

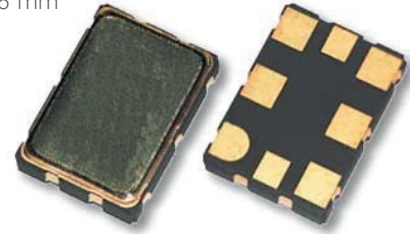
## SX7EUV

# LVPECL SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

## FEATURES

- Standard miniature package
- Ultra-low Jitter
- Up to 2100 MHz
- Short delivery

7.0 x 5.0 x 1.8 mm



Item	Specification					
Frequency Range	15.0 MHz ~ 2100 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 ±10%				+3.3V ±10%	
Control voltage center	+1.25V				+1.65V	
Control voltage range	0.25V to 2.25V				0.3V to 3.0V	
Supply Current Idd	100 mA typ. ; 120 mA max					
Output Voltage HIGH VOH	Vdd -1.165V min. ; Vdd -0.8V max					
Output Voltage LOW VOL	Vdd -2.0V min. ; Vdd -1.55V max					
Output Load	50 ohm to Vdd-2V					
Symmetry	45 / 55 %					
Rise / Fall time Fr/Ff	0.35 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.					
RMS Phase Jitter (12 kHz to 20 MHz)	150 fs typ., 300 fs max					
Phase Noise (typical)	<b>Offset</b>	<b>Frequency</b>	<b>156.250 MHz</b>	<b>491.520 MHz</b>	<b>1500 MHz</b>	<b>2100 MHz</b>
	10 Hz		-39 dBc / Hz	-20 dBc / Hz	-15 dBc / Hz	-18 dBc / Hz
	100 Hz		-75 dBc / Hz	-50 dBc / Hz	-55 dBc / Hz	-50 dBc / Hz
	1 kHz		-99 dBc / Hz	-83 dBc / Hz	-80 dBc / Hz	-80 dBc / Hz
	10 kHz		-123 dBc / Hz	-112 dBc / Hz	-105 dBc / Hz	-100 dBc / Hz
	100 kHz		-139 dBc / Hz	-128 dBc / Hz	-120 dBc / Hz	-117 dBc / Hz
	1 MHz		-149 dBc / Hz	-140 dBc / Hz	-130 dBc / Hz	-125 dBc / Hz
	10 MHz		-157 dBc / Hz	-153 dBc / Hz	-149 dBc / Hz	-145 dBc / Hz
Frequency Pulling Range	±50 ppm min. ; ±250 ppm max. (see options)					
Linearity	1% typical ; 10% max.					
Slope Polarity	Positive ( Increasing control voltage always increases output frequency )					
Modulation bandwidth	10 kHz min ( -3 dB )					
Input impedance	5 MΩ typ.					
Harmonics	-5.0 dBc max.					
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

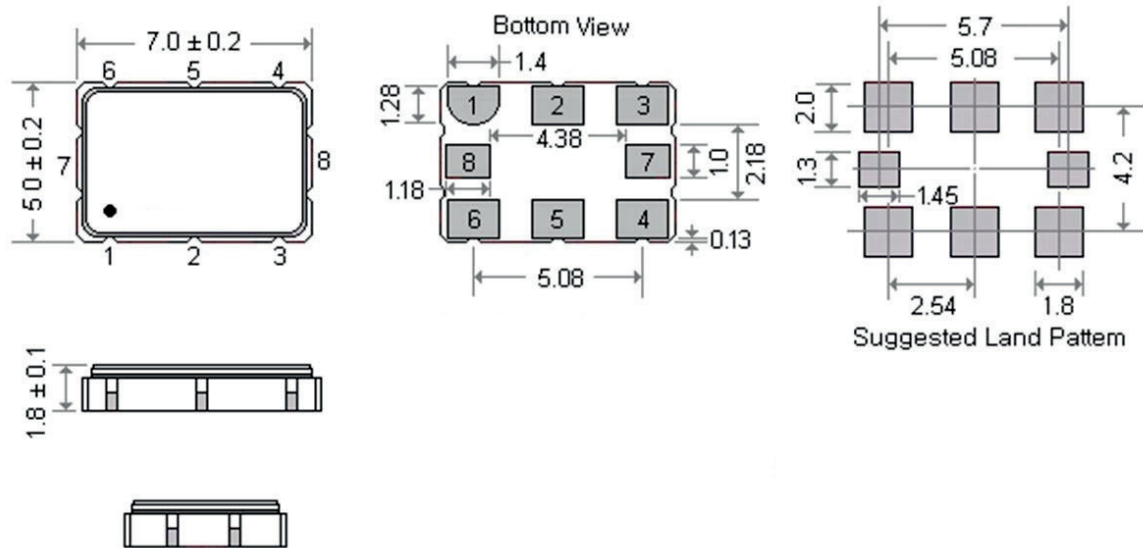
**Customer specifications on request**

## OPTIONS & ORDERING INFORMATION

SX7EUV						MHz
	Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	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	E = Tri-state	50 = ±50 ppm min. 100 = ±100 ppm min. 150 = ±150 ppm min. 200 = ±200 ppm min. 250 = ±250 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

#7 : NC

#8 : NC