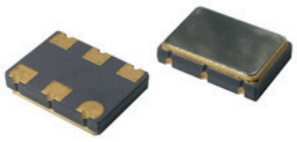
SX5CQV HCMOS SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

- SMD package
- Phase jitter less then 0.6 ps
- Tri-state function
- Applications: Optical, SONET, xDSL, SDH, …

5.0 x 3.2 x 1.3 mm



Item	Specification
Frequency Range	50.0 MHz ~ 245.0 MHz
Output Logic	CMOS
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	+2.5 V ±5% +3.3 V ±10%
Supply Voltage Center	+1.25 V +1.65 V
Control Voltage Range	0.2 V to 2.3 V 0.3 V to 3.0 V
Supply Current Idd	40 mA max (depends of frequency)
Output Level	VOH ≥ 0.9 Vdd VOL ≤ 0.1 Vdd
Output Load	15 pF
Symmetry	45 / 55 %
Rise Time / Fall Time Fr / Ff	3.0 ns max.
Tri-state Function	pin #2 = high or open pin #4 ==> oscillation pin #2 = low pin #4 ==> high impedance
Start-up Time	10 ms max.
Integrated Phase Jitter (12 kHz to 20 MHz band)	0.6 ps typical
Phase Noise (typical)	**Offset** **Freq. 122.880MHz** 10 Hz -68 dBc / Hz 100 Hz -99 dBc / Hz 1 kHz -115 dBc / Hz 10kHz -125 dBc / Hz 100 kHz -130 dBc / Hz
Frequency Pulling Range	standard ±90 ppm min. ; ±100 ppm min. ; ±150 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	1MΩ typ.
Packing Unit	1000pcs / 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

B.C.E. ELECTRONICS
Importation & Distribution Electronic Components
B.C.E. s.r.l.
Via Regina Pacis, 54/c - 41049 SASSUOLO (MO) Italy
Tel. +39 0536 811.616 r.a. - Fax +39 0536 811.500
www.bce.it - E-mail: bce@bce.it

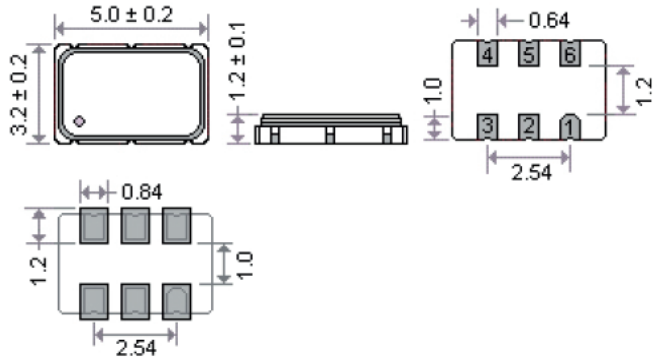
OPTIONS & ORDERING INFORMATION

SX5CQV .... - ..... MHz

Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	Frequency in MHz
25 = +2.5 V	**E** = 0° / +70°C	**20** = ±20 ppm	**E2** = Tri-state, pin #2	**6P** = 6-pad	**90** = ±90 ppm min.	Please specify the
33 = +3.3 V	**F** = -20° / +70°C	**25** = ±25 ppm	**F** = No Tri-state	version	**100** = ±100 ppm min.	frequency in MHz
	K = -40° / +85°C	**30** = ±30 ppm			**150** = ±150 ppm min.	
		50 = ±50 ppm				
		100 = ±100 ppm				

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

OUTLINE DIMENSIONS



Pin Connections			
	#1 : Control Voltage	**#2** : E/D or NC	**#3**: GND
	#4 : Output	**#5** : NC	**#6**: Vdd

B.C.E. ELECTRONICS
Importation & Distribution Electronic Components

B.C.E. s.r.l.
Via Regina Pacis, 54/c - 41049 SASSUOLO (MO) Italy
Tel. +39 0536 811.616 r.a. - Fax +39 0536 811.500
www.bce.it - E-mail: bce@bce.it

SYSTEM CERTIFICATION ISO 9001 SGS