

A18CT HCMOS THRU-HOLE TEMPERATURE COMPENSATED CRYSTAL CLOCK OSCILLATOR

FEATURES

- Thru-hole package
- Wide frequency range
- Adjustable Frequency
- 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 _{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)	<table border="1"> <thead> <tr> <th></th> <th>±0.5 ppm</th> <th>±1.0 ppm</th> <th>±1.5 ppm</th> <th>±2.0 ppm</th> <th>±2.5 ppm</th> <th>±3.0 ppm</th> </tr> </thead> <tbody> <tr> <td>0° to +50°C</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-10° to +60°C</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-20° to +70°C</td> <td>x</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-30° to +75°C</td> <td>x</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-30° to +85°C</td> <td>x</td> <td>◇</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-40° to +85°C</td> <td>x</td> <td>◇</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> </tr> </tbody> </table> <p>o = available ◇ = please contact us x = not available</p>		±0.5 ppm	±1.0 ppm	±1.5 ppm	±2.0 ppm	±2.5 ppm	±3.0 ppm	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
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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 F _r / F _f	10 ns max.																																																	
Start-up Time	5 ms typ., 10 ms max.																																																	
Phase noise	<table border="1"> <thead> <tr> <th>Offset / dBc / Hz</th> <th>10 Hz</th> <th>100 Hz</th> <th>1 kHz</th> <th>10 kHz</th> <th>100 kHz</th> </tr> </thead> <tbody> <tr> <td>(typical)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10.000 MHz</td> <td>-95 dBc / Hz</td> <td>-130 dBc / Hz</td> <td>-140 dBc / Hz</td> <td>-145 dBc / Hz</td> <td>-150 dBc / Hz</td> </tr> <tr> <td>20.000 MHz</td> <td>-80 dBc / Hz</td> <td>-120 dBc / Hz</td> <td>-135 dBc / Hz</td> <td>-140 dBc / Hz</td> <td>-145 dBc / Hz</td> </tr> </tbody> </table>	Offset / dBc / Hz	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	(typical)						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																									
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Mechanical Frequency Tuning (see options)	±3.0 ppm min. tuning																																																	
Packing Unit	100 pcs / box																																																	
Customer specifications on request																																																		

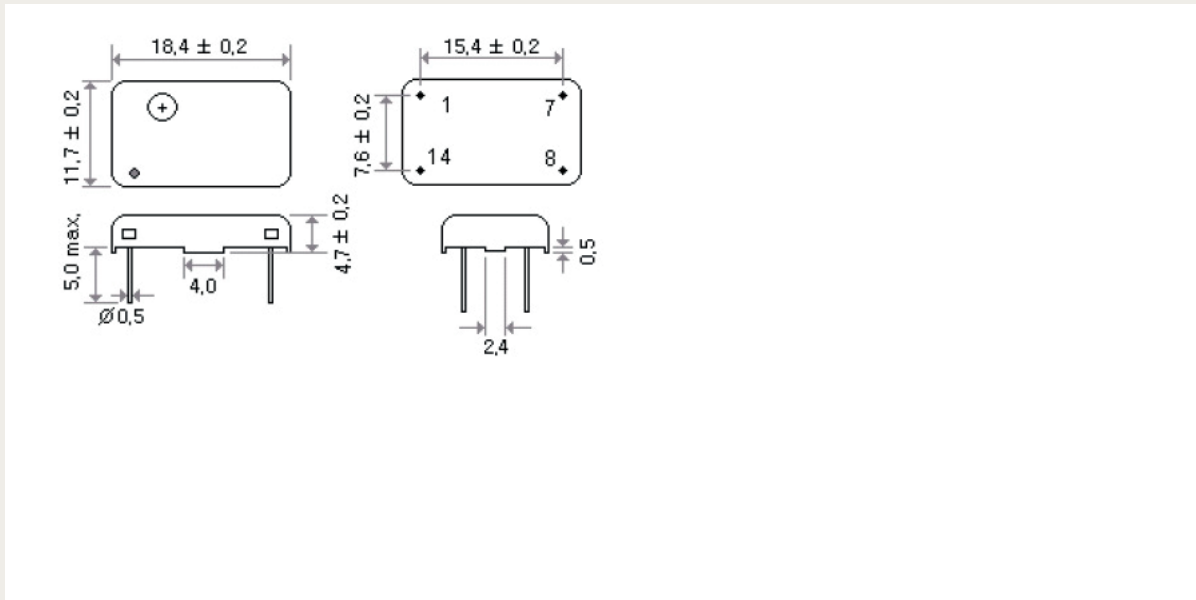
OPTIONS & ORDERING INFORMATION

A18CT

.....	- - MHz
Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Frequency in MHz	Mechanical Tuning
33 = +3.3V	C = 0° / +50°C	0.5 = ±0.5 ppm	F = No Tri-state	Please specify the frequency in MHz	-T = Trimmer option
50 = +5.0V	D = -10° / +60°C	1.0 = ±1.0 ppm			
	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.

OUTLINE DIMENSIONS



Pin Connections

#1 : NC

#7 : GND

#8: Output

#14 : Vdd