

SX2EK

LVPECL 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	LVPECL														
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	+2.5V ±5% +3.3V ±10%														
Supply Current Idd	30 mA typ.; 50 mA max.														
Output Voltage HIGH VOH	Vdd -1.03 V min. ; Vdd -0.6 V max														
Output Voltage LOW VOL	Vdd -1.85 V min. ; Vdd -1.6 V max														
Output Load	50 ohm into Vdd-2V														
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)	<table border="0"> <thead> <tr> <th>Offset</th> <th>Frequency 125.000 MHz</th> </tr> </thead> <tbody> <tr> <td>100 Hz</td> <td>-82 dBc / Hz</td> </tr> <tr> <td>1 kHz</td> <td>-116 dBc / Hz</td> </tr> <tr> <td>10 kHz</td> <td>-138 dBc / Hz</td> </tr> <tr> <td>100 kHz</td> <td>-144 dBc / Hz</td> </tr> <tr> <td>1 MHz</td> <td>-149 dBc / Hz</td> </tr> <tr> <td>10 MHz</td> <td>-155 dBc / Hz</td> </tr> </tbody> </table>	Offset	Frequency 125.000 MHz	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
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10 MHz	-155 dBc / Hz														
Packing Unit	1000pcs / reel														
Soldering Condition	260°C , 10 sec x2 max														
	Customer specifications on request														

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

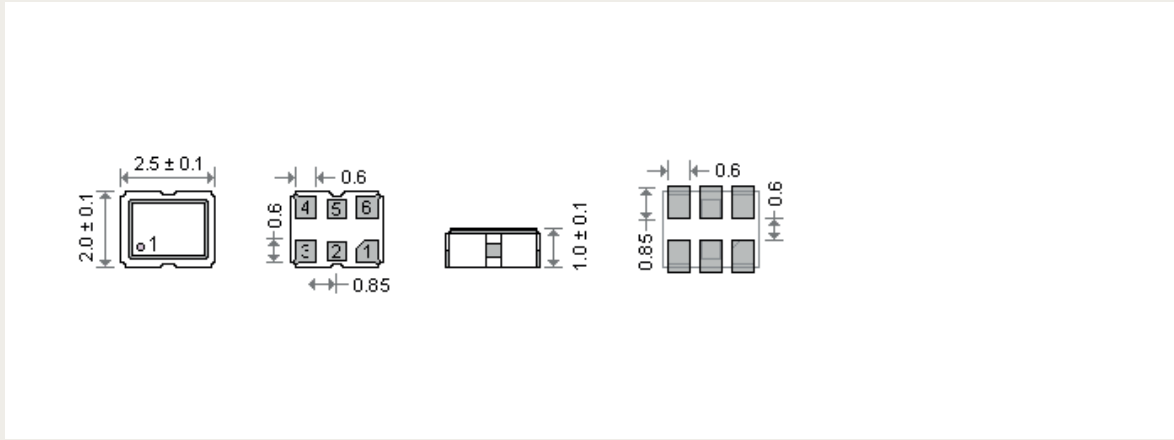
OPTIONS & ORDERING INFORMATION

SX2EK

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

* 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