

## Datasheet

# SX5CTB HCMOS SURFACE MOUNT TEMPERATURE COMPENSATED CRYSTAL CLOCK OSCILLATOR

## FEATURES

5.0 x 3.2 x 2.3 mm

- Miniature package
- Short Lead time
- Custom frequencies can easily be configured
- Applications: Reference clock, Portable radio equipment,...



Item	Specification						
Frequency Range	1.0 MHz to 200.0 MHz						
Output Logic	CMOS						
Supply Voltage V <sub>dd</sub> (see options)	+2.8 V ±5%	+3.0 V ±5%					+3.3 V ±5%
Supply Current I <sub>dd</sub>	8.0 mA max (25.0 MHz) ; 20.0 mA max (200 MHz)						
Frequency Tolerance	±2.0 ppm 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	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	o
	-30° to +85°C	x	o	o	o	o	o
	-40° to +85°C	x	o	o	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 (typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
	125.0 MHz	-76 dBc / Hz	-102 dBc / Hz	-114 dBc / Hz	-110 dBc / Hz	-100 dBc / Hz	
Packing Unit	1000 pcs / reel						
Soldering Conditions	260°C, 10 sec x2 max						

Customer specifications on request

## OPTIONS & ORDERING INFORMATION

SX5CTB	.....	.....	.....	.....	.....	..... MHz
Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Package Type	Frequency in MHz	
28 = +2.8V	C = 0° / +50°C	0.5 = ±0.5 ppm	F = No Tri-state	4P = 4-pad version	Please specify the frequency in MHz	
30 = +3.0V	D = -10° / +60°C	1.0 = ±1.0 ppm		6P = 6-pad version		
33 = +3.3V	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				

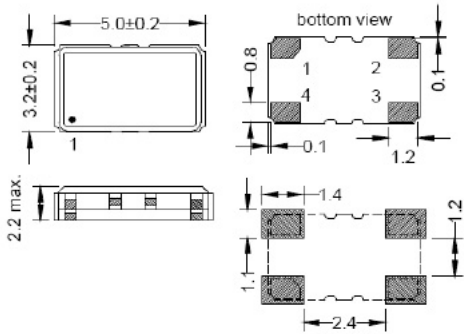
(\*) Note : Not all combinations are possible, please consult us.

Rev. 09-2012

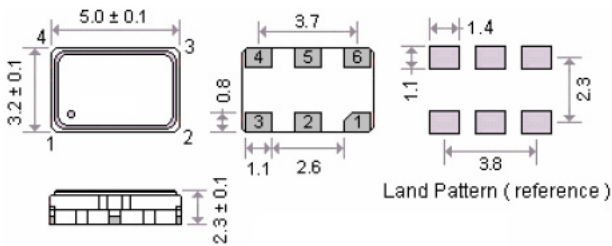
**Datasheet**

**SX5CTB** HCMOS SURFACE MOUNT TEMPERATURE COMPENSATED CRYSTAL CLOCK OSCILLATOR

**OUTLINE DIMENSIONS**



**Pin Connections** #1 : NC #2 : GND #3: Output #4 : Vdd



**Pin Connections** #1 : NC #2 : NC #3: GND #4 : Output #5 : NC #6: Vdd

Rev. 09-2012