

# SX7ST

## CLIPPED SINE WAVE SURFACE MOUNT TCXO

### FEATURES

- Miniature package
- Tight stability
- Low power consumption
- Applications: GPS, Mobile phone, WLAN, Base stations, ...

7.0 x 5.0 x 2.0 mm



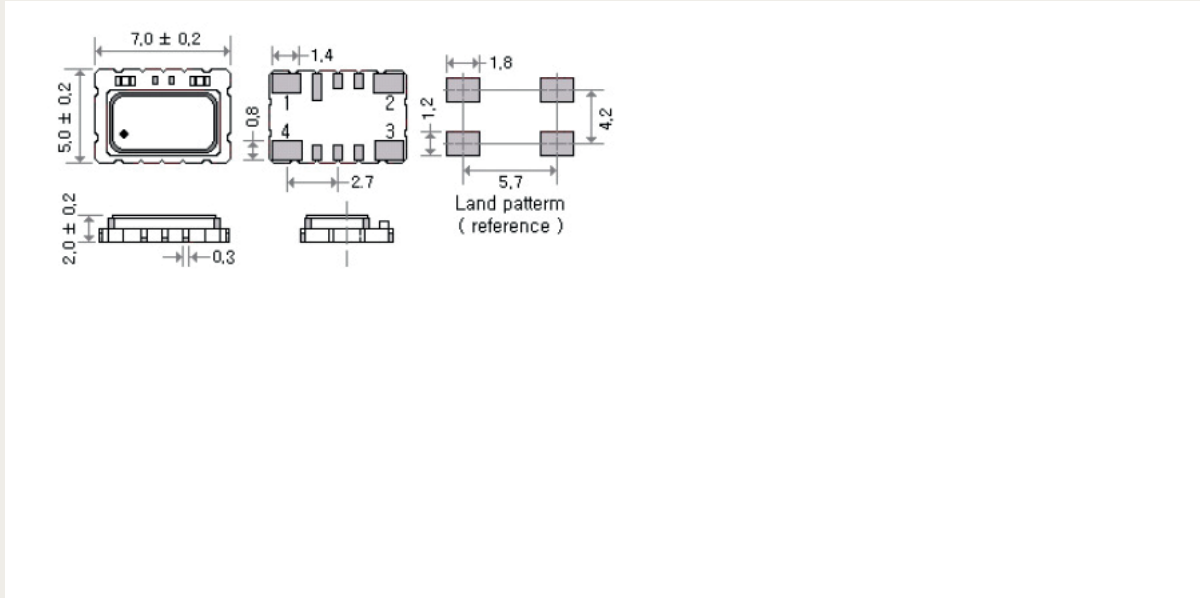
Item	Specification																																																	
Frequency Range	9.6 MHz to 50.0 MHz																																																	
Output Logic	Clipped Sine Wave																																																	
Supply Voltage V <sub>dd</sub> (see options)	+2.8 V ±5%    +3.0 V ±5%    +3.3 V ±5%    +5.0 V ±5%																																																	
Supply Current I <sub>dd</sub>	<table border="0"> <tr> <td>≤ 15 MHz</td> <td>1.5 mA max.</td> </tr> <tr> <td>15 - 26 MHz</td> <td>2.0 mA max.</td> </tr> <tr> <td>&gt; 26 MHz</td> <td>2.5 mA max.</td> </tr> </table>	≤ 15 MHz	1.5 mA max.	15 - 26 MHz	2.0 mA max.	> 26 MHz	2.5 mA max.																																											
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Frequency Tolerance	±2.0 ppm max. at 25°C ±2°C (one hour after reflow)																																																	
Frequency Stability vs Temperature (see options)	<table border="0"> <tr> <td></td> <td><b>±0.5 ppm</b></td> <td><b>±1.0 ppm</b></td> <td><b>±1.5 ppm</b></td> <td><b>±2.0 ppm</b></td> <td><b>±2.5 ppm</b></td> <td><b>±3.0 ppm</b></td> </tr> <tr> <td>-10° to +60°C</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-20° to +70°C</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-30° to +75°C</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-30° to +85°C</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td>-40° to +85°C</td> <td>◇</td> <td>◇</td> <td>o</td> <td>o</td> <td>o</td> <td>o</td> </tr> <tr> <td colspan="7">o = available                                  ◇ = please contact us                                  x = not available</td> </tr> </table>		<b>±0.5 ppm</b>	<b>±1.0 ppm</b>	<b>±1.5 ppm</b>	<b>±2.0 ppm</b>	<b>±2.5 ppm</b>	<b>±3.0 ppm</b>	-10° to +60°C	o	o	o	o	o	o	-20° to +70°C	o	o	o	o	o	o	-30° to +75°C	o	o	o	o	o	o	-30° to +85°C	◇	o	o	o	o	o	-40° to +85°C	◇	◇	o	o	o	o	o = available                                  ◇ = please contact us                                  x = not available						
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Frequency Stability vs Aging	±1.0 ppm max. per year at 25°C																																																	
Frequency Stability vs Voltage Change	±0.2 ppm max., for a ±5% input voltage change																																																	
Frequency Stability vs Load Change	±0.2 ppm max., for a ±10% load condition change																																																	
Output Level	≥0.8 V p-p																																																	
Output Load	10 kΩ // 10 pF																																																	
Phase Noise	<table border="0"> <tr> <td>Offset / dBc / Hz</td> <td><b>100 Hz</b></td> <td><b>1 kHz</b></td> <td><b>10 kHz</b></td> </tr> <tr> <td>(typical)</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>13.0 MHz</b></td> <td>-115 dBc / Hz</td> <td>-135 dBc / Hz</td> <td>-148 dBc / Hz</td> </tr> </table>	Offset / dBc / Hz	<b>100 Hz</b>	<b>1 kHz</b>	<b>10 kHz</b>	(typical)				<b>13.0 MHz</b>	-115 dBc / Hz	-135 dBc / Hz	-148 dBc / Hz																																					
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<b>13.0 MHz</b>	-115 dBc / Hz	-135 dBc / Hz	-148 dBc / Hz																																															
Start-up Time	3 ms max.																																																	
Packing Unit	1000 pcs / reel																																																	
Soldering Condition	260°C, 10 sec x2 max																																																	
	<b>Customer specifications on request</b>																																																	

## OPTIONS & ORDERING INFORMATION

SX7ST	.....	.....	.....	.....	..... MHz
	Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Package type
	<b>28</b> = +2.8V	<b>D</b> = -10° / +60°C	<b>0.5</b> = ±0.5 ppm	<b>F</b> = No Tri-state	<b>4P</b> = 4-pad version
	<b>30</b> = +3.0V	<b>F</b> = -20° / +70°C	<b>1.0</b> = ±1.0 ppm		
	<b>33</b> = +3.3V	<b>G</b> = -30° / +75°C	<b>1.5</b> = ±1.5 ppm		
	<b>50</b> = +5.0V	<b>H</b> = -30° / +85°C	<b>2.0</b> = ±2.0 ppm		
		<b>K</b> = -40° / +85°C	<b>2.5</b> = ±2.5 ppm		
			<b>3.0</b> = ±3.0 ppm		
					Please specify the frequency in MHz

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

# OUTLINE DIMENSIONS



**Pin Connections**

#1 : NC

#2 : GND

#3: Output

#4 : Vdd