

SX7SS

LOW EMI SPREAD SPECTRUM CLOCK OSCILLATORS

FEATURES

- Reduce EMI by >15 dBc without changing your board layout.
- Drop-in replacement.
- Wide frequency range.
- Applications: GPS, Wireless LAN, Mobile phone, SDCs,...

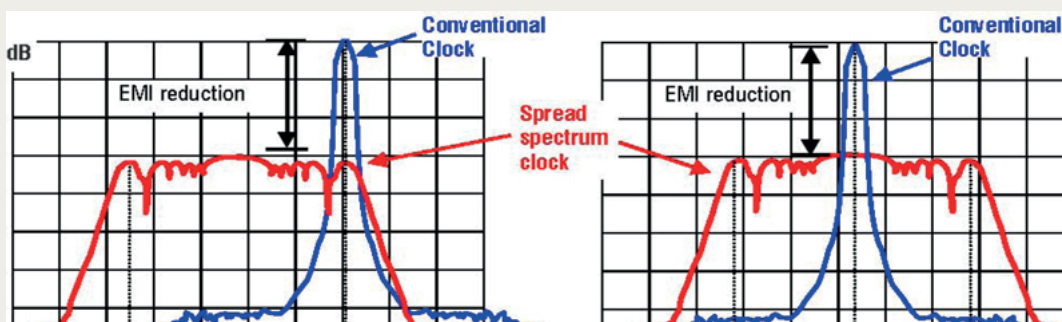
7.0 x 5.0 x 1.8 mm



Item	Specification		
Frequency Range	3.5 MHz ~ 220.0 MHz		
Spread Type (see options)	Total %	Down Spread (D)	Center Spread (C)
Spread Percentage (see options)	0.5%	-0.50%	±0.25%
	1%	-1%	±0.5%
	2%	-2%	±1.0%
	3%	-3%	±1.5%
EMI Reduction (Reduction is applied to the entire spectrum)	-9 dBc min. 100 MHz at Center Spread 0.5% -15 dBc min. 100 MHz at Center Spread 1.5% With respect to the dB level when no modulation.		
Modulation Carrier Frequency (Dither rate)	12 kHz min. ; 55.5 kHz max. Frequency dependent		
Output Signal	CMOS		
Overall Frequency Stability *	± 25 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	+3.3V ±5%		
Supply Current Idd	7 mA ~ 25 mA		
Output Level	VOH ≥ 0.9 Vdd	VOL ≤ 0.1 Vdd	
Output Load	15 pF		
Symmetry	45 / 55 %		
Rise Time / Fall Time Fr/Ff	4 ns max.		
Tri-state function	pin #1 = high or open pin #1 = low	pin #3 = oscillation pin #3 = high impedance	
Start-up Time	5 ms max.		
Cycle-to-cycle jitter	±100 ps typical ; ±150 ps 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

MODULATION TYPES

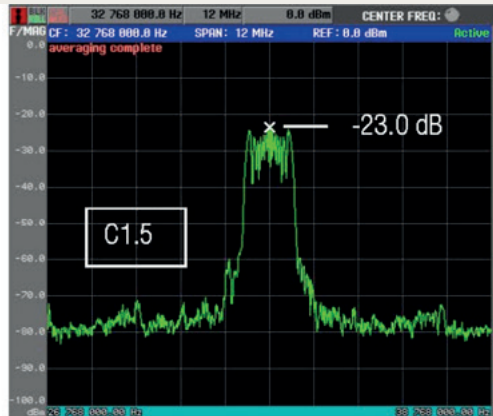
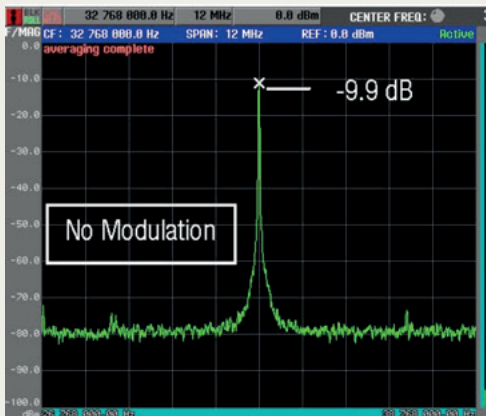


OPTIONS & ORDERING INFORMATION

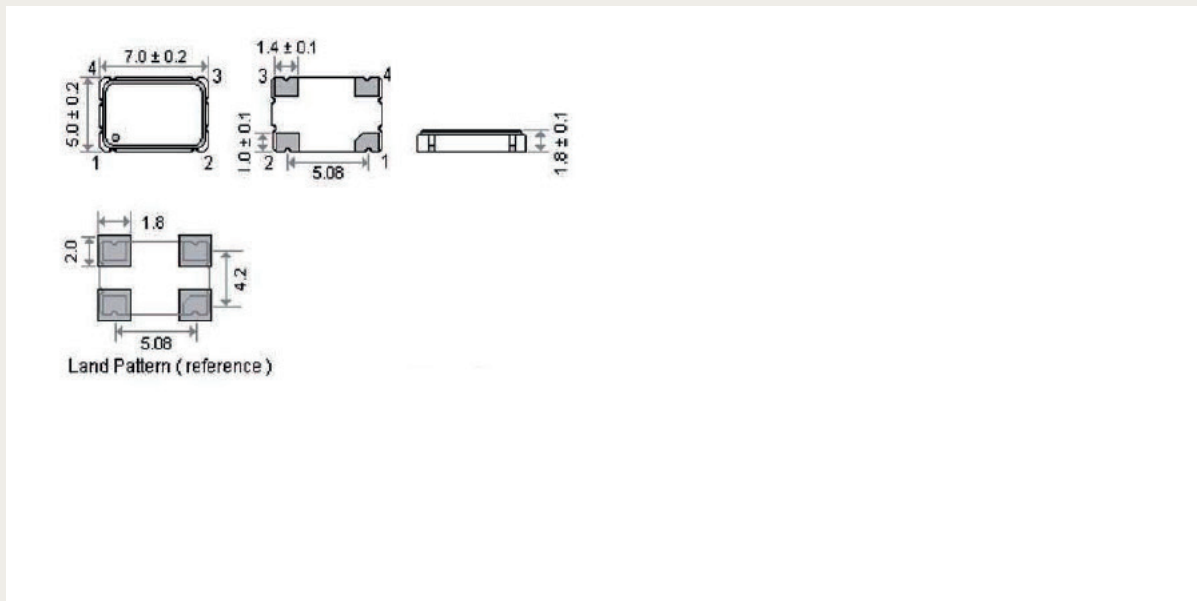
SX7SS				 MHz
Supply Voltage	Operating Temp.	Overall Stability	Tri-state Function	Spread Type	Frequency in MHz
33 = +3.3V	E = 0° / +70°C K = -40° / +85°C	25 = ±25 ppm 50 = ±50 ppm 100 = ±100 ppm	E = Tri-state	D05 = Down Spread 0.5% D10 = Down Spread 1% D20 = Down Spread 2% D30 = Down Spread 3% C025 = Center Spread 0.5% C05 = Center Spread 1% C10 = Center Spread 2% C15 = Center Spread 3%	Please specify the frequency in MHz

If over-clocking is a problem to your system , please choose down spread

Example: 32.768 MHz at No Modulation and at Center Spread 1.5% : 13.1 dBc EMI reduction



OUTLINE DIMENSIONS



Pin Connections	#1 : E/D	#2 : GND	#3 : Output	#4 : Vdd
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