

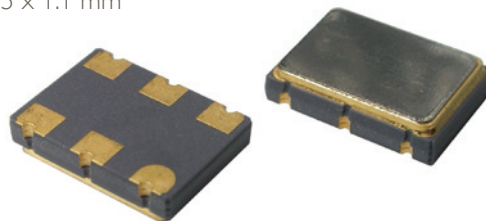
**SX3LQV**

**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 , ....

3.2 x 2.5 x 1.1 mm



Item	Specification			
Frequency Range	10 MHz ~ 1450 MHz			
Output Signal	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	+2.5V ±5%			+3.3V ±10%
Control voltage center	+1.25V			+1.65V
Control voltage range	0.2V to 2.3V			0.3V to 3.0V
Supply Current Idd	15 ~ 45 mA max.			
Output Voltage HIGH VOH	1.43V typ., 1.6V max.			
Output Voltage LOW VOL	1.10V typ., 0.9V min.			
Output Load	50 ohm from each output			
Symmetry	45 / 55 %			
Rise / Fall time Fr/Ff	0.4 ns max.			
Tri-state function	pin #2 = high or open pin #2 = low			pin #4 - #5 ==> oscillation pin #4 - #5 ==> high impedance
Start-up Time	3 ms typ.; 10 ms max.			
Integrated Phase Jitter ( 12 kHz to 20 MHz )	0.6 ps typical			
Phase Noise ( typical )	<b>Offset</b>	<b>Frequency</b>	<b>156.250 MHz</b>	<b>622.080 MHz</b>
	10 Hz	-74 dBc / Hz	-67 dBc / Hz	-52 dBc / Hz
	100 Hz	-104 dBc / Hz	-92 dBc / Hz	-82 dBc / Hz
	1 kHz	-121 dBc / Hz	-112 dBc / Hz	-99 dBc / Hz
	10 kHz	-130 dBc / Hz	-121 dBc / Hz	-109 dBc / Hz
	100 kHz	-134 dBc / Hz	-124 dBc / Hz	-114 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	1 MΩ typ.			
Packing Unit	1000pcs / reel			
Soldering Condition	260°C , 10 sec x2 max			

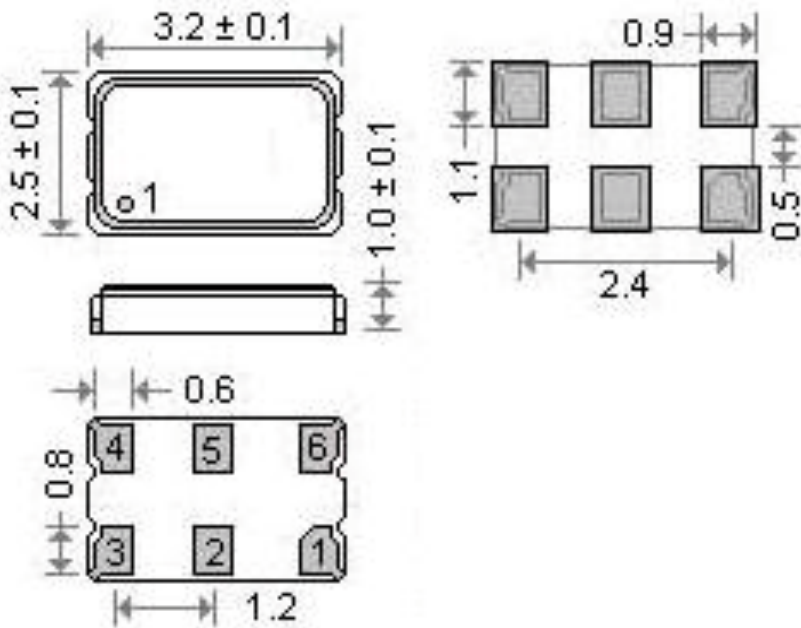
( \* ) Includes initial tolerance @+25°C , stability over operating temperature , stability vs. load change , stability vs. supply change and one year aging

## OPTIONS & ORDERING INFORMATION

SX3LQV						MHz
Supply Voltage *	Operating Temp. *	Overall Stability *	Tri-state Function	Package type	Pulling *	Frequency in MHz
25 = +2.5V 33 = +3.3V	E = 0° / +70°C F = -20° / +70°C K = -40° / +85°C	20 = ±20 ppm 25 = ±25 ppm 30 = ±30 ppm 50 = ±50 ppm 100 = ±100 ppm	E2 = Tri-state , pin 2	6P = 6-pad version	90 = ±90 ppm min. 100 = ±100 ppm min. 150 = ±150 ppm min.	Please specify the frequency in MHz

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

## OUTLINE DIMENSIONS (MM)



### Pin Connections

#1 : Control voltage

#2 : E/D

#3 : GND

#4 : Output

#5 : Complementary output

#6 : Vdd