Frequency Technology

SX2CT

HCMOS SURFACE MOUNT TEMPERATURE COMPENSATED CRYSTAL CLOCK OSCILLATOR

Frequency Technology

FEATURES

- Ultra-miniature package
- High shock and vibrational resistivity
- Low current consumption
- Applications: Portable electronics, GPS, ...





| Item | Specification | n | | | | | |
|--|--|-----------------|-----------------|--------------------------------------|-----------------|----------|----------|
| Frequency Range | I.25 MHz ~ 54.0 MHz | | | | | | |
| Output Signal | CMOS | | | | | | |
| Supply Voltage Vdd (see options) | +1.8V ±5% | +2.5V ±5% | +2.8 | V ±5% | +3.0V ±5% | +3.3\ | / ±5% |
| Supply Current Idd | 6 mA max | | | | | | |
| Frequency Tolerance | ±1.0 ppm at 25°C | C±2°C | | | | | |
| Frequency Stability vs Temperature (see options) | 0° to +50°C -10° to +60°C -20° to +70°C -30° to +75°C -40° to +85°C O = available | ±0.5 ppm | ±1.0 ppm | ±1.5 ppm O O O O X = not avai | ±2.0 ppm | ±2.5 ppm | ±3.0 ppm |
| Frequency Stability vs Aging | ±1.0 ppm max. pe | er year at 25°C | | | | | |
| Frequency Stability vs Voltage Change | ±0.3 ppm max., for a ±5% input voltage change | | | | | | |
| Frequency Stability vs Load Change | ±0.3 ppm max., for a ±10% load condition change | | | | | | |
| Output Level | VOH ≥ 0.9 Vdd | | | VOL≤0 |). I Vdd | | |
| Output Load | 15 pF | | | | | | |
| Symmetry | 45 / 55 % | | | | | | |
| Rise / Fall time Fr/Ff | 5 ns max. | | | | | | |
| Tri-state function | pin #1 = high or pin#1 = low | open | | | ==> oscillation | | |
| Start-up Time | 5 ms typ., 10 ms n | nax. | | | | | |
| Integrated Phase Jitter (12 kHz to 20 MHz band) | l ps max. | | | | | | |
| Phase noise | -145 dBc/Hz typ. a | t 10 kHz offset | | | | | |
| Packing Unit | 3000pcs / reel | | | | | | |
| Soldering Condition | 260°C , 10 sec ×2 | max | | | | | |
| Customer specifications on request | | | | | | | |

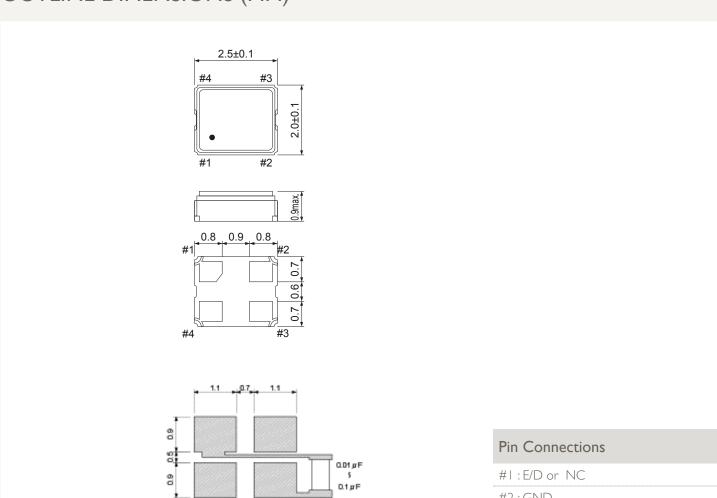
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OPTIONS & ORDERING INFORMATION

| SX2CT | | | | | | MHz | |
|-------|------------------|-------------------|-----------------------------|--------------------------|--------------------|-------------------------------------|--|
| | Supply Voltage * | Operating Temp. * | Temperature Stability * | Tri-state Function | Package type | Frequency in MHz | |
| | 18 = +1.8V | C = 0° / +50°C | $0.5 = \pm 0.5 \text{ ppm}$ | F = No Tri-state | 4P = 4-pad version | Please specify the frequency in MHz | |
| | 25 = +2.5V | D = -10° / +60°C | $1.0 = \pm 1.0 \text{ ppm}$ | EI = Tri-state , pin # I | | | |
| | 28 = +2.8V | F = -20° / +70°C | $1.5 = \pm 1.5 \text{ ppm}$ | | | | |
| | 30 = +3.0V | G = -30° / +75°C | $2.0 = \pm 2.0 \text{ ppm}$ | | | | |
| | 33 = +3.3V | H = -30° / +85°C | $2.5 = \pm 2.5 \text{ ppm}$ | | | | |
| | | K = -40° / +85°C | $3.0 = \pm 3.0 \text{ ppm}$ | | | | |

 $[\]ensuremath{^{\circ}}$ Note : Not all combinations are possible , please consult us.

OUTLINE DIMENSIONS (MM)



1.8

| Pin Connections |
|-----------------|
| #1:E/D or NC |
| #2 : GND |
| #3: Output |
| #4 :Vdd |