

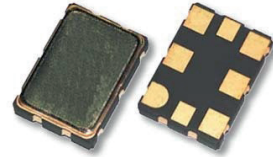
# SX5HU

# HCSSL SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

## FEATURES

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

5.0 x 3.2 x 1.3 mm



Item	Specification			
Frequency Range	150.0 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%	
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 Time / Fall Time Fr/Ff	0.35 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.			
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>
	10 Hz		-70 dBc / Hz	- 62 dBc / Hz
	100 Hz		-100 dBc / Hz	-92 dBc / Hz
	1 kHz		-120 dBc / Hz	-110 dBc / Hz
	10 kHz		-135 dBc / Hz	-120 dBc / Hz
	100 kHz		-142 dBc / Hz	-130 dBc / Hz
	1 MHz		-149 dBc / Hz	-140 dBc / Hz
	10 MHz		-156 dBc / Hz	-153 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

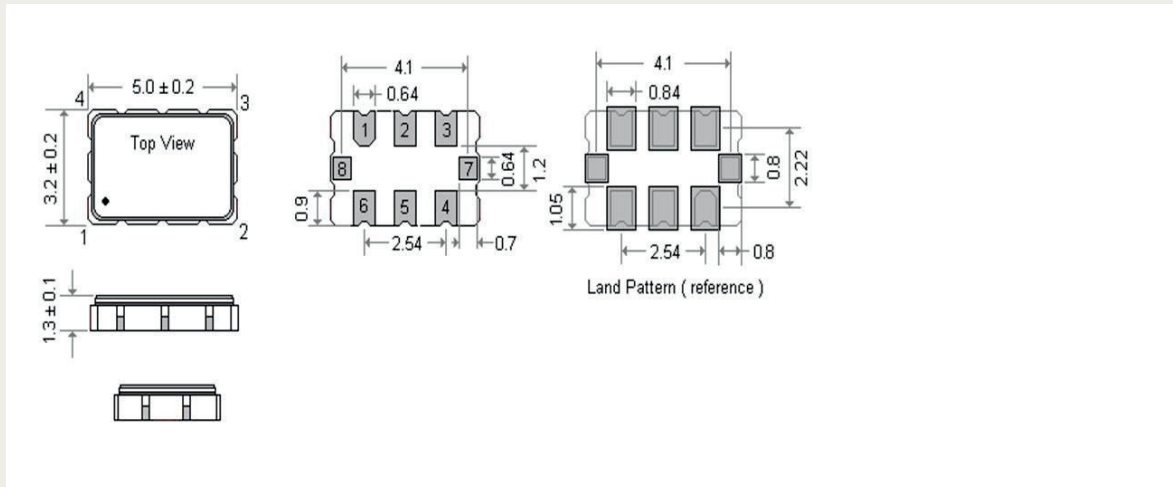
## OPTIONS & ORDERING INFORMATION

### SX5HU

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

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

## OUTLINE DIMENSIONS



### Pin Connections

#1 : E/D	#2 : NC	#3 : GND
#4 : Output	#5 : Complementary output	#6 : Vdd
#7 : NC	#8 : NC	