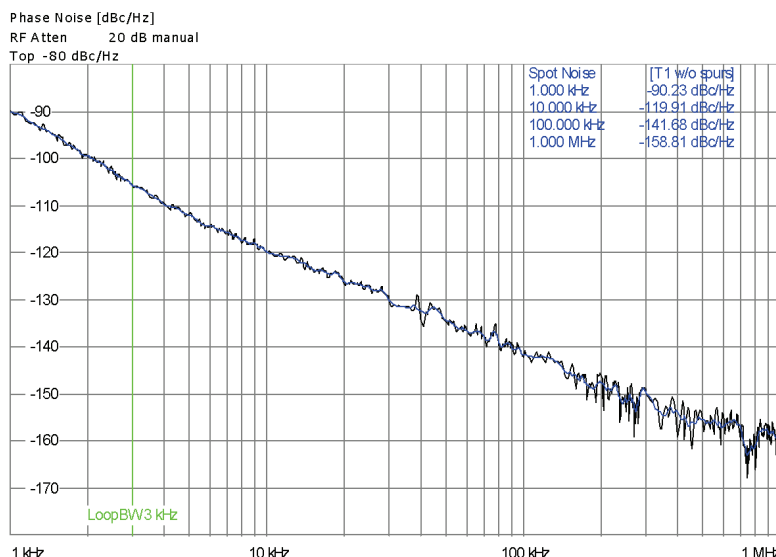
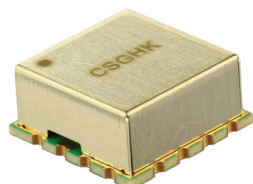


SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 495-520MHz

VLN520MB



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		495		520	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	495-520MHz	5.0		9.0	dBm
Supply Voltage (Vcc)		4.75	5	5.25	V
Supply Current (Icc)			14	17	mA
Phase Noise :					
	@10kHz Offset:		-118	-116	dBc/Hz
	@100kHz Offset:		-141	-138	dBc/Hz
Average Tuning Sensitivity	495-520MHz		13.9		MHz/V
Harmonic Outputs			-30		dBc
OperatingTemperature Range		-55		+85	$^\circ\text{C}$
Tune Input Capacitance			100		PF
Output Impedance -			50		Ω
Package Type	SK605G(12.7X12.7X5.8mm)				

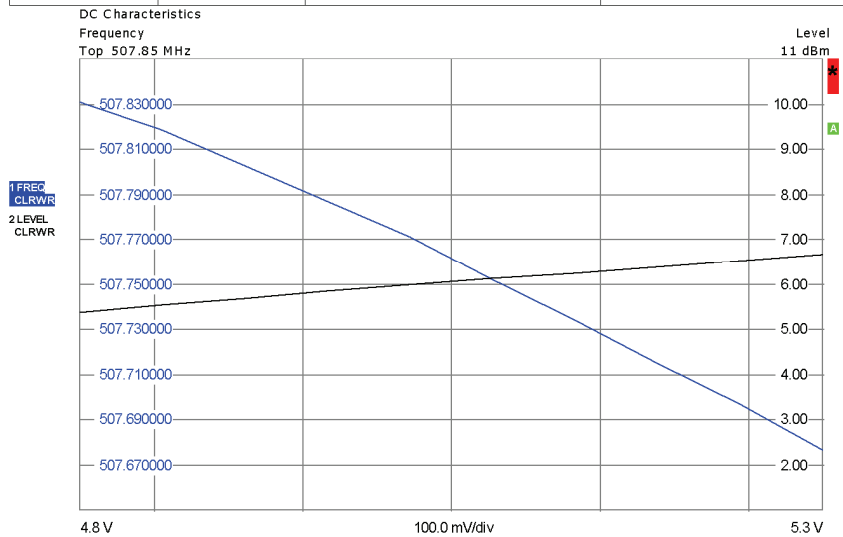
*注意：由于 VLN520MB 工艺特殊，只能用于手工焊接。

Comments

X Indicates parameter to be tested 100% in production

V TUNE	TUNING SENS. (MHz/V)	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc) 2 ⁿ		
		-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
0.5	16.3	481.4	478.8	476.4	7.1	6.9	5.8	-30.2	-31.0	-30.9
1.0	15.2	489.4	486.8	484.2	6.8	6.7	5.7	-30.6	-31.5	-31.3
1.5	14.4	497.0	494.2	491.8	6.7	6.5	5.5	-31.1	-31.5	-31.2
2.0	14.0	504.0	501.4	498.8	6.6	6.6	5.6	-31.4	-31.6	-31.2
2.5	13.8	511.0	508.4	505.6	6.6	6.6	5.6	-31.5	-31.5	-31.0
3.0	13.6	518.2	515.2	512.4	6.5	6.7	5.7	-31.7	-31.5	-30.9
3.5	13.5	525.0	522.0	519.0	6.5	6.7	5.8	-31.8	-31.4	-30.8
4.0	13.2	531.8	528.6	525.4	6.5	6.8	5.8	-32.1	-31.4	-30.7
4.5	13.0	538.6	535.2	531.8	6.4	6.7	5.8	-32.2	-31.4	-30.8

BS	R&S FSUP Signal Source Analyzer					
	Settings			Results		
	Supply	Voltage		Frequency		Level
	Vmin	4.75	V	507.831	MHz	5.36 dBm
	Vcurrent	5.00	V	507.762	MHz	6.04 dBm
	Vmax	5.25	V	507.677	MHz	6.67 dBm



Measurement Aborted

Date: 25.FEB.2014 15:54:05

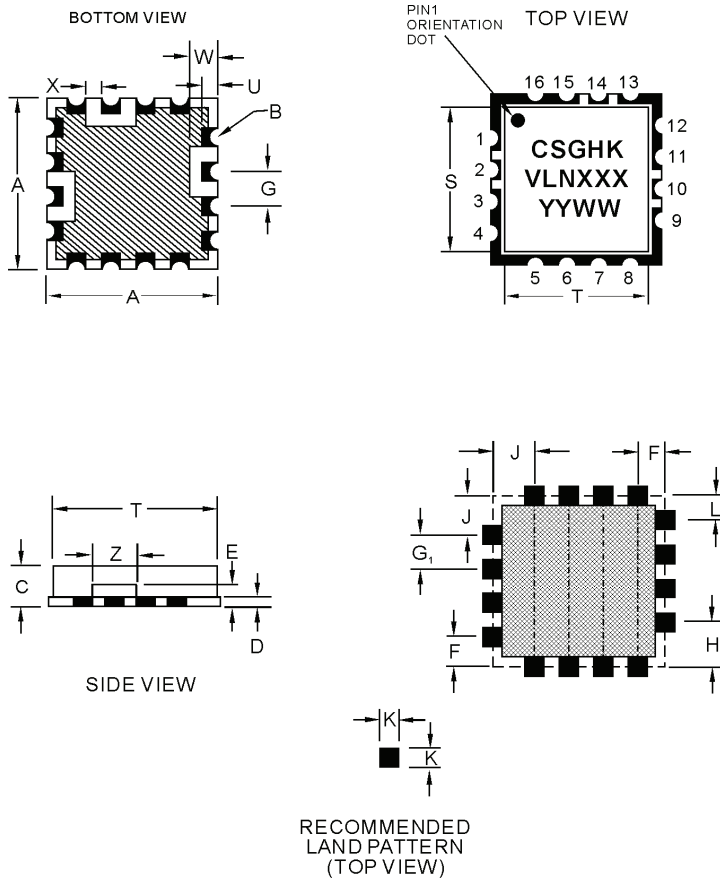
REVISIONS

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			