

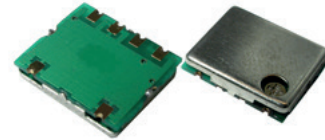
SP4ST

CLIPPED SINE WAVE SURFACE MOUNT TCXO

FEATURES

- Metal SMD case
- Tight stability
- Fundamental oscillation mode
- Applications: Base Stations, Test equipment, ...

11.4 x 9.6 x 2.5 mm



Item	Specification						
Frequency Range	9.6 MHz to 40.0 MHz						
Output Logic	Clipped Sine Wave						
Supply Voltage V _{dd} (see options)	+2.8 V ±5%	+3.0 V ±5%	+3.3 V ±5%	+5.0 V ±5%			
Supply Current I _{dd}	≤ 15 MHz	1.5 mA max.					
	15 - 26 MHz	2.0 mA max.					
	> 26 MHz	2.5 mA max.					
Frequency Tolerance	±1.0 ppm max. at 25°C ±2°C (one hour after reflow)						
Frequency Stability vs Temperature (see options)		±0.5 ppm	±1.0 ppm	±1.5 ppm	±2.0 ppm	±2.5 ppm	±3.0 ppm
	-10° to +60°C	o	o	o	o	o	o
	-20° to +70°C	x	o	o	o	o	o
	-30° to +75°C	x	◊	o	o	o	o
	-30° to +85°C	x	◊	o	o	o	o
	-40° to +85°C	x	◊	o	o	o	o
	o = available		◊ = please contact us		x = not available		
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						
Start-up Time	3 ms max.						
Phase noise	Offset / dBc / Hz (typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
	10.000 MHz	-95 dBc / Hz	-130 dBc / Hz	-140 dBc / Hz	-145 dBc / Hz	-150 dBc / Hz	
	38.880 MHz	-85 dBc / Hz	-110 dBc / Hz	-140 dBc / Hz	-150 dBc / Hz	-150 dBc / Hz	
Mechanical Frequency Tuning (see options)	±3.0 ppm min. tuning						
Packing Unit	1000 pcs / reel						
Soldering Condition	260°C, 10 sec x2 max						

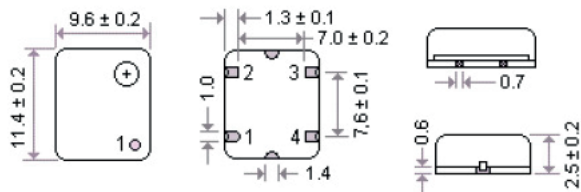
Customer specifications on request

OPTIONS & ORDERING INFORMATION

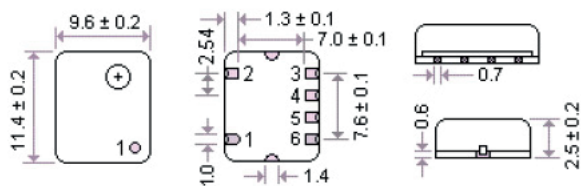
SP4ST	- MHz
Supply Voltage	Operating Temp. *	Temperature Stability *	Tri-state Function	Package type	Frequency in MHz	Mechanical Tuning
28 = +2.8V	D = -10° / +60°C	0.5 = ±0.5 ppm	F = No Tri-state	4P = 4-pad version	Please specify the frequency in MHz	Blanc = No trimmer
30 = +3.0V	F = -20° / +70°C	1.0 = ±1.0 ppm		6P = 6-pad version		-T = Trimmer option
33 = +3.3V	G = -30° / +75°C	1.5 = ±1.5 ppm				
50 = +5.0V	H = -30° / +85°C	2.0 = ±2.0 ppm				
	K = -40° / +85°C	2.5 = ±2.5 ppm				
		3.0 = ±3.0 ppm				

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

OUTLINE DIMENSIONS



Pin Connections	#1 : NC	#2 : GND	#3: Output	#4 : Vdd
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Pin Connections	#1 : GND	#2 : GND	#3: Output
	#4 : GND	#5 : NC	#6: Vdd