

C18CVT HCMOS SURFACE MOUNT VCTCXO

FEATURES

18.3 x 11.7 x 4.5 mm

- Metal SMD case
- Wide frequency range
- Many options available
- Applications: Reference clock, Test equipment,...



Item	Specification						
Frequency Range	1.0 MHz to 125.0 MHz						
Output Logic	CMOS						
Supply Voltage V _{dd} (see options)	+3.3 V ±5%		+5.0 V ±5%				
Supply Current I _{dd}	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)		±0.5 ppm	±1.0 ppm	±1.5 ppm	±2.0 ppm	±2.5 ppm	±3.0 ppm
	0° to +50°C	0	0	0	0	0	0
	-10° to +60°C	◇	0	0	0	0	0
	-20° to +70°C	x	0	0	0	0	0
	-30° to +75°C	x	◇	0	0	0	0
	-30° to +85°C	x	◇	◇	0	0	0
	-40° to +85°C	x	◇	◇	0	0	0
		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 _{dd}		VOL ≤ 0.1 V _{dd}				
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 (typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
	10.000 MHz	-95 dBc / Hz	-130 dBc / Hz	-140 dBc / Hz	-145 dBc / Hz	-150 dBc / Hz	
	20.000 MHz	-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)	Control Voltage Range	Center voltage +1.65 V, range ±1.35V		Center voltage +2.50 V, range ±2.0V			
	Frequency Pulling Range	±5 ppm min. ~ ±10 ppm min.					
	Linearity	10 % max.					
	Slope Polarity	Positive					
	Input Impedance	10 kΩ min.					
Packing Unit	800 pcs / reel						
Soldering Conditions	260°C, 10 sec x2 max						
	Customer specifications on request						

OPTIONS & ORDERING INFORMATION

C18CVT

Supply Voltage	Operating Temp. *	Temperature Stability*	Tri-state Function	Package Type	Pulling **	Frequency in MHz	Mechanical Tuning
33 = +3.3V	C = 0° / +50°C	0.5 = ±0.5 ppm	F = No Tri-state	4P = 4-pad version	5 = ±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	#2 : GND	#3 : Output	#4 : Vdd
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