

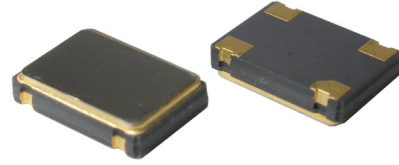
SX7SSP

LOW EMI SPREAD SPECTRUM CLOCK OSCILLATORS

FEATURES

- Reduce EMI by >12 dBc without changing your board layout.
- Drop-in replacement.
- One day delivery
- Applications : Medical devices , Wireless LAN , Hand-held ID readers , SDCs , ...

7.0 x 5.0 x 1.6 mm

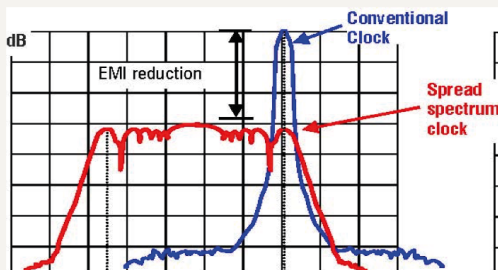


| Item | Specification | | |
|---|--|---|----------------------------|
| Frequency Range | 3.0 MHz ~ 166.0 MHz | 3.0 MHz ~ 200.0 MHz | |
| Supply Voltage Vdd | +2.5V ±0.25V | +3.3V ±0.33V | |
| Supply Current Idd | 10 mA ~ 25 mA | | |
| Output Signal | CMOS | | |
| Overall Frequency Stability * | ± 25 ppm ~ ± 100 ppm (see options) | | |
| Operating Temperature Range | 0 ~ +70°C commercial application (see options) -40 ~ +85°C industrial application (see options) | | |
| Spread Type (see options) | Total % | Down Spread (D) | Center Spread (C) |
| Spread Percentage (see options) | 0.25% (min.) 4% (max.) | -0,25% -4% | ±0.125% ±2.0% |
| Modulation Carrier Frequency (Dither rate) | 30 kHz min. ; 40 kHz max. Frequency dependent | | |
| Output Level | VOH ≥ 0.9 Vdd | VOL ≤ 0.1 Vdd | |
| Output Load | 15 pF | | |
| Symmetry | 40 / 60 % | | |
| Rise / Fall time Fr/Ff | 5.0 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 max. | | |
| Packing Unit | 1000pcs / reel | | |
| Soldering Condition | 260°C , 10 sec x2 max | | |

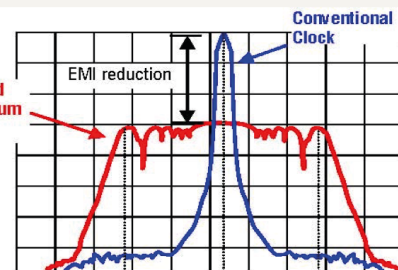
(*) Includes initial tolerance @+25°C , stability over operating temperature , stability vs. load change , stability vs. supply change and one year aging

MODULATION TYPES

Down Spread 'D'



Center Spread 'C'.

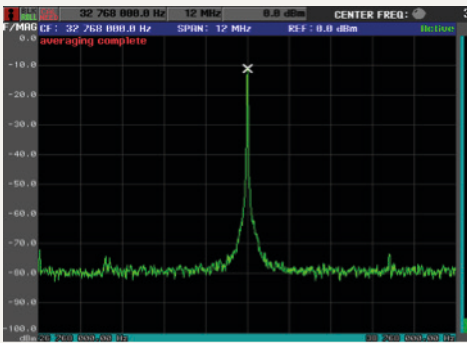


OPTIONS & ORDERING INFORMATION

| SX7SSP | | | | | | MHz |
|--------|--|--|---|----------------------|---|-------------------------------------|
| | Supply Voltage * | Operating Temp. * | Overall Stability * | Tri-state Function | Spread Type | Frequency in MHz |
| | 25 = +2.5V 33 = +3.3V | E = 0° / +70°C K = -40° / +85°C | 25 = ±25 ppm 50 = ±50 ppm 100 = ±100 ppm | E = Tri-state | D0.25 = Down Spread 0.25% D4 = Down Spread 4% C0.125 = Center Spread 0.25% C2 = Center Spread 4% | Please specify the frequency in MHz |

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

EXAMPLE : 32.768 MHZ AT NO MODULATION AND AT CENTER SPREAD 0.25 % : 12.3 DBC EMI REDUCTION



OUTLINE DIMENSIONS (MM)

bottom view

top view

side view

Dimensions: 7.00±0.15, 5.00±0.15, 0.6, 1.4, 0.1, 5.08, 2.2, 1.8, 1.4±0.2, R0.1, R0.2

Pin Connections

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