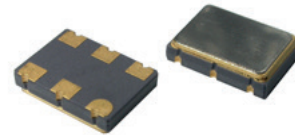


# SX7LQV LVDS SURFACE MOUNT VOLTAGE CONTROLLED CRYSTAL CLOCK OSCILLATOR

## FEATURES

- Standard miniature package
- Reduced jitter design without PLL multiplier circuit
- Good phase noise
- Applications : SONET, xDSL, SDH, Set-top box,...

7.0 x 5.0 x 1.8 mm



Item	Specification				
Frequency Range	10 MHz ~ 1450 MHz				
Output Logic	LVDS				
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	15 ~ 30 mA max.				
Output Voltage HIGH VOH	1.43 V typ. ; 1.6 V max				
Output Voltage LOW VOL	1.10 V typ. ; 0.9 V min.				
Output Load	50 ohm from each output				
Symmetry	45 / 55 %				
Rise Time / Fall Time Fr / Ff	0.4 ns max.				
Tri-state Function	pin #2 = high or open				pin #4 - pin#5 ==> oscillation
	pin #2 = low				pin #4 - pin#5 ==> high impedance
Start-up Time	3 ms typ. ; 10 ms max.				
Integrated Phase Jitter (12 kHz to 20 MHz band)	0.6 ps typical				
Phase Noise (typical)	<b>Offset</b>	<b>Freq. 77.760 MHz</b>	<b>Freq. 156.250 MHz</b>	<b>Freq. 622.080 MHz</b>	<b>Freq. 1250 MHz</b>
	10 Hz	-74 dBc / Hz	-67 dBc / Hz	-52 dBc / Hz	-42 dBc / Hz
	100 Hz	-104 dBc / Hz	-92 dBc / Hz	-82 dBc / Hz	-81 dBc / Hz
	1 kHz	-121 dBc / Hz	-112 dBc / Hz	-99 dBc / Hz	-94 dBc / Hz
	10kHz	-130 dBc / Hz	-121 dBc / Hz	-109 dBc / Hz	-103 dBc / Hz
	100 kHz	-134 dBc / Hz	-124 dBc / Hz	-114 dBc / Hz	-105 dBc / Hz
Frequency Pulling Range	standard ±90 ppm min. ; ±100 ppm min. ; ±150 ppm min. (see options)				
Linearity	3% 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				
	<b>Customer specifications on request</b>				

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

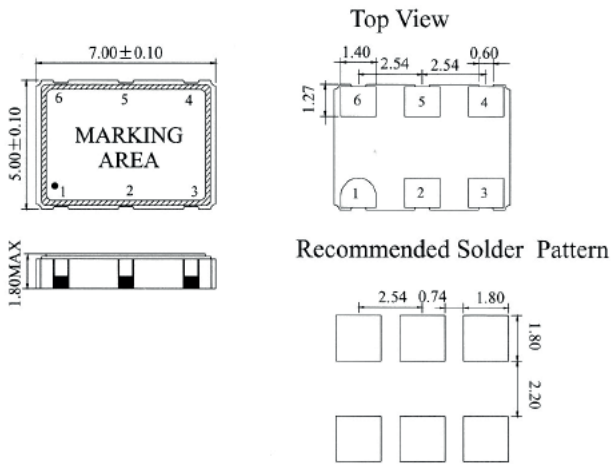
# OPTIONS & ORDERING INFORMATION

## SX7LQV

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, pin #2	6P = 6-pad version	90 = ±90 ppm min.	Please specify the frequency in MHz
25 = +2.5 V	F = -20° / +70°C	25 = ±25 ppm			100 = ±100 ppm min.	
	K = -40° / +85°C	30 = ±30 ppm 50 = ±50 ppm 100 = ±100 ppm			150 = ±150 ppm min.	

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

# OUTLINE DIMENSIONS



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