

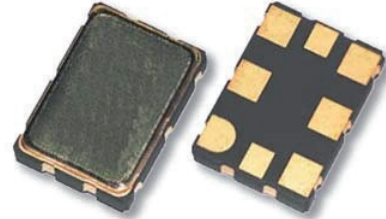
SX7LU

LVDS SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR

FEATURES

- Miniature package
- Ultra-low jitter
- Up to 2100 MHz
- Short delivery

7.0 x 5.0 x 1.8 mm



| Item | Specification | | | | |
|--|--|---|--------------------|--------------------|-----------------|
| Frequency Range | 150.0 MHz ~ 2100 MHz | | | | |
| Output Signal | LVDS | | | | |
| Overall Frequency Stability * | ± 20 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 | +1.8V ±5% | +2.5V ±10% | +3.3V ±10% | | |
| Supply Current Idd | 75 mA typ. ; 90 mA max | | | | |
| Output Voltage HIGH VOH | 1.43V typ. ; 1.6V max | | | | |
| Output Voltage LOW VOL | 1.1 V typ. ; 0.9V min. | | | | |
| Output Load | 50 ohm from each output | | | | |
| Symmetry | 45 / 55 % | | | | |
| Rise / Fall time Fr/Ff | 0.35 ns max. | | | | |
| Tri-state function | pin #1 = high or open pin #1 = low | pin #4 - #5 ==> oscillation pin #4 - #5 ==> high impedance | | | |
| Start-up Time | 3 ms typ. ; 10 ms max. | | | | |
| RMS Phase Jitter (12 kHz to 20 MHz) | 150 fs typ. , 300 fs max | | | | |
| Phase Noise (typical) | Offset | Frequency | 156.250 MHz | 491.520 MHz | 1500 MHz |
| | 10 Hz | | -70 dBc / Hz | -62 dBc / Hz | -54 dBc / Hz |
| | 100 Hz | | -100 dBc / Hz | -92 dBc / Hz | -85 dBc / Hz |
| | 1 kHz | | -120 dBc / Hz | -110 dBc / Hz | -105 dBc / Hz |
| | 10 kHz | | -135 dBc / Hz | -120 dBc / Hz | -111 dBc / Hz |
| | 100 kHz | | -142 dBc / Hz | -130 dBc / Hz | -120 dBc / Hz |
| | 1 MHz | | -149 dBc / Hz | -140 dBc / Hz | -130 dBc / Hz |
| | 10 MHz | | -156 dBc / Hz | -153 dBc / Hz | -149 dBc / Hz |
| 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

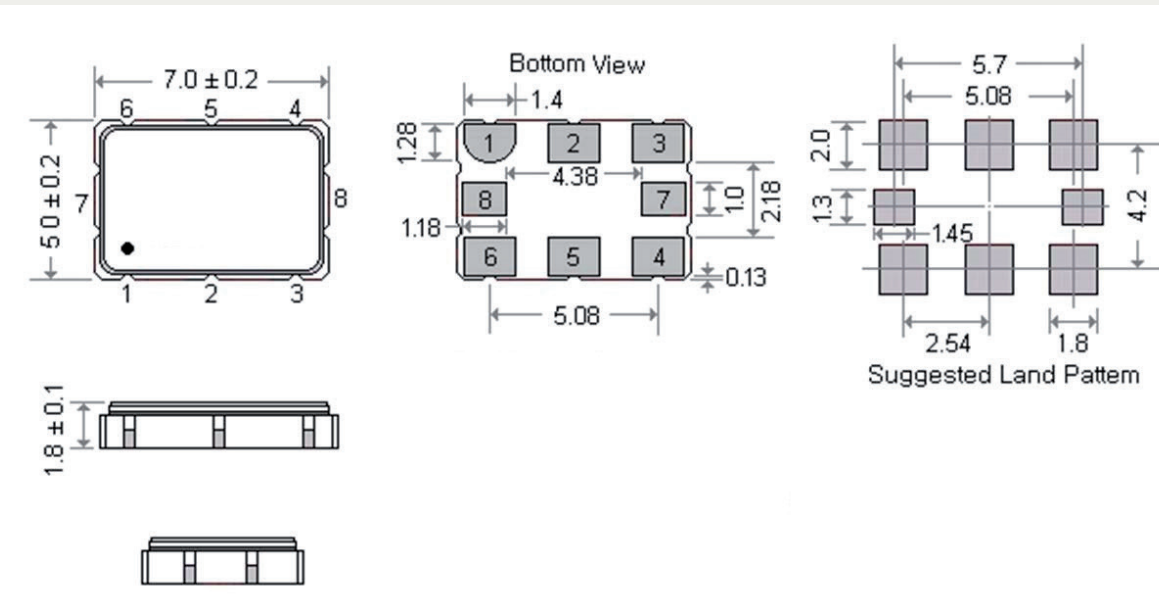
Customer specifications on request

OPTIONS & ORDERING INFORMATION

| SX7LU | | | | | MHz |
|-------|------------------|-------------------|---------------------|--------------------|-------------------------------------|
| | Supply Voltage * | Operating Temp. * | Overall Stability * | Tri-state Function | Frequency in MHz |
| | 18 = +1.8V | E = 0° / +70°C | 20 = ±20 ppm | E = Tri-state | Please specify the frequency in MHz |
| | 25 = +2.5V | F = -20° / +70°C | 25 = ±25 ppm | | |
| | 33 = +3.3V | K = -40° / +85°C | 30 = ±30 ppm | | |
| | | | 50 = ±50 ppm | | |
| | | | 100 = ±100 ppm | | |

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

OUTLINE DIMENSIONS (MM)



Pin Connections

- #1 : E/D
- #2 : NC
- #3: GND
- #4 : Output
- #5 : Complementary output
- #6 :Vdd
- #7 : NC
- #8 : NC