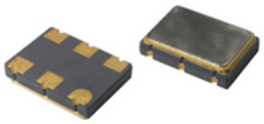
Datasheet

SX5EK LVPECL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

FEATURES

5.0 x 3.2 x 1.2 mm

- Standard miniature package
- Reduced jitter design without PLL and multiplier circuit
- Superior phase noise
- Applications : SONET, xDSL, SDH, Set-top box,...



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 ±5%
Supply Current Idd	35 mA typ. ; 50 mA max	
Output Voltage HIGH VOH	Vdd -1.025 V min. ; Vdd -0.95 V typ. ; Vdd -0.88 V max	
Output Voltage LOW VOL	Vdd -1.810 V min. ; Vdd -1.70 V typ. ; Vdd -1.62 V max	
Output Load	50 ohm to 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.	
Integrated Phase Jitter (12kHz to 20 MHz band)	130 fs typ. ; 0.3 ps max.	
Phase Noise (typical)	**Offset** 10 Hz 100 Hz 1 kHz 10 kHz 100 kHz	**Frequency 100.000 MHz** -70 dBc / Hz -101 dBc / Hz -126 dBc / Hz -139 dBc / Hz -145 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

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		
		50 = ±50 ppm		
		100 = ±100 ppm		

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

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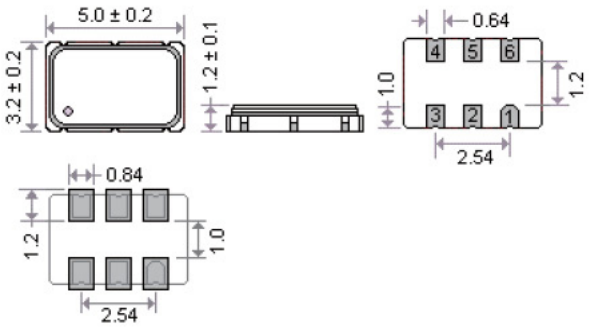
OUTLINE DIMENSIONS (mm)



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

Rev. 09-2012