

SURFACE MOUNT MODEL

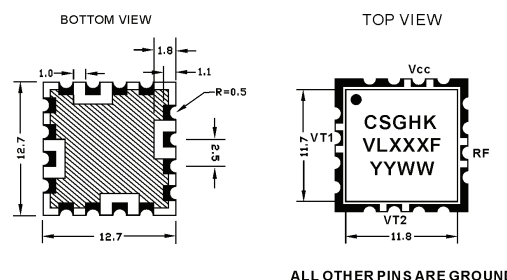
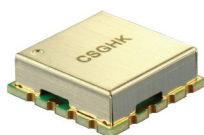
VOLTAGE CONTROLLED OSCILLATOR

Frequency 154-213MHz

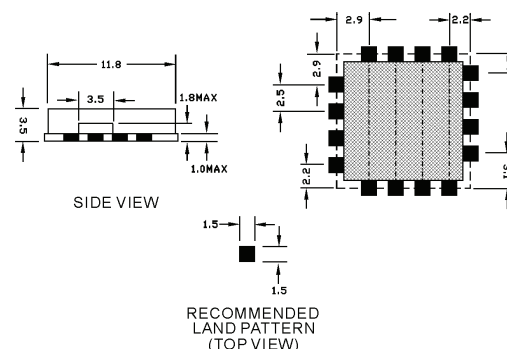
VL213F

FEATURES:

- ▶ Miniature Size
- ▶ Surface Mount Package
- ▶ Low Phase Noise Performance
- ▶ Electrically Shielded
- ▶ Highly Linear Tuning



ALL OTHER PINS ARE GROUND



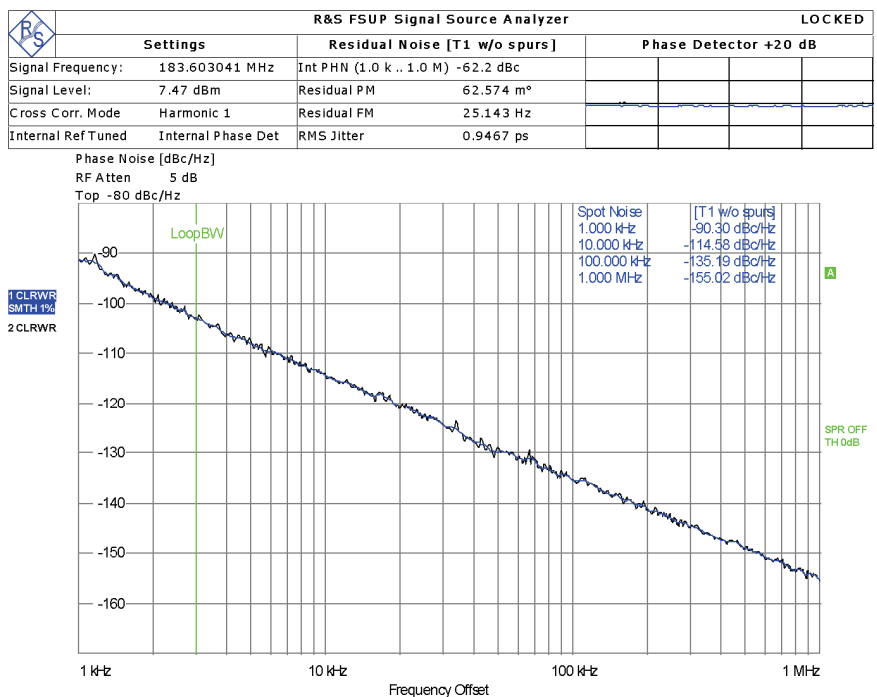
Electrical Specifications, $T_A = +25^{\circ}\text{C}$, $V_{CC} = +5.0\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		154		213	MHz
Tuning Voltage :					
	VT1:	1.5		2.5	V
	VT2:	-0.5		-5.0	V
RF Output Power	154-213MHz	5.0		9.0	dBm
Supply Voltage (Vcc)		4.75		5.25	V
Supply Current (Icc)			20	23	mA
Phase Noise :					
	@10kHz Offset:		-113	-110	dBc/Hz
	@100kHz Offset:		-134	-131	dBc/Hz
Average Tuning Sensitivity	154-213MHz		16.6		MHz/V
Harmonic Outputs			-10		dBc
Operating Temperature Range		-55		+85	$^{\circ}\text{C}$
Tune Input Capacitance			330		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X3.5mm)				

V TUNE	VT1=1.5V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	142.8	138.7	138.0	8.2	8.5	8.5	-3.5	-5.0	-6.5
-1.0	150.8	146.8	145.3	7.8	8.2	8.2	-5.4	-6.5	-7.1
-1.5	160.3	156.1	153.8	7.9	8.1	8.0	-9.8	-6.7	-10.0
-2.0	169.5	164.8	163.3	7.9	7.9	7.8	-12.0	-13.1	-14.3
-2.5	178.5	174.7	173.5	7.7	7.8	7.8	-13.5	-15.2	-16.5
-3.0	188.3	184.6	183.3	7.5	7.8	7.8	-17.2	-17.1	-17.7
-3.5	196.8	193.1	191.5	7.3	7.5	7.5	-19.9	-21.2	-21.2
-4.0	204.3	200.8	199.5	6.9	7.0	7.0	-21.1	-23.1	-24.7
-4.5	211.5	208.5	207.3	6.4	6.4	6.5	-22.1	-25.2	-27.1
-5.0	218.0	215.4	214.3	6.1	6.1	6.1	-23.4	-26.5	-28.4

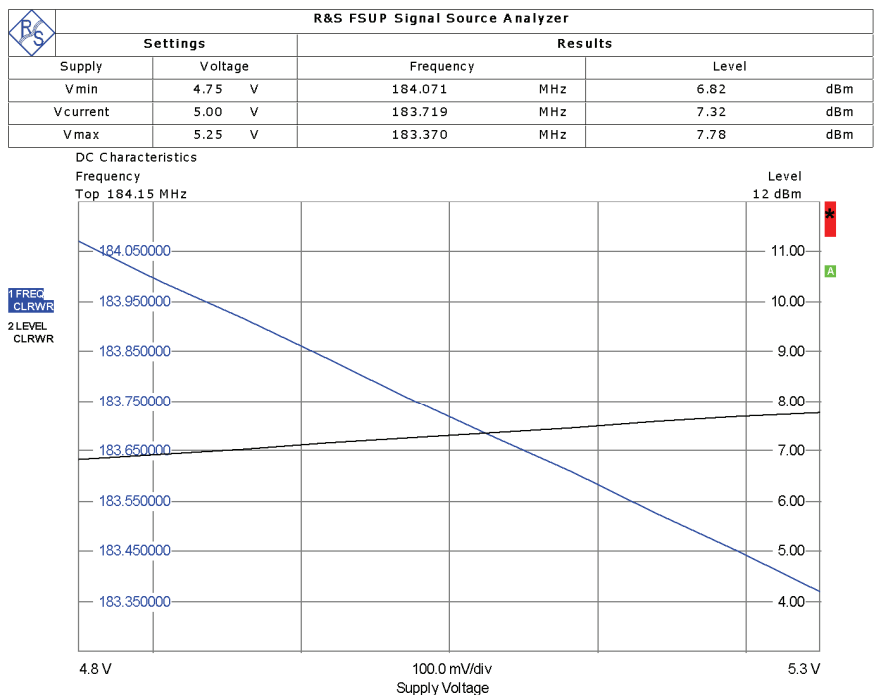
V TUNE	VT1=2.0V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	150.8	147.0	145.5	7.8	8.2	8.2	-5.7	-6.1	-7.1
-1.0	160.0	156.0	154.0	7.8	8.1	8.0	-9.9	-9.9	-10.1
-1.5	169.3	165.0	163.3	7.8	7.8	7.8	-12.2	-13.2	-14.5
-2.0	178.3	174.9	173.3	7.7	7.8	7.8	-13.8	-15.2	-16.6
-2.5	188.0	184.6	182.8	7.5	7.8	7.8	-17.5	-17.4	-17.8
-3.0	196.5	193.1	191.5	7.3	7.5	7.5	-20.2	-20.7	-22.1
-3.5	203.8	201.0	199.5	6.9	7.0	7.0	-21.4	-22.9	-25.6
-4.0	211.3	208.4	207.3	6.4	6.5	6.5	-22.4	-25.1	-27.9
-4.5	217.8	215.4	214.3	6.1	6.1	6.1	-23.4	-26.6	-28.7
-5.0	224.3	221.7	221.0	5.9	5.9	5.9	-27.0	-28.3	-28.1

V TUNE	VT1=2.5V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	160.3	155.8	153.8	7.8	8.1	8.0	-9.9	-9.4	-10.2
-1.0	169.0	164.8	163.0	7.8	7.8	7.8	-11.4	-13.0	-14.6
-1.5	178.8	174.7	173.3	7.6	7.8	7.8	-13.2	-14.9	-16.5
-2.0	188.3	184.4	182.8	7.5	7.7	7.8	-16.8	-16.8	-18.2
-2.5	196.8	192.9	191.5	7.2	7.5	7.5	-20.0	-19.9	-21.2
-3.0	204.0	200.8	199.5	6.8	7.0	7.0	-21.5	-23.1	-24.6
-3.5	211.3	208.0	207.3	6.4	6.5	6.5	-22.3	-25.1	-26.8
-4.0	218.0	215.2	214.3	6.0	6.1	6.1	-23.5	-26.5	-28.5
-4.5	224.3	221.8	220.8	5.8	5.9	5.9	-27.1	-28.3	-28.2
-5.0	230.3	227.8	226.8	5.7	5.8	5.8	-32.1	-28.9	-27.3



Measurement Aborted

Date: 4.NOV.2010 13:18:44



Measurement Aborted

Date: 4.NOV.2010 13:20:26