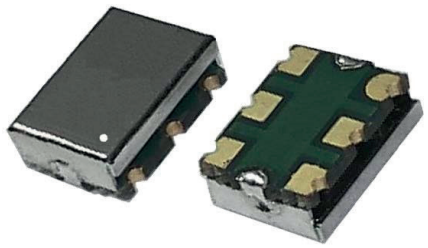
HMI Frequency Technology | ECO Frequency Technology | KLOVE Frequency Technology

SX7CVTQ HCMOS SURFACE MOUNT VCTCXO

FEATURES

- FR4 based package
- Low jitter
- Low current consumption

7.0 x 5.0 x 2.5 mm



Item	Specification
Frequency Range	10 MHz ~ 245.0 MHz
Output Signal	CMOS
Supply Voltage Vdd (see options)	+2.5V ±5% +3.3V ±5%
Supply Current Idd	30.0 mA max , Frequency dependent
Frequency Tolerance	±2.0 ppm at 25°C ±2°C (one hour after reflow)
Frequency Stability vs Temperature (see options)	See table below
Frequency Stability vs Aging	±1.0 ppm max. per year at 25°C
Frequency Stability vs Voltage Change	±0.2 ppm max. , for a ±5% input voltage change
Frequency Stability vs Load Change	±0.2 ppm max. , for a ±10% load condition change
Output Level	VOH ≥ 0.9 Vdd VOL ≤ 0.1 Vdd
Output Load	15 pF
Symmetry	45 / 55 %
Rise / Fall time Fr/Ff	3.0 ns max.
Tri-state function (only available for 6-pad)	pin #2 = high or open → pin #4 ==> oscillation pin#2 = low → pin #4 ==> high impedance
Start-up Time	5 ms max.
Integrated Phase Jitter (12 kHz to 20 MHz band)	0.8 ps typical
Voltage Control Function	See table below
Packing Unit	1000pcs / reel
Soldering Condition	260°C , 10 sec x2 max

	±0.5 ppm	±1.0 ppm	±1.5 ppm	±2.0 ppm	±2.5 ppm
-20° to +70°C	O	O	O	O	O
-30° to +75°C	O	O	O	O	O
-30° to +85°C	O	O	O	O	O
-40° to +85°C	◊	O	O	O	O

O = available ◊ = please contact us X = not available

Supply Voltage (Vdd)	Vdd +2.5V ,Vcon Center = +1.5V	Vdd +3.3V ,Vcon Center = +1.5V
Control voltage range	+1.5V ±1.0V	+1.5V ±1.0V
Frequency pulling range	±8 ppm min.	
Linearity	10 % max	
Slope polarity	Positive	
Input impedance	770 kΩ typ.	
Modulation bandwidth	10 kHz min. (at -3 dB)	

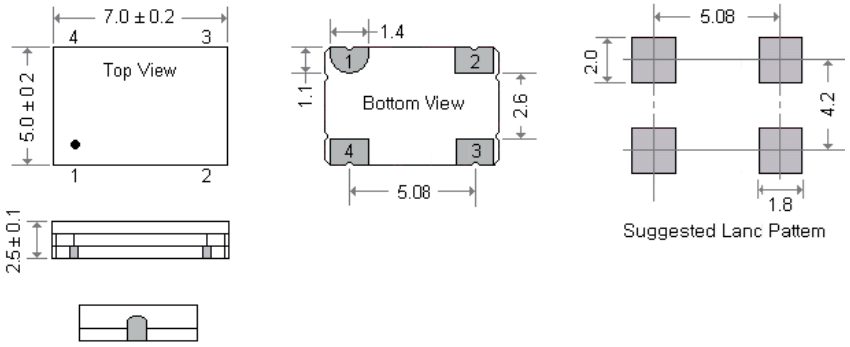
OPTIONS & ORDERING INFORMATION

SX7CVTQ .... MHz

Supply Voltage *	Operating Temp. *	Temperature Stability *	Tri-state Function	Package type	Pulling **	Frequency in MHz
25 = +2.5V 33 = +3.3V	F = -20° / +70°C G = -30° / +75°C H = -30° / +85°C K = -40° / +85°C	0.5 = ±0.5 ppm 1.0 = ±1.0 ppm 1.5 = ±1.5 ppm 2.0 = ±2.0 ppm 2.5 = ±2.5 ppm	F = No Tri-state (4-pad) E2 = Tri-state , pin 2	4P = 4-pad version 6P = 6-pad version	08 = ±8 ppm min.	Please specify the frequency in MHz

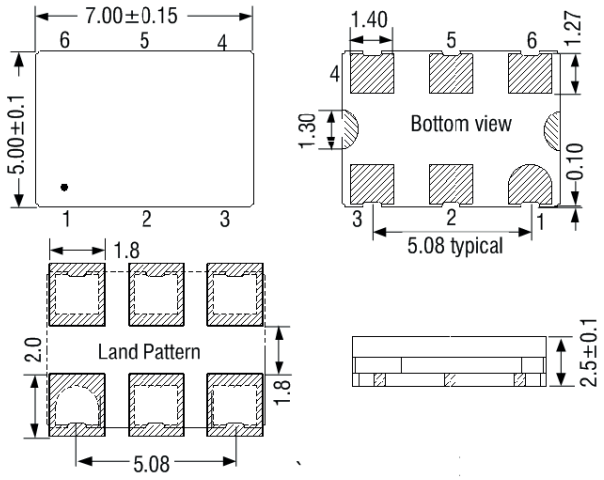
* Note : Not all combinations are possible , please consult us.
** Other pulling range is available on customer specification

OUTLINE DIMENSIONS (MM)



Pin Connections

#1 : NC
#2 : GND
#3: Output
#4 :Vdd



Pin Connections

#1 : NC
#2 : E/D
#3: GND
#4 : Output
#5 : NC
#6 :Vdd