SX7CWV HCMOS SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

FEATURES

- SMD package
- Multiplier circuit, PLL design
- Low cost
- Applications: Optical, SONET, xDSL, SDH, ...

7.0 x 5.0 x 1.8 mm

Item	Specification
Frequency Range	200.0 MHz ~ 800.0 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	+3.3 V ±5%
Control Voltage Center	+1.65 V
Control Voltage Range	0.3V to 3.0V
Supply Current Idd	50 mA max.
Output Level	VOH ≥ 0.9 Vdd VOL ≤ 0.1 Vdd
Output Load	15pF
Symmetry	45 / 55%
Rise Time / Fall Time Fr/Ff	2.4 ns typ.
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)	2.6 ps typical ; 4.0 ps max (For 155.520 MHz)
Period Jitter RMS	4.3 ps typical (For 155.520 MHz)
Period Jitter peak-to-peak	27.0 ps typical (For 155.520 MHz)
Phase Noise (typical)	**Offset** **Frequency 155.520 MHz** 10 Hz -65 dBc / Hz 100 Hz -95 dBc / Hz 1 kHz -120 dBc / Hz 10 kHz -125 dBc / Hz 100kHz -121 dBc / Hz
Frequency Pulling Range	standard ±80 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	25 kHz min. (-3 dB)
Input Impedance	2 MΩ min.
Packing Unit	1000 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

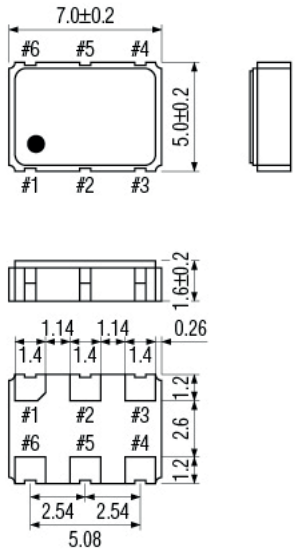
OPTIONS & ORDERING INFORMATION

SX7CWV .... - ..... MHz

Supply Voltage	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	Frequency in MHz
33 = +3.3 V	**E =** 0° / +70°C	**20 =** ±20 ppm	**E2 =** Tri-state at pad #2	**6P =** 6-pad version	**80 =** ±80 ppm min.	Please specify the frequency in MHz
	F = -20° / +70°C	**25 =** ±25 ppm	**F =** No Tri-state		**100 =** ±100 ppm min.	
	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