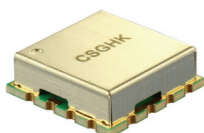


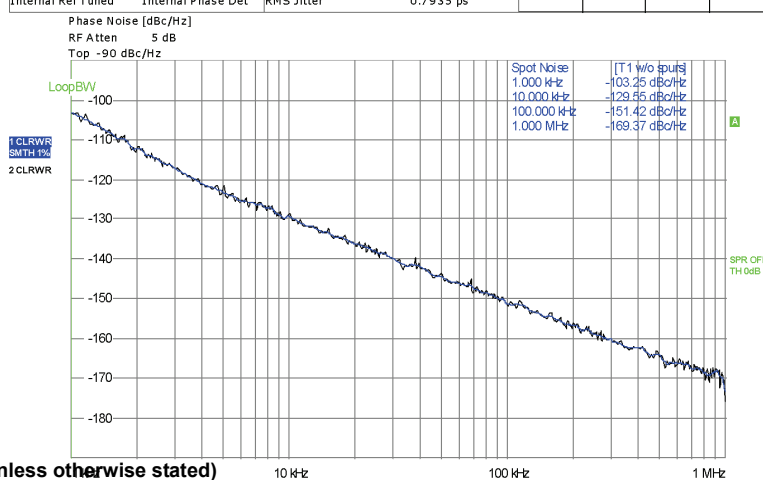
SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency

VT46M



R&S FSUP Signal Source Analyzer				LOCKED			
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +30 dB			
Signal Frequency:	46.064969 MHz	Int PHN (1.0 k .. 1.0 M)	-75.8 dBc				
Signal Level:	9.6 dBm	Residual PM	13.158 m°				
Cross Corr. Mode	Harmonic 1	Residual FM	4.162 Hz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.7935 ps				



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)

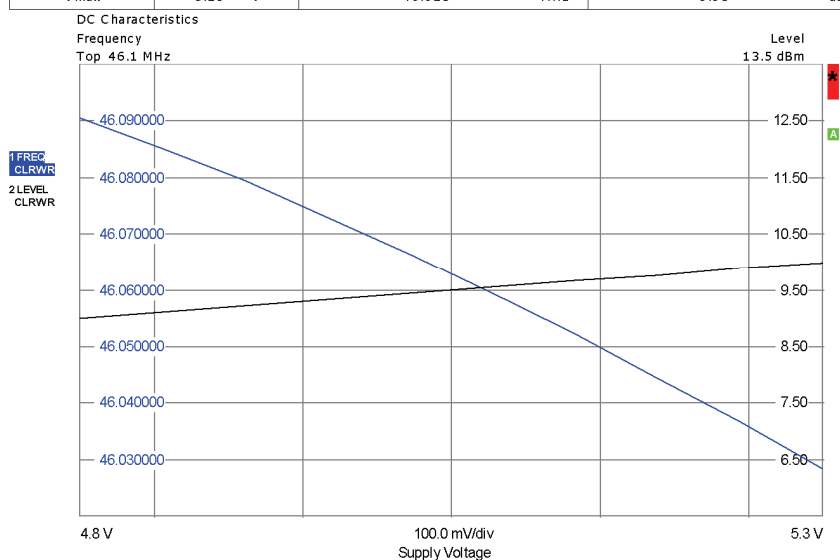
Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs			45.999		MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power		7.0		11.0	dBm
Supply Voltage (Vcc)		4.75		5.25	V
Supply Current (Icc)			19	22	mA
Phase Noise :					
	@10kHz Offset:		-128	-125	dBc/Hz
	@100kHz Offset:		-149	-146	dBc/Hz
Average Tuning Sensitivity			1.7		MHz/V
Harmonic Outputs			-20		dBc
Operating Temperature Range		-55		+85	°C
Tune Input Capacitance			1000		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X4.3mm)				

Comments

X Indicates parameter to be tested 100% in production

V TUNE	TUNING SENS. (MHz/V)	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
		-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
0.5	1.7	42.4	41.9	41.6	9.5	9.8	10.0	-14.4	-15.4	-16.3
1.0	1.7	43.2	42.8	42.6	9.1	9.7	10.0	-15.9	-17.6	-18.4
1.5	1.8	44.2	43.7	43.5	9.1	9.5	9.7	-17.3	-18.6	-20.5
2.0	1.8	45.1	44.6	44.4	9.0	9.4	9.7	-18.2	-20.0	-22.4
2.5	1.7	45.9	45.5	45.2	8.9	9.3	9.6	-19.2	-21.3	-22.7
3.0	1.7	46.7	46.3	46.1	8.8	9.3	9.5	-19.4	-22.5	-24.6
3.5	1.7	47.6	47.1	46.9	8.7	9.2	9.4	-21.4	-23.3	-25.7
4.0	1.8	48.6	48.0	47.8	8.6	9.0	9.3	-22.4	-24.5	-27.5
4.5	1.9	49.5	49.0	48.8	8.5	8.9	9.2	-23.5	-26.5	-29.0

BS	R&S FSUP Signal Source Analyzer					
	Settings		Results			
	Supply	Voltage	Frequency		Level	
	Vmin	4.75 V	46.091	MHz	8.98	dBm
	Vcurrent	5.00 V	46.063	MHz	9.51	dBm
	Vmax	5.25 V	46.028	MHz	9.98	dBm



Measurement Aborted

Date: 17.MAY.2010 09:53:33

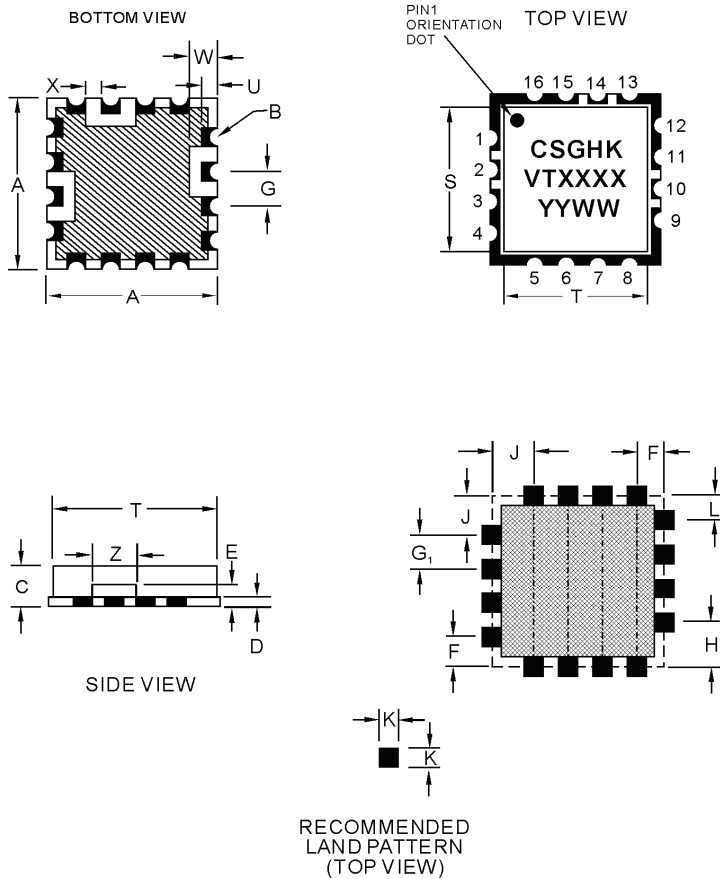
REVISIONS

NOTE. UNLESS OTHERWISE SPECIFIED:

1. THE METAL CASE IS GROUND
2. ALL HALF VIA CONTACTS ARE PLATED THRU FROM THE PAD ON THE TOP SIDE TO THE PAD ON THE BOTTOM SIDE OF THE BOARD.
3. HATCHED AREAS GROUND AND ARE COVERED WITH LPI SOLDER MASK OVER BARE COPPER. ALL CONTACT AREAS ARE PLATED. SIGNAL VIAS MAY BE LOCATED WITHIN GROUND PLANE.
4. SUBSTRATE MATERIAL: FR-4
5. XXXX REPRESENTS THE MODEL NUMBER.
6. YYWW IS THE DATA CODE.

PIN OUT FOR PLL	
PIN	APPLICATION
2	VT
10	RF OUT
14	VCC

ALL OTHER PINS ARE GROUND



SYMBOL	DIMENSION	
	MILLIMETERS	INCHES
A	12.7±0.25	0.50±0.010
B	R=0.50	R=0.019
C	4.3	0.169
D	0.99MAX	0.039MAX
E	1.75MAX	0.069MAX
F	2.16	0.085
G	2.54±0.08	0.100±0.003
G ₁	2.54	0.100
H	3.07	0.121
J	2.92	0.115
K	1.52	0.060
L	2.00	0.079
S	11.68	0.460
T	11.81	0.465
U	1.10	0.043
W	1.78	0.188
X	1.02	0.040
Z	3.49	0.137

	APPROVALS	DATA	 SK605 PACKAGE MECHANICAL PCB OUTLINE
DRAWN BY			
CHECKED BY			
PROCESS ENG			
QUALITY			