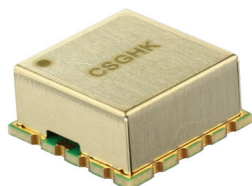


SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

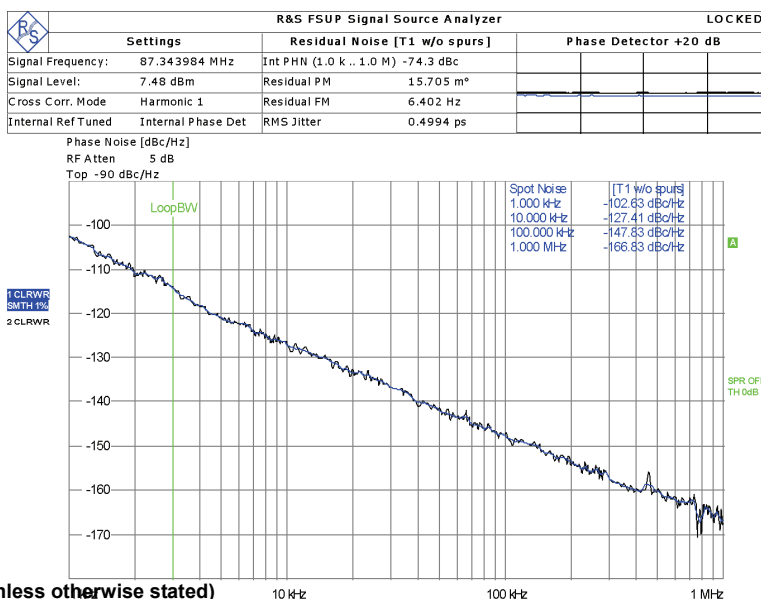
Frequency 72-102MHz

SN102E



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)

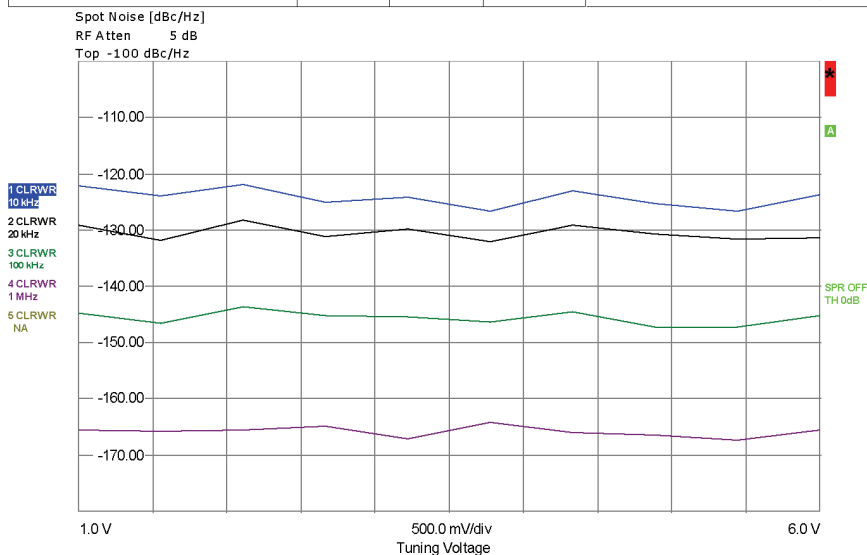
Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		72		102	MHz
Tuning Voltage (V)		1.0		6.0	V
RF Output Power	72-102MHz	5.0		9.0	dBm
Supply Voltage (Vcc)		4.75	5	5.25	V
Supply Current (Icc)			18	21	mA
Phase Noise :					
	@10kHz Offset:		-125	-122	dBc/Hz
	@100kHz Offset:		-146	-143	dBc/Hz
Average Tuning Sensitivity	72-102MHz		9.0		MHz/V
Harmonic Outputs			-15		dBc
OperatingTemperature Range		-55		+85	°C
Tune Input Capacitance			1000		PF
Output Impedance -			50		Ω
Package Type	SK605G(12.7X12.7X5.8mm)				

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℃
1.0	7.2	65.8	65.3	64.8	7.2	7.7	7.6	-12.8	-13.8	-15.2
1.5	8.5	69.8	69.0	68.8	7.1	7.7	7.6	-13.3	-14.4	-15.6
2.0	8.6	74.0	73.5	73.0	6.9	7.6	7.7	-14.4	-15.3	-16.3
2.5	9.1	78.5	78.0	77.3	6.7	7.5	7.7	-15.3	-16.2	-17.2
3.0	8.7	83.0	82.3	81.8	6.7	7.6	7.7	-16.3	-17.2	-17.8
3.5	9.3	87.5	86.8	86.3	6.6	7.6	7.7	-17.3	-18.0	-18.8
4.0	9.2	92.3	91.5	90.8	6.5	7.6	7.7	-17.4	-18.8	-19.4
4.5	9.2	97.0	96.0	95.3	6.6	7.5	7.7	-18.1	-19.0	-19.9
5.0	9.7	101.5	100.8	100.0	6.5	7.4	7.6	-18.5	-20.5	-21.4
5.5	9.3	106.5	105.5	104.8	6.4	7.4	7.6	-20.7	-21.9	-22.5
6.0	9.4	111.3	110.3	109.5	6.5	7.4	7.5	-22.1	-22.7	-23.2

R&S FSUP Signal Source Analyzer							
Settings		Results			Spot Noise [Vtune 6 V] w/o spurs		
Signal Frequency:	65.083221 MHz	Tuning	Voltage	Frequency	10.000 kHz	-123.75 dBc/Hz	
Signal Level:	7.49 dBm	Vmin	1.00 V	65.326 MHz	20.068 kHz	-131.24 dBc/Hz	
Spot Noise Tuning	Harmonic 1	Vcurrent	3.53 V	86.967 MHz	100.000 kHz	-145.31 dBc/Hz	
	Internal Phase Det	Vmax	6.00 V	109.959 MHz	1.000 MHz	-165.65 dBc/Hz	



Measurement Aborted

Date: 22.MAR.2011 08:37:34

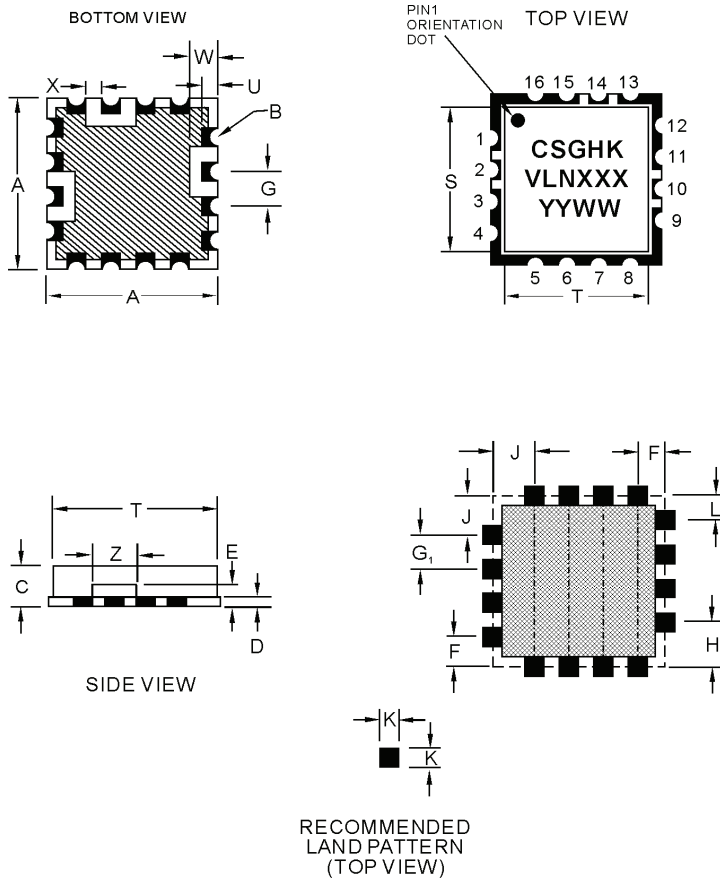
REVISIONS

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	5.80	0.228
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	 SK605G PACKAGE MECHANICAL PCB OUTLINE
DRAWN BY			
CHECKED BY			
PROCESS ENG			
QUALITY			