

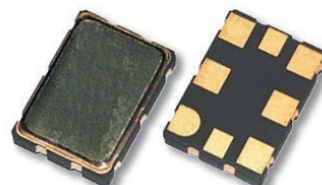
SX7HUV

HCSL SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

- Standard miniature package
- Ultra-low Jitter
- Up to 700 MHz
- Short delivery

7.0 x 5.0 x 1.8 mm



Item	Specification			
Frequency Range	15.0 MHz ~ 700 MHz			
Output Signal	HCSL			
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	+1.8V ±5%	+2.5V ±10%	+3.3V ±10%	
Control voltage center	+0.9 V	+1.25 V	+1.65 V	
Control voltage range	0.18V to 1.62V	0.25V to 2.25V	0.3V to 3.0V	
Supply Current Idd	95 mA typ. ; 115 mA max			
Output Voltage HIGH VOH	660 mV min. , 740 mV typ. , 850 mV max.			
Output Voltage LOW VOL	-150 mV min. , 0 mV typ. , 150 mV min.			
Output Load	50 ohm to GND			
Symmetry	45 / 55 %			
Rise / Fall time Fr/Ff	0.4 ns max			
Tri-state function	pin #2 = high or open pin #2 = low	pin #4 - #5 ==> pin #4 - #5 ==>	oscillation 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)	Offset	Frequency:	156.250 MHz	491.520 MHz
	10 Hz		-39 dBc / Hz	- 20 dBc / Hz
	100 Hz		-75 dBc / Hz	- 50 dBc / Hz
	1 kHz		-99 dBc / Hz	- 83 dBc / Hz
	10 kHz		-123 dBc / Hz	- 112 dBc / Hz
	100 kHz		-139 dBc / Hz	- 128 dBc / Hz
	1 MHz		-149 dBc / Hz	- 140 dBc / Hz
	10 MHz		-157 dBc / Hz	- 153 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 typ. (-3 dB)			
Input impedance	5 MΩ min.			
Harmonics	-5.0 dBc max.			
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

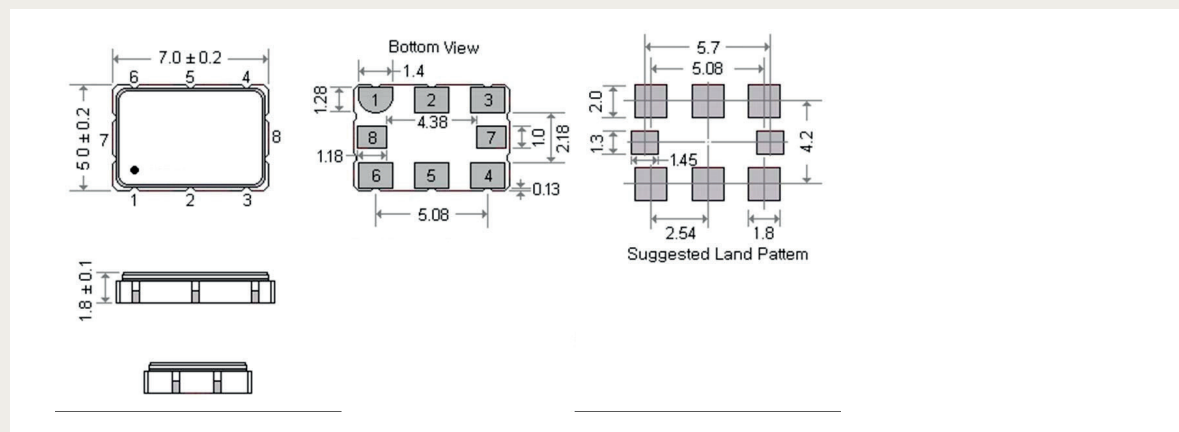
OPTIONS & ORDERING INFORMATION

SX7HUV

Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Pulling*	Frequency in MHz
18 = +1.8V	E = 0°/+70°C	20 = ±20 ppm	E = Tri-state	50 = ±50 ppm min.	Please specify the frequency in MHz
25 = +2.5V	F = -20°/+70°C	25 = ±25 ppm		100 = ±100 ppm min.	
33 = +3.3V	K = -40°/+85°C	30 = ±30 ppm		150 = ±150 ppm min.	
		50 = ±50 ppm		200 = ±200 ppm min.	
		100 = ±100 ppm		250 = ±250 ppm min.	

* 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