

SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 2400-3000MHz

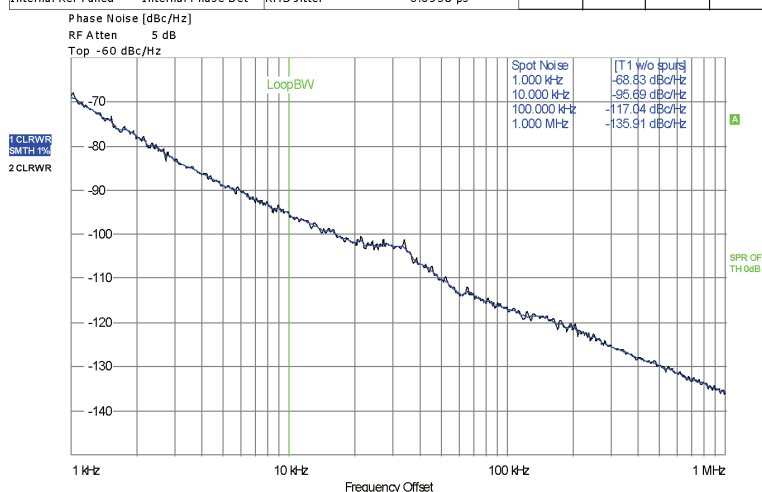
VL3000M



FEATURES

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

R&S FSUP Signal Source Analyzer				LOCKED			
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +20 dB			
Signal Frequency:	2.688242 GHz	Int PHN (1.0 k .. 1.0 M)	-41.6 dBc				
Signal Level:	7.03 dBm	Residual PM	0.673 °				
Cross Corr. Mode	Harmonic 1	Residual FM	228.421 Hz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.6958 ps				



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		2400		3000	MHz
Tuning Voltage (V)		0.5		15.0	V
RF Output Power	2400-3000MHz	5.0		9.0	dBm
Supply Voltage (Vcc)		4.75	5	5.25	V
Supply Current (Icc)			22	25	mA
Phase Noise :					
	@10kHz Offset:		-95	-92	dBc/Hz
	@100kHz Offset:		-115	-112	dBc/Hz
Average Tuning Sensitivity	2400-3000MHz		57.7		MHz/V
Harmonic Outputs			-20		dBc
Operating Temperature Range		-40		+85	°C
Tune Input Capacitance			12		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X4.3mm)				

Comments

X Indicates parameter to be tested 100% in production

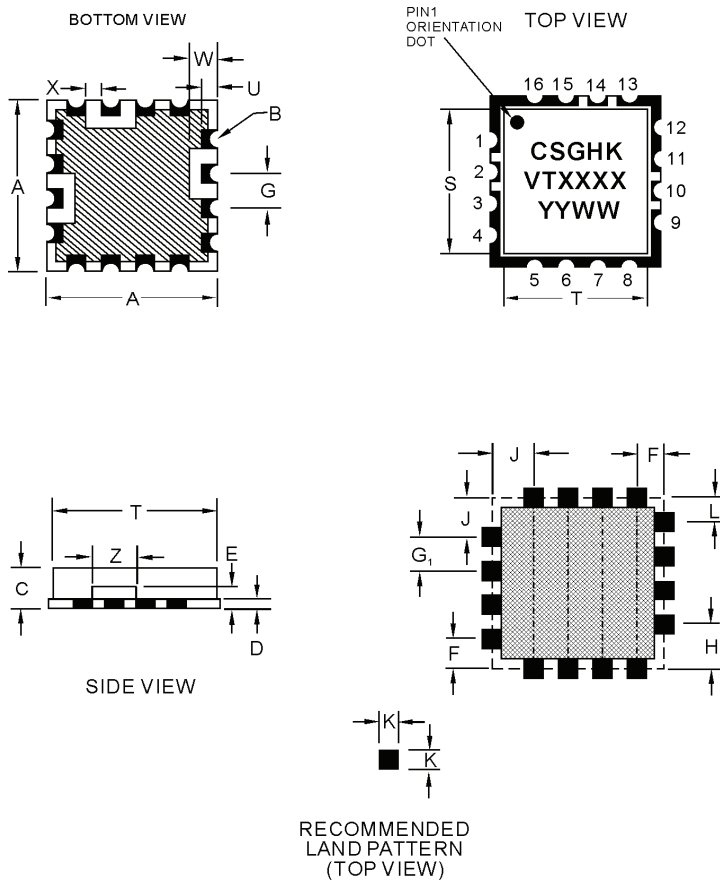
REVISIONS

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	3.50	0.138
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			