

# SX2HK

## HCSSL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

### FEATURES

- Ultra Miniature package
- Ultra-low Jitter , 0.2 ps typ.
- High performance
- NO PLL

2.5 x 2.0 x 1.0 mm



Item	Specification
Frequency Range	13.5 MHz~200 MHz
Output Logic	HCSL
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)
Supply Voltage Vdd	+1.8V ±5%      +2.5V ±5%      +3.3V ±10%
Supply Current Idd	22 mA typ.; 30 mA max.
Output Voltage HIGH VOH	400 mV min. , 850 mV max.
Output Voltage LOW VOL	-150 mV min. , 150 mV max.
Output Load	50 ohm to GND
Symmetry	45/55%
Rise Time / Fall Time Fr/Ff	0.3 ns typ. ; 0.6 ns max.
Tri-state function	pin #1 = high or open      pin #4 - #5 ==> oscillation pin #1 = low      pin #4 - #5 ==> high impedance
Start-up Time	3 ms typ. ; 10 ms max.
Integrated Phase Jitter (12 kHz to 20 MHz band)	0.2 ps typ. , 0.5 ps max
Phase Noise (typical)	<b>Offset</b> <b>Frequency 125.000 MHz</b> 100 Hz      -82 dBc / Hz 1 kHz      -116 dBc / Hz 10 kHz      -138 dBc / Hz 100 kHz      -144 dBc / Hz 1 MHz      -149 dBc / Hz 10 MHz      -155 dBc / Hz
Packing Unit	1000pcs / 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

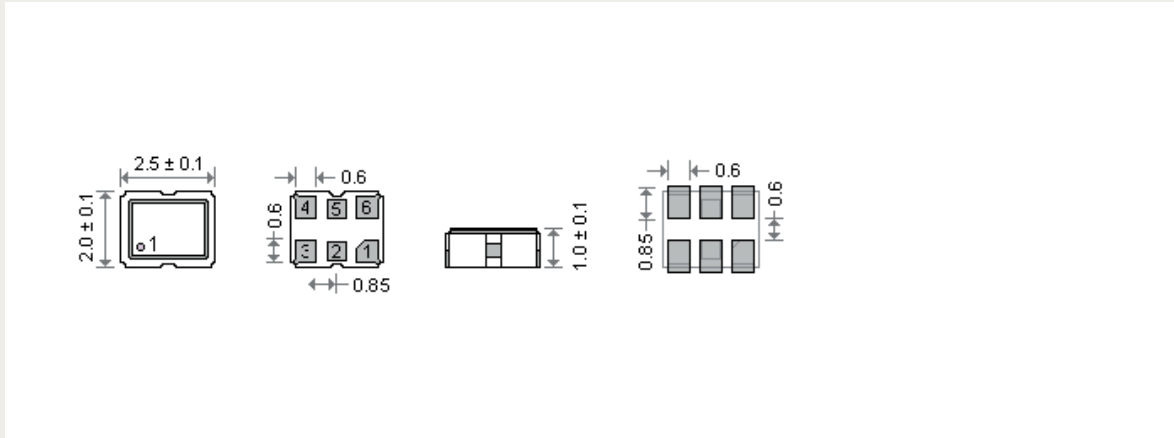
## OPTIONS & ORDERING INFORMATION

### SX2HK

.....	.....	.....	..... -	..... MHz
Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Frequency in MHz
18 = +1.8V	E = 0°/+70°C	20 = ±20 ppm	E = Tri-state	Please specify the frequency in MHz
25 = +2.5V	F = -20°/+70°C	25 = ±25 ppm		
33 = +3.3V	K = -40°/+85°C	30 = ±30 ppm		
		50 = ±50 ppm		
		100 = ± 100ppm		

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

## OUTLINE DIMENSIONS



### Pin Connections

#1 : E/D

#4 : Output

#2 : NC

#5 : Complementary output

#3: GND

#6: Vdd