

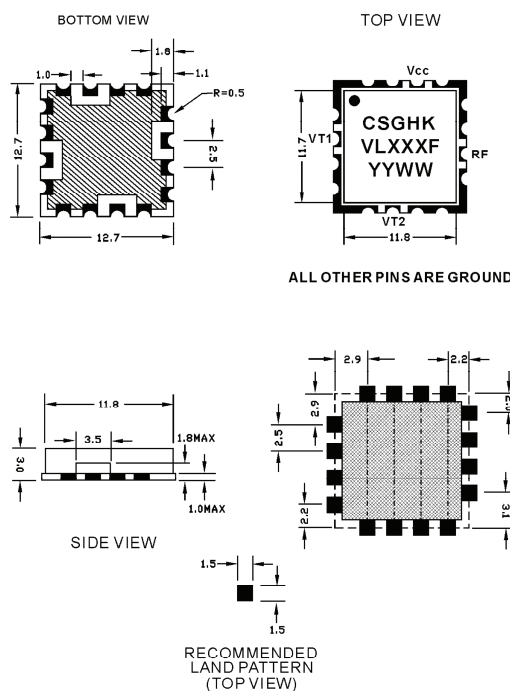
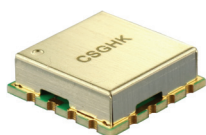
SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 1000-1612MHz

VL1612FB

FEATURES:

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



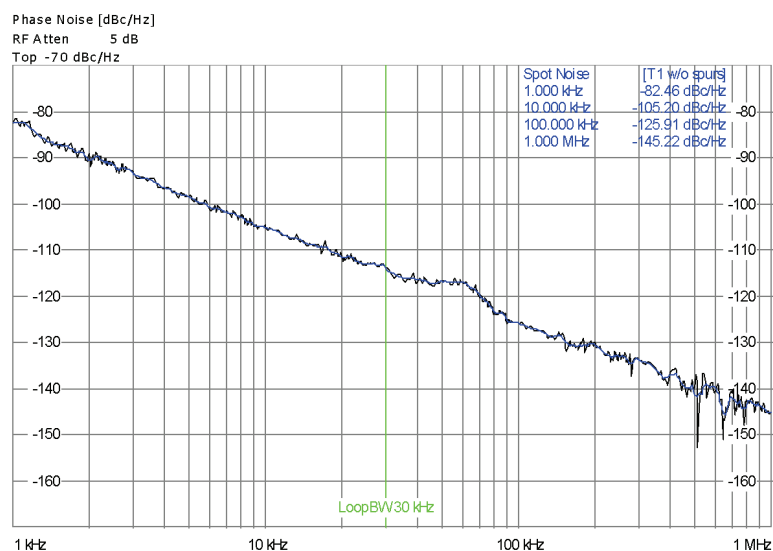
Electrical Specifications, $T_A = +25^{\circ}\text{C}$, $V_{CC} = +5.0\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		1000		1612	MHz
Tuning Voltage :					
	VT1:	1.6		2.6	V
	VT2:	-0.5		-11.0	V
RF Output Power	1000-1612MHz	4.0		8.0	dBm
Supply Voltage (Vcc)		4.75	5.0	5.25	V
Supply Current (Icc)			20	23	mA
Phase Noise :					
	@10kHz Offset:		-103	-100	dBc/Hz
	@100kHz Offset:		-124	-121	dBc/Hz
Average Tuning Sensitivity	1000-1612MHz		61.7		MHz/V
Harmonic Outputs			-10		dBc
Operating Temperature Range		-55		+85	$^{\circ}\text{C}$
Tune Input Capacitance			22		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X3.0mm)				

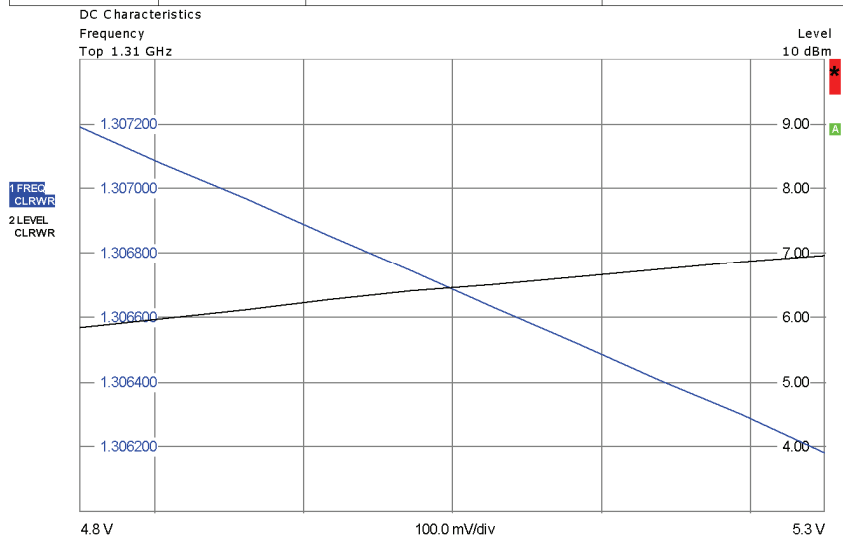
V TUNE	VT1=1.6V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	960.0	943.8	933.6	8.0	7.3	5.9	-7.0	-8.0	-12.9
-1.0	993.6	977.2	970.0	8.0	7.3	5.7	-6.4	-8.0	-14.6
-2.0	1059.6	1046.8	1041.2	7.7	6.9	5.1	-5.2	-8.0	-15.3
-3.0	1125.4	1115.4	1109.6	7.8	6.6	5.1	-5.2	-8.7	-15.7
-4.0	1191.0	1183.8	1177.0	7.7	6.0	5.0	-5.3	-9.8	-16.5
-5.0	1257.2	1249.4	1242.0	6.4	5.4	4.8	-6.4	-10.6	-15.4
-6.0	1325.6	1314.0	1304.4	5.2	5.4	4.9	-9.1	-13.2	-16.2
-7.0	1388.8	1376.2	1367.0	5.0	5.3	4.9	-10.5	-13.5	-15.3
-8.0	1450.6	1436.4	1425.4	5.3	5.7	5.1	-12.8	-14.8	-15.4
-9.0	1510.2	1495.8	1484.0	5.6	5.9	5.3	-14.3	-15.7	-15.8
-10.0	1567.0	1551.8	1538.8	5.9	6.2	5.6	-17.4	-18.8	-19.1
-11.0	1620.6	1603.0	1590.2	6.5	6.7	5.9	-22.2	-23.6	-23.3

V TUNE	VT1=2.1V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	992.0	976.0	969.2	7.9	7.3	5.5	-6.4	-8.2	-14.9
-1.0	1025.4	1011.0	1005.6	7.9	7.0	5.1	-5.8	-7.9	-15.4
-2.0	1091.8	1080.6	1075.4	7.7	6.6	5.0	-5.2	-8.6	-16.1
-3.0	1157.0	1148.6	1142.6	7.8	6.3	5.0	-5.5	-9.5	-16.5
-4.0	1223.0	1216.4	1209.6	7.1	5.6	4.7	-5.4	-10.2	-16.0
-5.0	1291.8	1281.0	1272.6	5.7	5.5	4.8	-9.2	-13.2	-15.8
-6.0	1357.6	1345.6	1336.0	4.9	6.3	4.8	-9.9	-14.5	-15.9
-7.0	1419.6	1406.0	1396.0	5.3	5.5	5.0	-12.2	-14.5	-15.0
-8.0	1480.4	1466.0	1455.0	5.4	5.7	5.1	-13.5	-15.4	-15.6
-9.0	1538.8	1523.0	1511.4	5.7	6.0	5.4	-16.0	-17.9	-18.2
-10.0	1593.8	1577.4	1565.00	6.3	6.5	5.8	-20.0	-21.0	-22.2
-11.0	1646.8	1628.0	1614.2	6.7	6.8	5.8	-21.3	-25.5	-25.1

V TUNE	VT1=2.6V			POWER OUTPUT(dBm)			HARMONIC(dBc)		
	FREQUENCY(MHz)						2 ⁿ		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	1024.2	1010.4	1004.6	7.8	6.9	5.0	-5.7	-7.9	-16.2
-1.0	1057.6	1045.4	1039.8	7.7	6.7	4.9	-5.3	-8.4	-16.4
-2.0	1124.6	1114.4	1109.2	7.7	6.5	4.9	-5.3	-9.0	-16.2
-3.0	1189.6	1182.2	1176.2	7.7	5.9	4.8	-5.7	-10.7	-17.3
-4.0	1256.8	1248.6	1240.6	6.2	5.4	4.7	-6.9	-11.0	-16.0
-5.0	1325.0	1313.4	1303.6	5.2	5.4	4.8	-9.7	-13.4	-16.5
-6.0	1388.4	1375.8	1365.8	5.0	5.3	4.8	-10.8	-13.9	-15.6
-7.0	1450.2	1436.0	1425.0	5.3	5.7	4.9	-12.9	-15.1	-15.5
-8.0	1509.2	1494.6	1483.4	5.5	5.8	5.1	-15.8	-15.8	-15.8
-9.0	1566.0	1550.8	1538.4	5.9	6.2	5.5	-17.2	-19.2	-19.1
-10.0	1619.6	1602.6	1589.6	6.5	6.7	5.7	-21.5	-24.5	-23.7
-11.0	1671.4	1653.0	1637.8	6.9	7.0	5.6	-22.0	-31.4	-25.9



R&S FSUP Signal Source Analyzer					
Settings			Results		
Supply	Voltage		Frequency	Level	
Vmin	4.75 V		1.307 GHz	5.83	dBm
Vcurrent	5.00 V		1.307 GHz	6.45	dBm
Vmax	5.25 V		1.306 GHz	6.97	dBm



Measurement Aborted
 Date: 23.MAR.2015 14:54:46