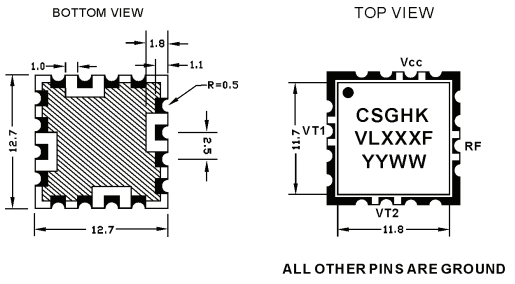
CSGHK

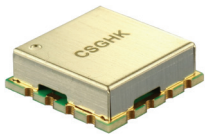
SURFACE MOUNT MODEL
VOLTAGE CONTROLLED OSCILLATOR

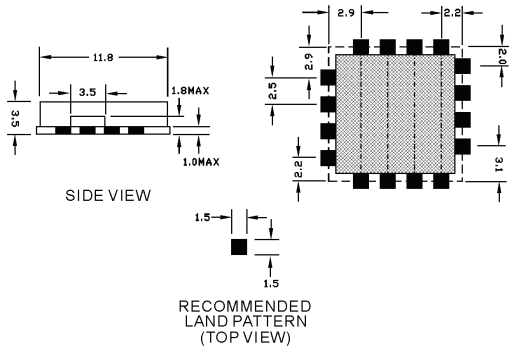
Frequency **900-1000MHz** **VT1000F**

FEATURES:

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







Electrical Specifications, T_A = +25℃, V_{CC} = +5.0V (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		900		1000	MHz
Tuning Voltage：					
	VT1:	1.6		2.6	V
	VT2:	-0.5		-5.0	V
RF Output Power	900-100MHz	7.0		11.0	dBm
Supply Voltage (Vcc)		4.75		5.25	V
Supply Current (Icc)			24	27	mA
Phase Noise：					
	@10kHz Offset:		-107	-104	dBc/Hz
	@100kHz Offset:		-128	-125	dBc/Hz
Average Tuning Sensitivity	900-100MHz		40.2		MHz/V
Harmonic Outputs			-7		dBc
OperatingTemperature Range		-55		+85	℃
Tune Input Capacitance			33		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X3.5mm)				

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VT1=1.6V

V TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc) 2^n		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	848.3	838.5	833.5	10.3	9.7	8.6	-6.0	-7.6	-11.5
-1.0	865.0	856.8	852.5	10.5	9.9	8.9	-6.4	-7.3	-9.8
-1.5	883.8	874.5	870.3	10.8	10.1	9.1	-7.3	-8.5	-11.0
-2.0	905.0	895.0	891.5	10.4	10.2	9.0	-5.8	-9.1	-12.9
-2.5	925.8	916.5	914.0	10.4	9.8	8.3	-5.7	-7.2	-11.3
-3.0	942.3	934.3	932.0	10.5	10.0	8.6	-5.5	-7.0	-9.6
-3.5	960.0	952.0	950.0	10.7	9.9	8.6	-6.4	-7.4	-9.6
-4.0	979.5	973.5	970.5	10.8	9.5	8.4	-5.6	-8.3	-11.4
-4.5	999.3	994.8	992.5	10.3	8.8	7.8	-5.0	-7.4	-11.0
-5.0	1016.3	1013.0	1011.0	10.5	8.8	7.7	-4.9	-7.1	-10.0

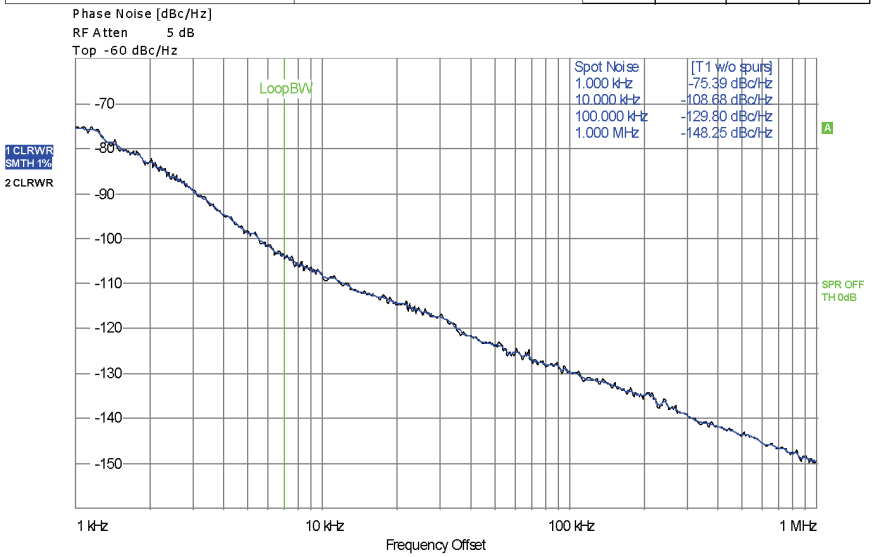
VT1=2.1V

V TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc) 2^n		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	863.8	855.0	851.5	10.4	9.8	8.8	-6.3	-7.3	-10.0
-1.0	882.5	874.0	869.5	10.7	10.0	9.0	-7.3	-8.3	-10.9
-1.5	903.5	894.0	890.3	10.4	10.2	8.9	-6.0	-9.3	-13.3
-2.0	924.5	915.3	913.3	10.3	9.7	8.3	-5.6	-7.2	-10.8
-2.5	941.3	933.3	931.0	10.5	10.0	8.5	-5.5	-7.0	-9.5
-3.0	959.0	951.3	949.5	10.7	9.8	8.5	-5.4	-7.5	-9.8
-3.5	978.0	972.5	969.8	10.8	9.4	8.4	-5.7	-8.4	-11.9
-4.0	998.0	994.0	991.5	10.3	8.7	7.7	-5.0	-7.4	-11.2
-4.5	1015.8	1012.3	1010.3	10.5	8.7	7.6	-5.0	-7.1	-10.1
-5.0	1035.5	1034.8	1027.8	10.5	8.5	7.8	-6.2	-7.7	-9.7

VT1=2.6V

V TUNE	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc) 2^n		
	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
-0.5	881.3	872.8	868.8	10.6	9.9	8.9	-7.2	-8.2	-11.3
-1.0	902.3	893.3	890.0	10.4	10.1	8.8	-6.0	-9.3	-13.6
-1.5	923.0	914.5	912.5	10.2	9.6	8.2	-5.6	-7.3	-10.2
-2.0	940.2	932.8	930.3	10.4	9.9	8.4	-5.5	-7.0	-9.7
-2.5	958.0	950.5	918.8	10.5	9.7	8.4	-6.2	-7.4	-9.6
-3.0	977.3	971.8	969.0	10.7	9.4	8.3	-5.8	-8.5	-11.9
-3.5	997.0	993.5	990.8	10.2	8.6	7.7	-5.0	-7.4	-11.2
-4.0	1014.8	1011.8	1099.3	10.4	8.7	7.6	-5.0	-7.2	-11.1
-4.5	1035.0	1030.5	1027.0	9.4	8.5	7.8	-5.4	-7.4	-9.9
-5.0	1057.8	1051.3	1045.5	8.5	8.4	8.0	-6.9	-6.8	-11.6

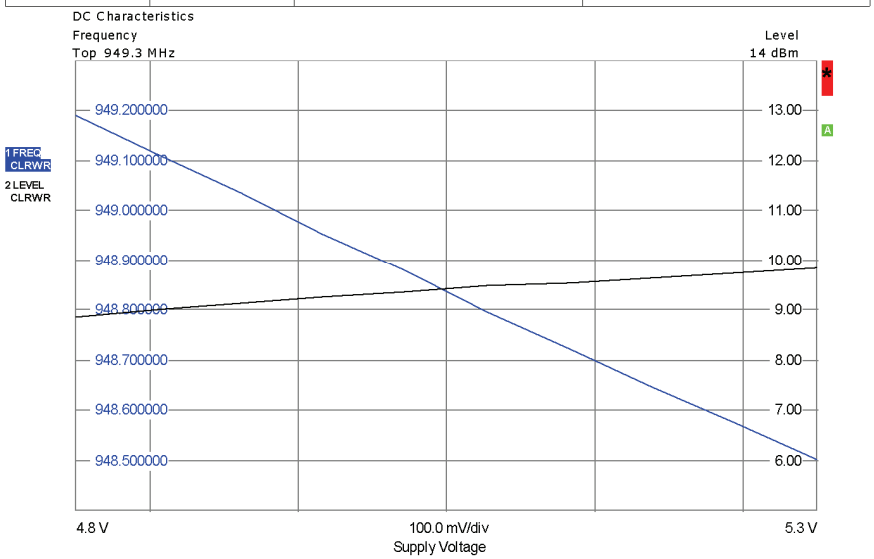
R&S FSUP Signal Source Analyzer				LOCKED
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +0 dB
Signal Frequency:	947.571358 MHz	Int PHN (1.0 k .. 1.0 M)	-47.5 dBc	
Signal Level:	9.57 dBm	Residual PM	0.341 °	
Cross Corr. Mode	Harmonic 1	Residual FM	50.513 Hz	
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.9991 ps	



Measurement Aborted

Date: 18.OCT.2010 08:58:26

R&S FSUP Signal Source Analyzer					
Settings		Results			
Supply	Voltage	Frequency		Level	
Vmin	4.75 V	949.192	MHz	8.86	dBm
Vcurrent	5.00 V	948.839	MHz	9.42	dBm
Vmax	5.25 V	948.502	MHz	9.83	dBm



Measurement Aborted

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