

SURFACE MOUNT MODEL

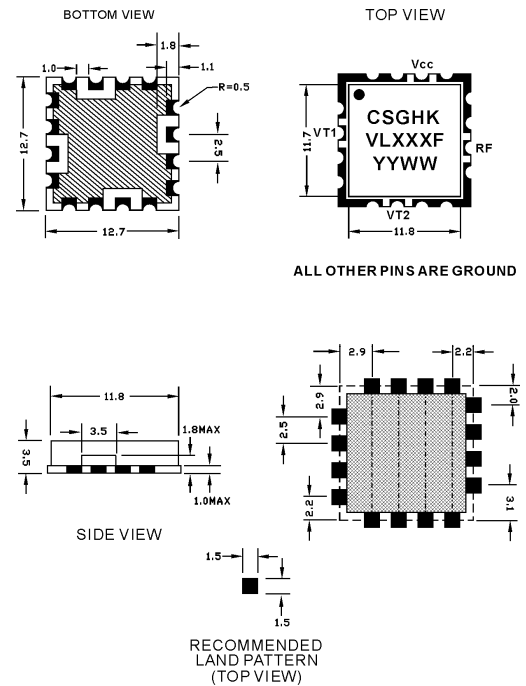
VOLTAGE CONTROLLED OSCILLATOR

Frequency 909-1391MHz

VL1391F

FEATURES:

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



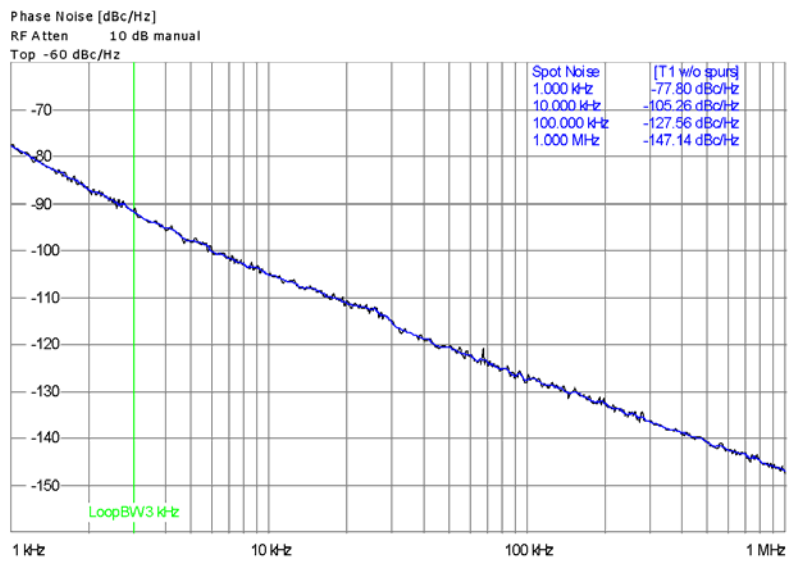
Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{CC} = +12\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		909		1391	MHz
Tuning Voltage :					
	VT1:	1.5		2.5	V
	VT2:	-1.0		-11.0	V
RF Output Power	909-1391MHz	6.0		10.0	dBm
Supply Voltage (Vcc)		11.75	12	12.25	V
Supply Current (Icc)			24	27	mA
Phase Noise :					
	@10kHz Offset:		-104	-101	dBc/Hz
	@100kHz Offset:		-125	-122	dBc/Hz
Average Tuning Sensitivity	909-1391MHz		56.7		MHz/V
Harmonic Outputs			-5		dBc
OperatingTemperature Range		-55		+85	°C
Tune Input Capacitance			27		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X3.5mm)				

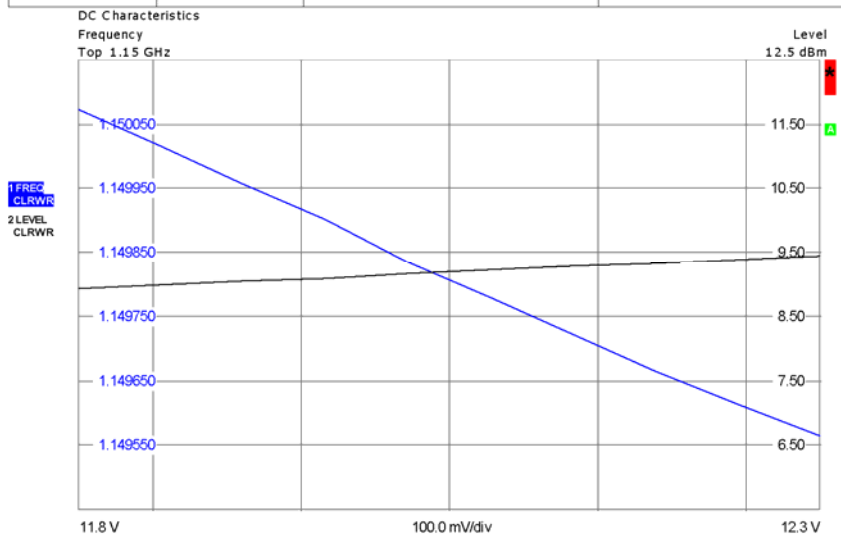
VT2 TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
							2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-1.0	837.4	825.4	813.8	9.4	8.2	7.3	-3.8	-7.5	-11.4
-2.0	890.0	878.8	870.8	9.8	8.6	7.5	-4.9	-7.9	-10.6
-3.0	947.4	936.0	929.4	9.4	8.4	7.1	-6.3	-7.4	-10.3
-4.0	1006.6	993.6	987.8	9.4	8.7	6.9	-6.1	-6.6	-11.3
-5.0	1065.2	1052.6	1047.8	9.8	8.9	6.9	-5.7	-6.0	-10.7
-6.0	1124.4	1112.4	1108.6	9.9	9.0	6.8	-4.8	-6.1	-11.7
-7.0	1181.6	1171.4	1167.6	10.3	8.6	6.7	-4.3	-7.0	-12.3
-8.0	1236.6	1230.8	1226.2	10.2	7.4	6.2	-3.9	-7.7	-12.5
-9.0	1295.4	1288.6	1281.4	8.1	6.9	6.5	-5.4	-10.1	-15.0
-10.0	1350.4	1342.2	1334.2	7.7	7.0	6.7	-6.5	-11.2	-14.9
-11.0	1403.4	1394.4	1385.6	7.1	6.8	6.6	-8.1	-12.4	-16.1

V TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
							2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-1.0	861.4	851.0	841.8	10.1	8.4	7.3	-3.5	-7.6	-10.5
-2.0	916.8	906.8	898.6	9.5	8.3	6.8	-4.8	-7.7	-11.8
-3.0	975.0	963.0	957.2	9.5	8.8	7.2	-6.7	-7.0	-10.7
-4.0	1034.6	1022.2	1017.4	9.5	8.7	6.7	-6.1	-6.1	-10.9
-5.0	1094.0	1081.8	1078.2	9.9	9.0	6.9	-5.4	-6.4	-11.8
-6.0	1152.2	1141.4	1138.4	10.1	8.8	6.6	-4.6	-6.2	-11.6
-7.0	1209.0	1202.2	1197.4	10.1	7.7	6.4	-3.8	-7.9	-13.4
-8.0	1265.0	1259.0	1253.4	9.1	7.3	6.5	-5.3	-9.4	-14.0
-9.0	1322.2	1315.0	1308.6	7.6	6.6	6.1	-6.1	-10.0	-14.2
-10.0	1377.8	1368.6	1360.0	7.3	7.1	6.7	-8.2	-12.4	-16.0
-11.0	1428.2	1418.6	1410.2	7.1	6.9	6.6	-9.0	-12.6	-16.3

V TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
							2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-1.0	886.6	876.8	868.0	10.1	8.6	7.3	-4.4	-7.9	-10.9
-2.0	944.2	934.2	928.0	9.4	8.4	6.9	-6.2	-7.5	-10.9
-3.0	1003.6	992.2	986.4	9.4	8.7	6.7	-6.1	-6.6	-12.2
-4.0	1063.2	1051.0	1047.4	9.6	8.8	6.7	-5.4	-6.1	-11.3
-5.0	1123.8	1111.6	1108.4	9.9	8.9	6.6	-4.8	-6.3	-12.2
-6.0	1179.8	1171.2	1168.4	10.3	8.3	6.6	-4.3	-7.5	-13.0
-7.0	1235.0	1230.8	1225.8	10.2	7.3	6.2	-3.9	-8.1	-12.9
-8.0	1295.0	1288.6	1281.2	7.9	6.9	6.5	-5.8	-10.6	-15.5
-9.0	1349.4	1340.6	1333.2	7.6	7.0	6.4	-7.6	-11.4	-14.6
-10.0	1403.0	1394.0	1385.4	7.0	6.8	6.6	-8.3	-12.4	-16.2
-11.0	1453.8	1442.8	1433.0	7.1	7.1	6.7	-10.6	-14.3	-18.1



R&S FSUP Signal Source Analyzer					
Settings			Results		
Supply	Voltage		Frequency		Level
Vmin	11.75	V	1.150	GHz	8.94 dBm
Vcurrent	12.00	V	1.150	GHz	9.19 dBm
Vmax	12.25	V	1.150	GHz	9.44 dBm



Measurement Aborted

Date: 28.MAR.2014 14:55:21