

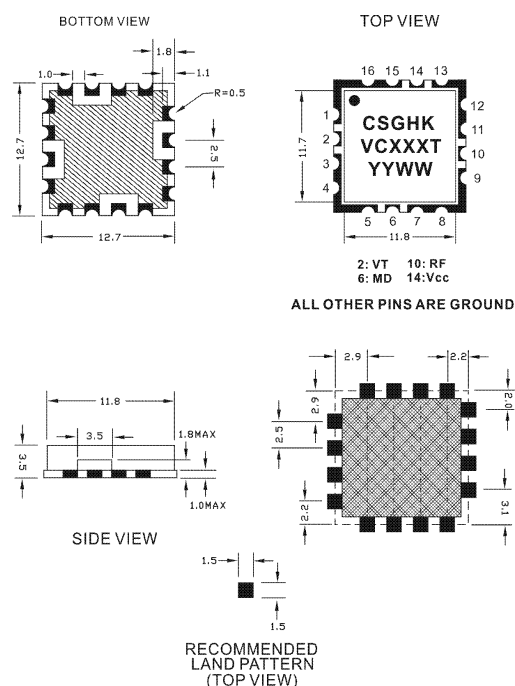
SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 806-821MHz

VT814M

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		806		821	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	806-821MHz	1.0		5.0	dBm
Supply Voltage (Vcc)		4.75	5.0	5.25	V
Supply Current (Icc)			15	18	mA
Phase Noise :					
	@10kHz Offset:		-115	-112	dBc/Hz
	@100kHz Offset:		-136	-133	dBc/Hz
Average Tuning Sensitivity	806-821MHz		10.0		MHz/V
Modulation deviation	@Freq:1kHz Ampl:300mVrms		± 10		KHz
Harmonic Outputs			-20		dBc
OperatingTemperature Range		-55		+85	$^\circ\text{C}$
Tune Input Capacitance			47		PF
Output Impedance -			50		Ω
Package Type	SK605(12.7X12.7X4.3mm)				

V TUNE	TUNING SENS. (MHz/V)	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
		-55℃	+25℃	+85℃	-55℃	+25℃	+85℃	-55℃	+25℃	+85℃
0.5	11.0	796.3	793.0	791.2	3.2	2.8	1.5	-17.4	-21.0	-19.5
1.0	10.5	801.7	798.6	796.6	3.3	2.9	1.6	-17.5	-21.8	-20.0
1.5	10.0	806.9	803.6	801.8	3.3	3.0	1.7	-17.6	-22.8	-20.2
2.0	10.0	811.9	808.6	806.8	3.4	3.1	1.8	-17.8	-23.8	-21.1
2.5	10.0	817.1	813.6	811.8	3.5	3.1	1.8	-18.0	-24.6	-21.5
3.0	10.0	822.1	818.6	816.6	3.6	3.1	1.9	-18.3	-25.2	-22.0
3.5	10.1	827.1	823.6	821.8	3.6	3.2	1.9	-18.3	-25.8	-22.5
4.0	10.1	832.3	828.6	826.6	3.6	3.3	1.9	-18.2	-26.8	-22.9
4.5	10.2	837.3	833.6	831.8	3.7	3.3	1.9	-18.0	-26.9	-22.5

Phase Noise [dBc/Hz]

RF Atten 5 dB

Top -80 dBc/Hz

