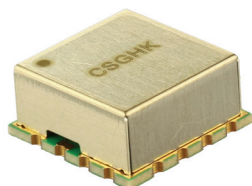


SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

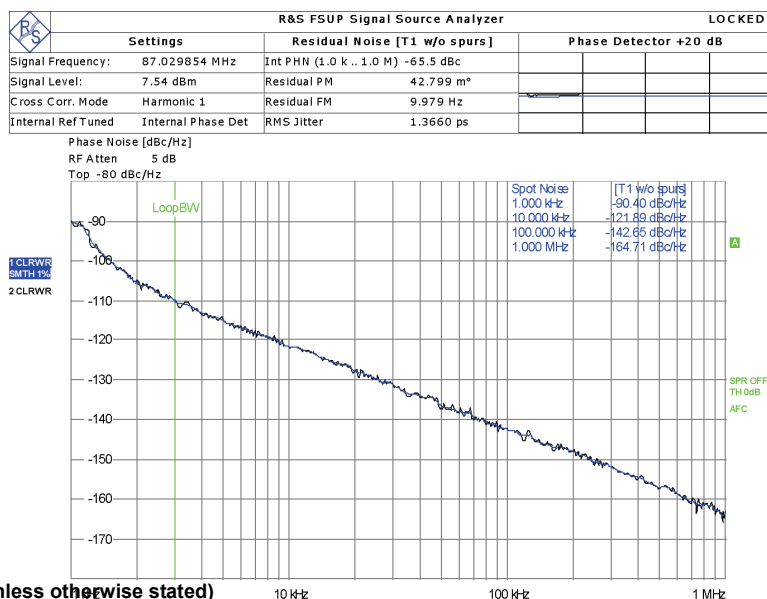
Frequency 72-102MHz

SN102B



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)		2.0		8.0	V
RF Output Power	72-102MHz	5.0		9.0	dBm
Supply Voltage (Vcc)		4.75	5	5.25	V
Supply Current (Icc)			15	18	mA
Phase Noise :					
	@10kHz Offset:		-121	-118	dBc/Hz
	@100kHz Offset:		-142	-139	dBc/Hz
Average Tuning Sensitivity	72-102MHz		5.9		MHz/V
Harmonic Outputs			-25		dBc
OperatingTemperature Range		-55		+85	°C
Tune Input Capacitance			1000		PF
Output Impedance -			50		Ω
Package Type	SK605G(12.7X12.7X5.8mm)				

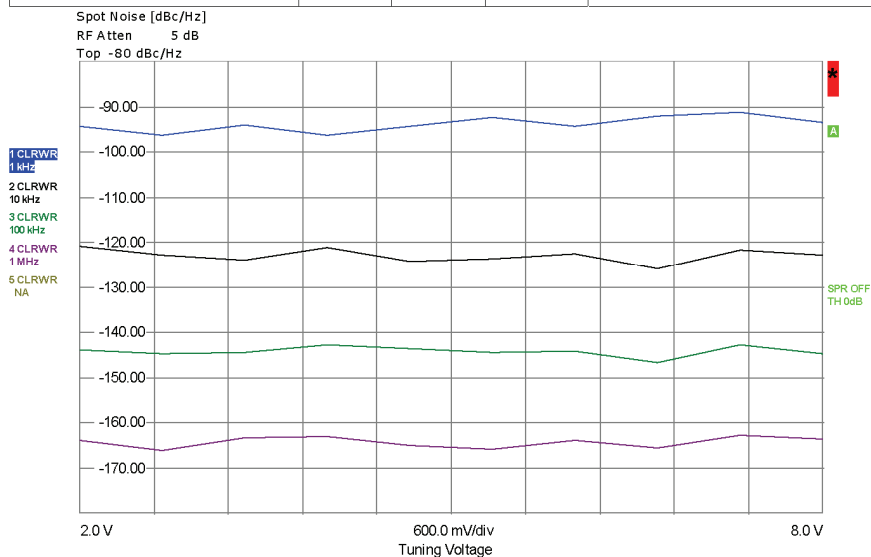
*注意：由于 VLN102B1 工艺特殊，只能用于手工焊接。

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℃
2.0	4.1	70.4	68.7	68.8	7.1	7.2	7.0	-33.2	-32.8	-37.1
2.5	4.3	72.5	70.9	70.9	7.1	7.2	7.1	-31.2	-30.4	-34.2
3.0	4.9	74.7	73.3	73.2	7.2	7.3	7.1	-29.4	-29.5	-32.0
3.5	5.1	77.2	75.8	75.7	7.0	7.4	7.3	-28.5	-28.8	-30.8
4.0	5.3	79.9	78.5	78.3	7.2	7.4	7.3	-28.1	-28.3	-29.9
4.5	5.7	82.7	81.3	81.1	7.1	7.3	7.3	-27.8	-28.1	-29.8
5.0	6.0	85.6	84.3	83.9	7.1	7.3	7.4	-27.9	-28.4	-29.9
5.5	6.0	88.7	87.4	86.9	7.1	7.4	7.4	-28.4	-28.6	-29.9
6.0	6.4	91.9	90.4	90.1	7.1	7.4	7.2	-28.8	-28.8	-30.4
6.5	6.7	95.0	93.7	93.3	7.1	7.3	7.3	-29.2	-29.6	-31.0
7.0	6.8	98.4	97.1	96.6	6.9	7.3	7.4	-29.6	-30.3	-31.6
7.5	6.7	101.9	100.4	99.9	7.0	7.4	7.3	-30.6	-30.6	-31.6
8.0	7.0	105.3	103.8	103.4	7.1	7.3	7.3	-30.6	-30.6	-32.0

R&S	R&S FSUP Signal Source Analyzer						
	Settings		Results		Spot Noise [Vtune 8 V] w/o spurs		
	Signal Frequency:	68.830330 MHz	Tuning	Voltage	Frequency	1.000 kHz	-93.53 dBc/Hz
	Signal Level:	7.48 dBm	Vmin	2.00 V	68.798 MHz	10.000 kHz	-122.85 dBc/Hz
	Spot Noise Tuning	Harmonic 1	Vcurrent	5.47 V	87.025 MHz	100.000 kHz	-144.74 dBc/Hz
	Internal Phase Det		Vmax	8.00 V	103.646 MHz	1.000 MHz	-163.78 dBc/Hz



Measurement Aborted

Date: 19.AUG.2009 09:19:25

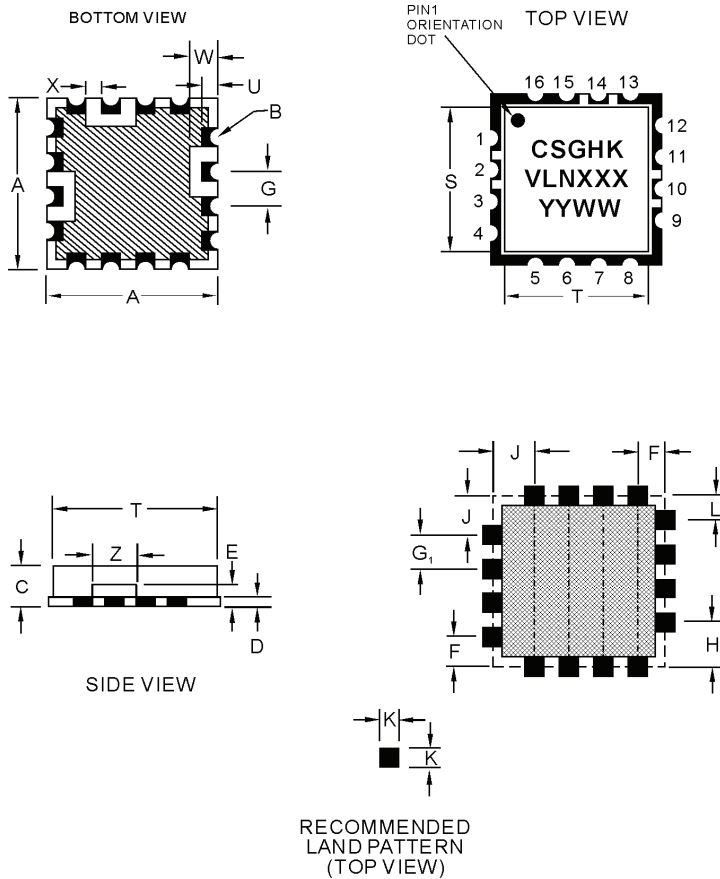
REVISIONS

NOTE. UNLESS OTHERWISE SPECIFIED:

1. THE METAL CASE IS GROUND
2. ALL HALF VIA CONTACTS ARE PLATED THRU FORM 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			