

SURFACE MOUNT MODEL

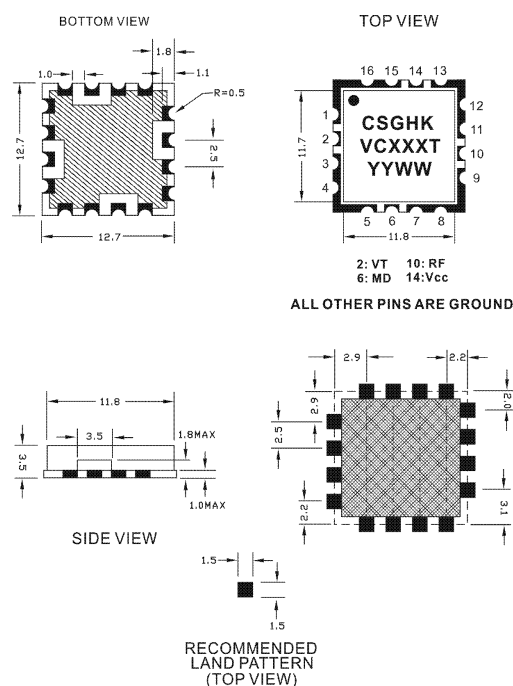
VOLTAGE CONTROLLED OSCILLATOR

Frequency 851-866MHz

VT859M

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		851		866	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	851-866MHz	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:		-114	-111	dBc/Hz
	@100kHz Offset:		-134	-131	dBc/Hz
Average Tuning Sensitivity	851-866MHz		10.8		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	11.7	839.8	836.2	834.0	3.6	3.3	1.9	-17.5	-28.3	-22.9
1.0	11.2	845.4	842.0	840.0	3.6	3.4	1.9	-17.5	-30.5	-23.4
1.5	10.8	851.0	847.4	845.2	3.7	3.4	1.9	-17.7	-31.8	-24.0
2.0	10.7	856.1	852.8	850.8	3.7	3.4	1.9	-17.6	-33.4	-25.4
2.5	10.7	861.6	858.2	856.0	3.7	3.4	1.9	-17.6	-35.7	-25.4
3.0	10.8	867.3	863.6	861.4	3.7	3.4	1.8	-17.3	-38.9	-25.8
3.5	10.9	872.6	869.0	867.0	3.7	3.4	1.8	-17.0	-41.4	-26.6
4.0	11.0	878.1	874.6	872.4	3.8	3.4	1.7	-16.6	-39.7	-26.8
4.5	11.0	883.8	880.0	878.0	3.8	3.5	1.8	-16.2	-36.7	-26.9

Phase Noise [dBc/Hz]

RF Atten 5 dB

Top -80 dBc/Hz

