

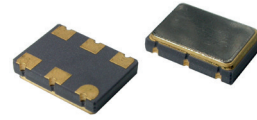
# SX5EK

# LVPECL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

## FEATURES

- Standard miniature package
- Ultra-low Jitter, 0.2 ps typ.
- Wide Temperature Range
- NO PLL

5.0 x 3.2 x 1.3 mm



Item	Specification	
Frequency Range	13.5 MHz ~ 200 MHz	
Output Signal	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)	
	-40 ~ +105 °C industrial application (see options)	
Supply Voltage Vdd	+2.5V ±5%	+3.3V ±5%
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. ; 0.5 ns max.	
Tri-state function	pin #1 = high or open pin #1 = low	pin #4 - #5 ==> oscillation pin #4 - #5 ==> high impedance
Start-up Time	3 ms typ. ; 10 ms max.	
RMS Phase Jitter (12 kHz to 20 MHz)	0.2 ps typ. , 0.5 ps max	
Phase Noise (typical)	<b>Offset</b>	<b>Frequency 100.000 MHz</b>
	10 Hz	-70 dBc / Hz
	100 Hz	-97 dBc / Hz
	1 kHz	-122 dBc / Hz
	10 kHz	-138 dBc / Hz
	100 kHz	-144 dBc / Hz
	1 MHz	-149 dBc / Hz
10 MHz	-154 dBc / Hz	
Packing Unit	1000pcs / reel	
Soldering Condition	260 °C , 10 sec x2 max	
	<b>Customer specifications on request</b>	

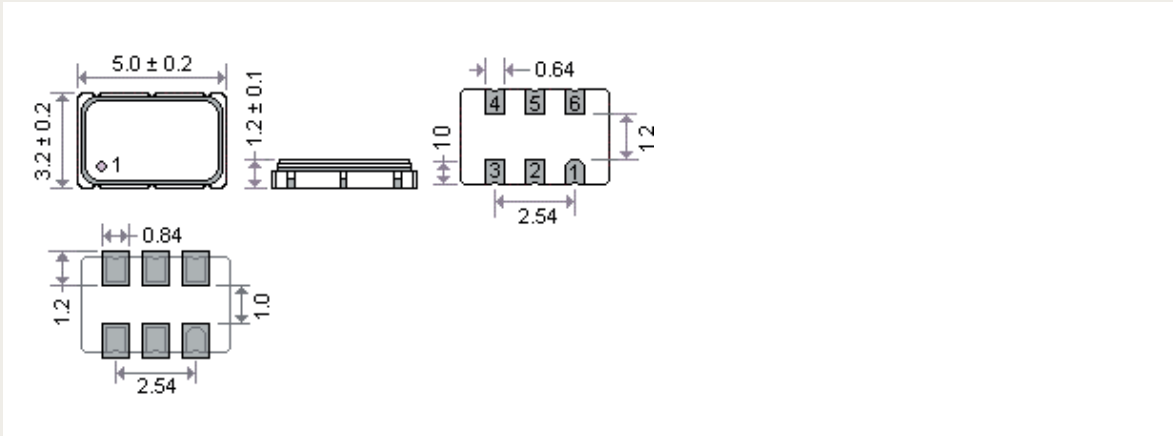
(\* ) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

## OPTIONS & ORDERING INFORMATION

SX5EK .....	.....	.....	..... -	..... MHz
Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Frequency in MHz
25 = +2.5V	E = 0°/+70 °C	20 = ±20 ppm	E = Tri-state	Please specify the frequency in MHz
33 = +3.3V	F = -20°/+70 °C	25 = ±25 ppm		
	K = -40°/+85 °C	30 = ±30 ppm		
	L = -40°/+105 °C	50 = ±50 ppm		
		100 = ±100 ppm		

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

## OUTLINE DIMENSIONS (mm)



Pin Connections	#1 : E/D	#2 : NC	#3: GND
	#4 : Output	#5 : Complementary output	#6: Vdd