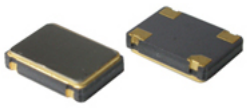
Datasheet

SX3CV HCMOS SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

- Ultra-miniature package
- High shock and vibrational resistivity
- Low current consumption
- Applications: Wireless communications, Digital TV-tuner, ...

3.2 x 2.5 x 1.1 mm



Item	Specification				
Frequency Range	1.0 MHz ~ 54.0 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	+1.8 V ±5%	+2.5 V ±5%	+2.8 V ±5%	+3.3 V ±5%	+5.0 V ±5%
Control Voltage Center	+0.9 V	+1.25 V	+1.4 V	+1.65 V	+2.5 V
Control Voltage Range	0.0 V to 1.8V	0.25 V to 2.25 V	0.4 V to 2.4 V	0.3V to 3.0V	0.5V to 4.5V
Supply Current Idd	10 ~ 45 mA (Frequency dependent)				
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 ~54 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	±50 ppm min.; ±100 ppm min.; ±150 ppm min.; ±200 ppm min. (See options)				
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

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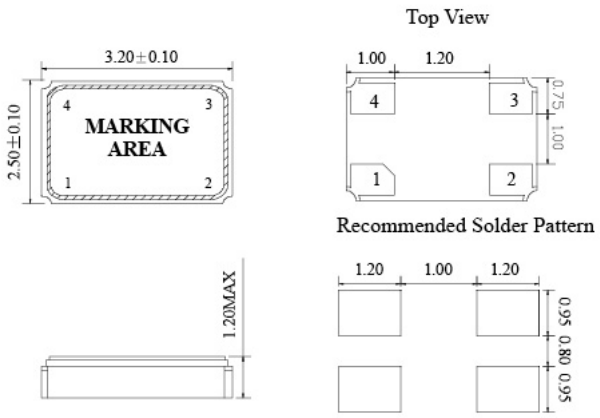
OPTIONS & ORDERING INFORMATION

SX3CV

.....	.....	.....	.....	.....	..... -	..... 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	**50 =** ±50 ppm min.	Please specify the
25 = +2.5 V	**E =** 0° / +70°C	**30 =** ±30 ppm			**100 =** ±100 ppm min.	frequency in MHz
28 = +2.8 V	**F =** -20° / +70°C	**50 =** ±50 ppm			**150 =** ±150 ppm min.	
33 = +3.3 V	**G =** -30° / +75°C	**100 =** ±100 ppm			**200 =** ±200 ppm min.	
50 = +5.0 V	**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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