

# SX5EQ

# LVPECL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

## FEATURES

- Standard miniature package
- Low Jitter
- Superior phase noise
- Applications : SONET, xDSL, SDH, Set-top box, ...

5.0 x 3.2 x 1.3 mm



Item	Specification	
Frequency Range	10.0 MHz ~ 1450 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)	0.6 ps typ.	
Phase Noise ( typical )	<b>Offset</b> 10 Hz 100 Hz 1 kHz 10 kHz 100 kHz	<b>Frequency 156.250 MHz</b> -67 dBc / Hz -95 dBc / Hz -115 dBc / Hz -121 dBc / Hz -125 dBc / Hz
Packing Unit	1000pcs / reel	
Soldering Condition	260 °C , 10 sec x2 max	
	<b>Customer specifications on request</b>	

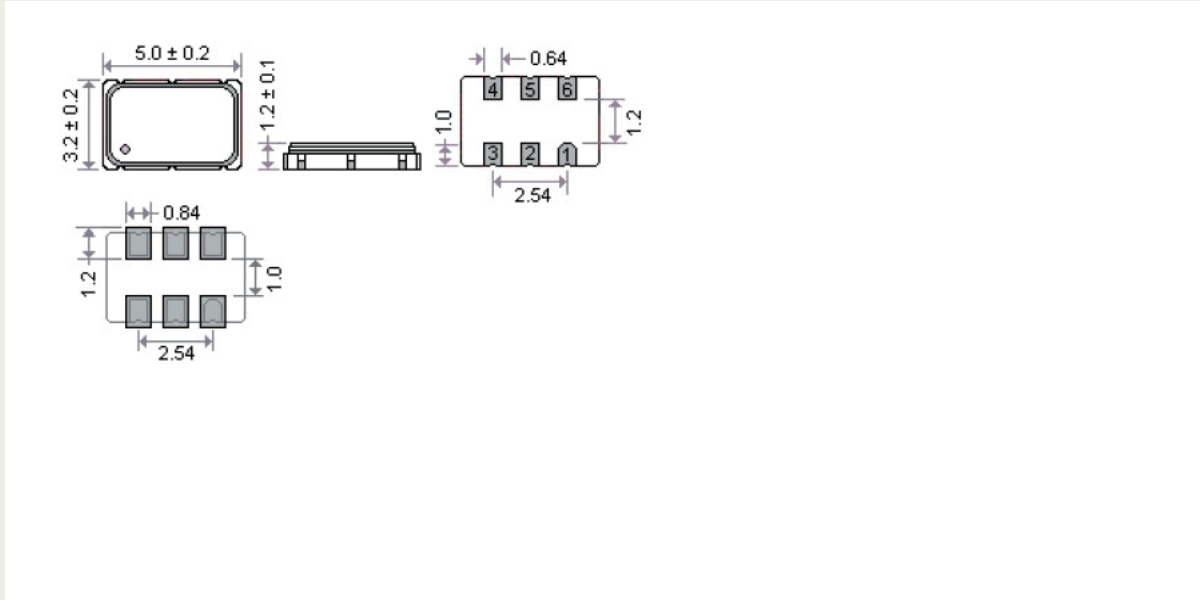
(\*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging.

## OPTIONS & ORDERING INFORMATION

SX5EQ .....	.....	.....	..... -	..... 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.

## OUTLINE DIMENSIONS (mm)



### Pin Connections

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