Frequency Technology

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SX1ST

CLIPPED SINE WAVE SURFACE MOUNT TCXO

FEATURES

- Ultra miniature package
- Tight stability
- External DC-Cut capacitor required
- Applications: GPS, Mobile phone, WLAN, ...

2.0 x 1.6 x 0.7 mm



Item	Specification										
Frequency Range	13.0 MHz to 52.0 M	13.0 MHz to 52.0 MHz									
Output Logic	Clipped Sine Wave	Clipped Sine Wave									
Supply Voltage Vdd (see options)	+1.8 V ±5%	+2.5 V ±5% +2.8 V ±5%		+3.0 V ±5%	+3.3	+3.3 V ±5%					
Supply Current Idd	≤ 30.0 MHz	1.5 mA max.									
	> 30.0 MHz	2.0 mA max	Κ.								
Frequency Tolerance	±1.5 ppm max. at 2	±1.5 ppm max. at 25°C ±2°C (one hour after reflow)									
Frequency Stability vs Temperature		±0.5 ppm	±1.0 ppm	±1.5 ppm	±2.0 ppm	±2.5 ppm	±3.0 ppm				
(see options)	-10° to +60°C	0	0	0	0	0	0				
	-20° to +70°C	0	0	0	0	0	0				
	-30° to +75°C	0	0	0	0	0	0				
	-30° to +85°C	0	0	0	0	0	0				
	-40° to +85°C	X	♦	0	0	0	0				
	o = availabe	o = availabe									
Frequency Stability vs Aging	±1.0 ppm max. per	±1.0 ppm max. per year at 25°C									
Frequency Stability vs Voltage Change	±0.2 ppm max., for	±0.2 ppm max., for a ±5% input voltage change									
Frequency Stability vs Load Change	±0.2 ppm max., for	±0.2 ppm max., for a ±10% load condition change									
Output Level	≥1.0 V p-p	≥1.0 V p-p									
Output Load	10 kΩ // 10 pF	10 kΩ // 10 pF									
Harmonics of output signal	-5 dBc max.	-5 dBc max.									
Phase noise	-135 dBc/Hz typ. at	-135 dBc/Hz typ. at 1 kHz offset									
Start-up Time	3 ms max.	3 ms max.									
Packing Unit	3000 pcs / reel	3000 pcs / reel									
Soldering Condition	260°C, 10 sec x2 n	260 °C, 10 sec x2 max									

Customer specifications on request

OPTIONS & ORDERING INFORMATION

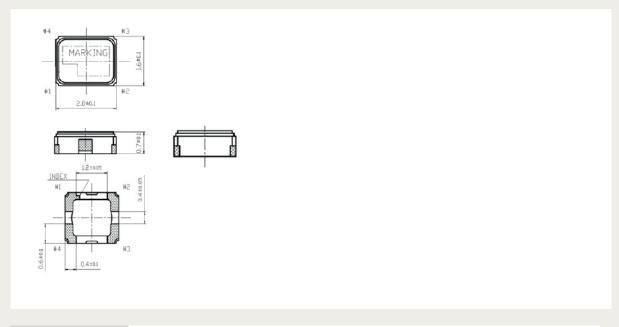
SX1ST						MHz
	Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Package type	Frequency in MHz
	18 = +1.8V	D = -10° / +60°C	0.5 = ±0.5 ppm	F = No Tri-state	4P = 4-pad version	Please specify the
	25 = +2.5V	F = -20° / +70°C	1.0 = ±1.0 ppm			frequency in MHz
	28 = +2.8V	G = -30° / +75°C	1.5 = ±1.5 ppm			
	30 = +3.0V	H = -30° / +85°C	2.0 = ±2.0 ppm			
	33 = +3.3V	K = -40° / +85°C	2.5 = ±2.5 ppm			
			$3.0 = \pm 3.0 \text{ ppm}$			

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

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OUTLINE DIMENSIONS



Pin Connections

#1 : NC

#2 : GND

#3: Output

#4 : Vdd