

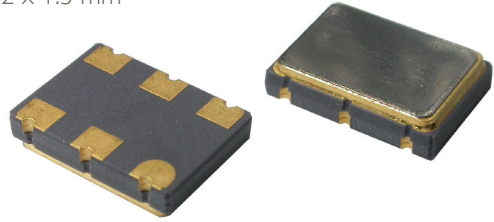
**SX5EPV**

**LVPECL SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR**

**FEATURES**

- Standard miniature package
- Programmable VCXO
- One day delivery

5.0 x 3.2 x 1.3 mm



Item	Specification		
Frequency Range	10 MHz ~ 1450 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 )		
Supply Voltage Vdd	+2.5V ±5%	+3.3V ±10%	
Control voltage center	+1.25V	+1.65V	
Control voltage range	0.2V to 2.3V	0.3V to 3.0V	
Supply Current Idd	45 ~ 65 mA max.		
Output Voltage HIGH VOH	Vdd -1.03V min.;Vdd -0.95V typ.;Vdd -0.6V max		
Output Voltage LOW VOL	Vdd -1.85V min.;Vdd -1.70V typ.;Vdd -1.60V max		
Output Load	50 ohm to Vdd-2V		
Symmetry	45 / 55 %		
Rise / Fall time Fr/Ff	0.5 ns max.		
Tri-state function	pin #2 = high or open pin #2 = low	pin #4 - #5 ==> oscillation pin #4 - #5 ==> high impedance	
Start-up Time	3 ms typ.; 10 ms max.		
Integrated Phase Jitter ( 12 kHz to 20 MHz )	1.2 ps typical		
Phase Noise ( typical )	<b>Offset</b>	<b>Frequency 156.250 MHz</b>	<b>Frequency 622.080 MHz</b>
	10 Hz	-63 dBc / Hz	-50 dBc / Hz
	100 Hz	-94 dBc / Hz	-85 dBc / Hz
	1 kHz	-113 dBc / Hz	-101 dBc / Hz
	10 kHz	-118 dBc / Hz	-102 dBc / Hz
	100 kHz	-119 dBc / Hz	-103 dBc / Hz
Frequency Pulling Range	±100 ppm min. ; ±150 ppm min. ( see options )		
Linearity	3% typical ; 10% max.		
Slope Polarity	Positive ( Increasing control voltage always increases output frequency )		
Modulation bandwidth	10 kHz min ( -3 dB )		
Input impedance	1 MΩ typ.		
Packing Unit	1000pcs / reel		
Soldering Condition	260°C , 10 sec x2 max		

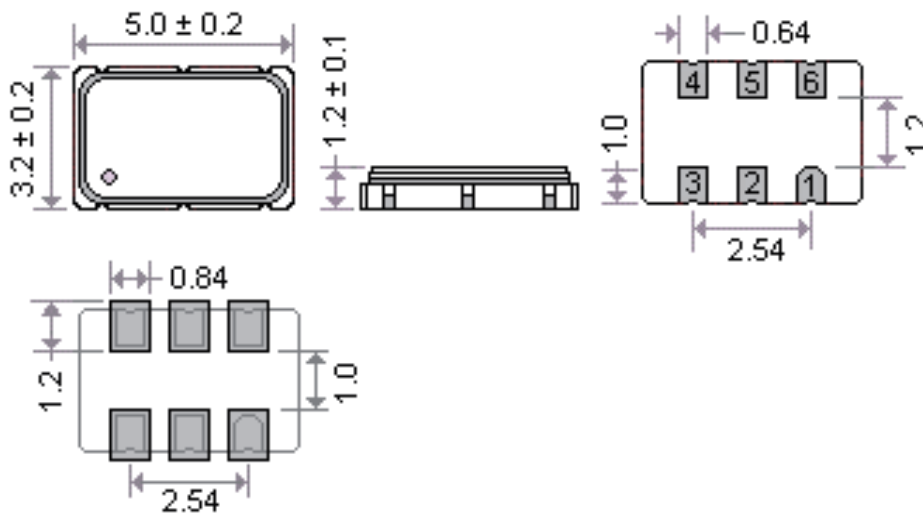
( \* ) Includes initial tolerance @+25°C , stability over operating temperature , stability vs. load change , stability vs. supply change and one year aging

## OPTIONS & ORDERING INFORMATION

SX5EPV							MHz
	Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	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 = ±100 ppm	E2 = Tri-state , pin 2	6P = 6-pad version	100 = ±100 ppm min. 150 = ±150 ppm min.	Please specify the frequency in MHz

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

## OUTLINE DIMENSIONS (MM)



### Pin Connections

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