

# SX2P

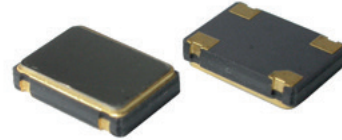
## PROGRAMMABLE HCMOS

## SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

### FEATURES

- Ultra-miniature package
- Performance comparable to fixed frequency oscillator
- One day delivery possible
- Applications: Prototype evaluation, Portable electronics, PC card, ...

2.5 x 2.0 x 0.9 mm



Item	Specification		
Frequency Range			
F1 ( Prime output on pin 3 )	1.0 - 133.0 MHz	1.0 - 166.0 MHz	1.0 - 200.0 MHz
F2 ( Secondary output on pin 1 )	F1 or F1/2 ( See options )		
Supply Voltage Vdd	+1.8V ±5%	+2.5V ±5%	+3.3V ±5%
Supply Current Idd	10 mA max	15 mA max	20 mA max
Output Logic	CMOS		
Overall Frequency Stability *	± 20 ppm ~ ± 100 ppm ( see options )		
Operating Temperature Range	0 ~ +70 °C commercial application (see options) -40 ~ +85 °C industrial application (see options)		
Output Level	VOH ≥ 0.9 Vdd	VOL ≤ 0.1 Vdd	
Output Load	15 pF		
Symmetry	45 / 55 %		
Rise Time / Fall Time Fr/Ff	2 ~ 8 ns		
Tri-state Enable ( See options )	pin #1 = high or open pin #1 = low	pin #3 = oscillation pin #3 = high impedance	
Tri-state Power Down( See options )	pin #1 = high or open pin #1 = low	pin #3 = oscillation pin #3 = low output	
Disable Stand-by current	8 mA max		
Disable Power Down current	10 µA max		
Start-up Time	5 ms max.		
Period Jitter peak-to-peak **	70 ps typ.		
Packing Unit	3000pcs / reel		
Soldering Condition	260 °C , 10 sec x2 max		
	<b>Customer specifications on request</b>		

(\*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

(\*\*) Jitter and Phase Noise performance depends on programming parameter and output frequency

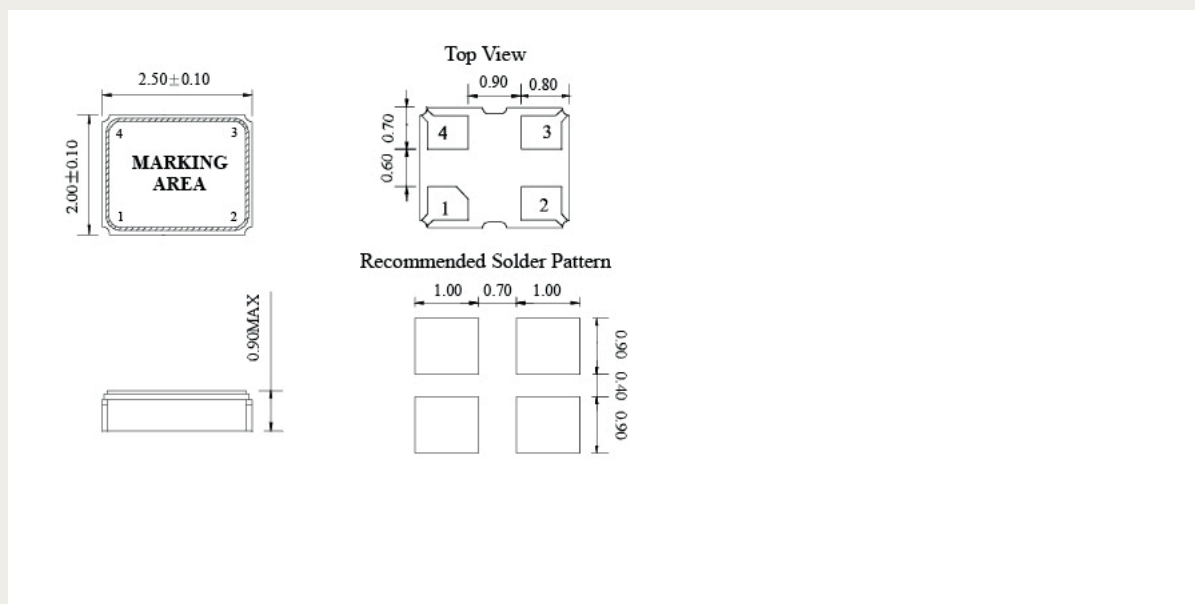
## OPTIONS & ORDERING INFORMATION

### SX2P

Supply Voltage	Operating Temp. *	Overall Stability *	PIN1	Output Load *	Frequency in MHz
18 = +1.8V	E = 0° / +70°C	20 = ±20 ppm	E = Tri-state Enable	Blanc = 15 pF	Please specify the frequency in MHz
25 = +2.5V	F = -20° / +70°C	25 = ±25 ppm	B = Tri-state Power Down		
33 = +3.3V	K = -40° / +85°C	30 = ±30 ppm	OF1 = F1		
		50 = ±50 ppm	OF2 = F1/2		
		100 = ±100 ppm			

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

## OUTLINE DIMENSIONS



<b>Pin Connections</b>	#1 : E/D or Output F2	#2 : GND	#3 : Output F1	#4 : Vdd
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