = ±3.0 ppm				

(\*) Note : Not all combinations are possible, please consult us.

(\*\*) Other pulling range is available on customer specification.

## OUTLINE DIMENSIONS



### Pin Connections

#1 : Control voltage

#7 : GND

#8: Output

#14 : Vdd