

SX2CV

HCMOS SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

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

2.5 x 2.0 x 0.9 mm



Item	Specification		
Frequency Range	1.0 MHz ~ 30.0 MHz		
Output Logic	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	+1.8V ±5%	+2.8V ±5%	+3.3V ±5%
Supply Current Idd	3 mA max.	5 mA max.	8 mA max.
Output Level	VOH ≥ 0.9 Vdd	VOL ≤ 0.1 Vdd	
Output Load	15pF		
Symmetry	45 / 55%		
Rise time / Fall time Fr/Ff	10 ns max (1.0 MHz ~9.99 MHz) 6 ns (10.0 Mhz ~30 MHz)		
Start-up Time	10 ms max.		
RMS Jitter (12 kHz to 20 MHz band)	1 ps max.		
Phase Noise	-130 dBc/Hz max. at 1 kHz offset		
Frequency Pulling Range	±80 ppm min. at Vcon = 0.9V ±0.9V (Vdd = +1.8V) ±90 ppm min. at Vcon = 1.4V ±1.4V (Vdd = +2.8V) ±90 ppm min. at Vcon = 1.65V ±1.65V (Vdd = +3.3V)		
Linearity	6% typical; 10% max.		
Slope Polarity	Positive (Increasing control voltage always increases output frequency)		
Modulation Bandwidth	10 kHz min (-3 dB)		
Input Impedance	1 MΩ min.		
Packing Unit	3000 pcs / reel		
Soldering Condition	260°C , 10 sec x2 max		
	Customer specifications on request		

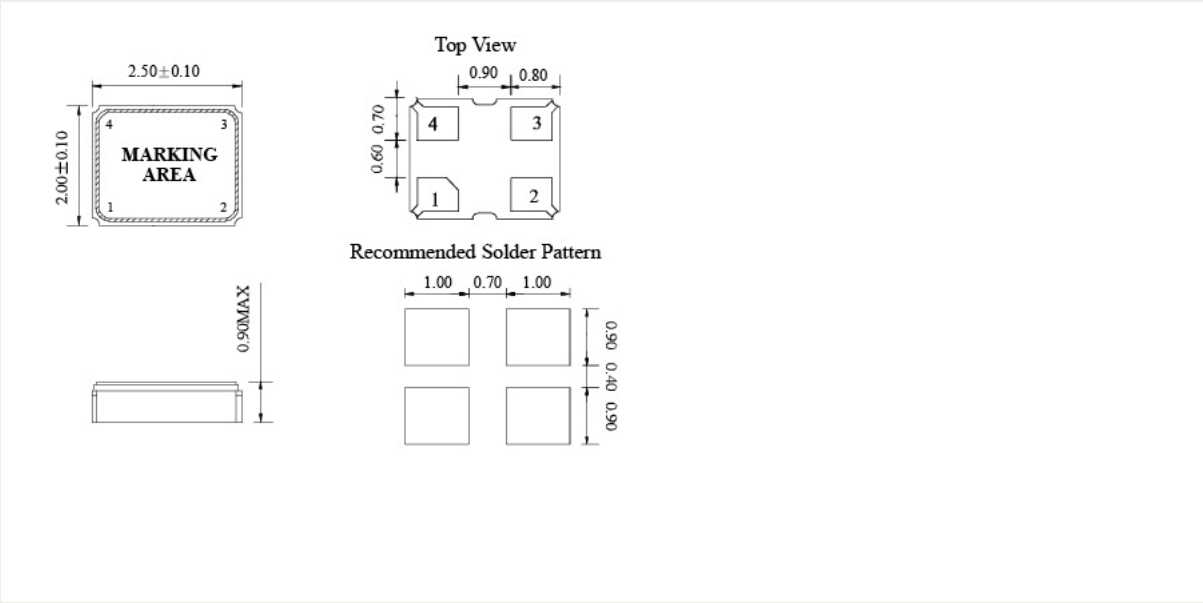
(*) Includes initial tolerance @+25°C, stability over operating temperature, stability vs. load change, stability vs. supply change and one year aging

OPTIONS & ORDERING INFORMATION

SX2CV							 MHz
	Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	Frequency in MHz
	18 = +1.8 V	D = -10° / +60°C	25 = ±25 ppm	F = No Tri-state	4P = 4-pad version	80 = ±80 ppm min.	Please specify the
	28 = +2.8 V	E = 0° / +70°C	30 = ±30 ppm			90 = ±90 ppm min.	frequency in MHz
	33 = +3.3 V	F = -20° / +70°C	50 = ±50 ppm				
		G = -30° / +75°C	100 = ±100 ppm				
		H = -30° / +85°C					
		K = -40° / +85°C					

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

OUTLINE DIMENSIONS



Pin Connections	#1 : Control Voltage	#2 : GND	#3: Output	#4 : Vdd
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