

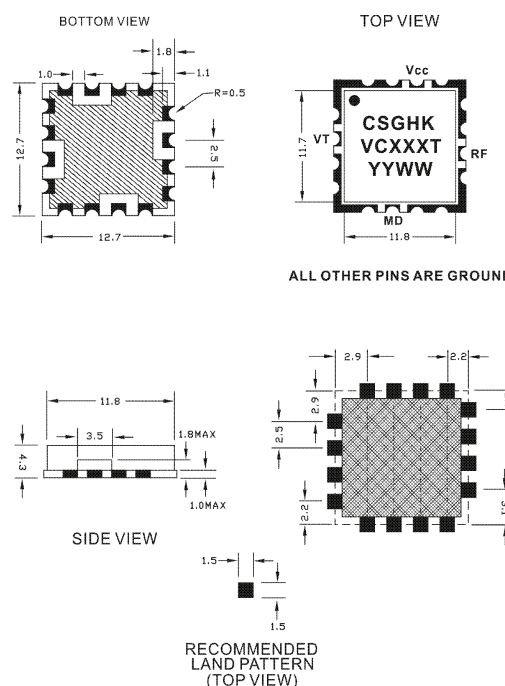
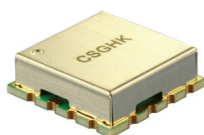
SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 175-200MHz

VC187MT5

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		175		200	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	175-200MHz	-3.0		3.0	dBm
Supply Voltage (Vcc)		4.75		5.25	V
Supply Current (Icc)			16	19	mA
Phase Noise :					
	@12.5kHz Offset:		-119	-116	dBc/Hz
	@100kHz Offset:		-139	-136	dBc/Hz
Average Tuning Sensitivity	175-200MHz		10.1		MHz/V
Modulation deviation	@Freq:1kHz Ampl:500mV			2.5	KHz/V
Harmonic Outputs			-5		dBc
OperatingTemperature Range		-40		+85	°C
Tune Input Capacitance			270		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)		
		-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.5	12.0	167.2	166.2	165.2	1.7	1.8	1.5	-7.2	-7.7	-8.0
1.0	10.6	172.6	171.8	171.0	1.7	1.7	1.4	-7.3	8.0	-8.2
1.5	10.2	177.8	177.0	176.2	1.6	1.6	1.4	-7.3	-8.0	-8.2
2.0	9.6	182.8	181.8	181.0	1.6	1.7	1.3	-7.5	-8.0	-8.2
2.5	9.5	188.0	186.6	185.8	1.5	1.7	1.3	-7.6	-8.1	-8.3
3.0	10.3	193.2	191.8	190.8	1.3	1.5	1.1	-7.6	-8.1	-8.4
3.5	10.4	198.4	196.8	195.8	0.9	1.3	0.9	-7.8	-8.3	-8.5
4.0	10.7	203.8	202.2	201.0	0.4	1.0	0.7	-8.0	-8.3	-8.6
4.5	11.1	209.4	207.6	206.4	0.0	0.7	0.4	-8.1	-8.5	-8.8

Phase Noise [dBc/Hz]

RF Atten 5 dB

Top -80 dBc/Hz

