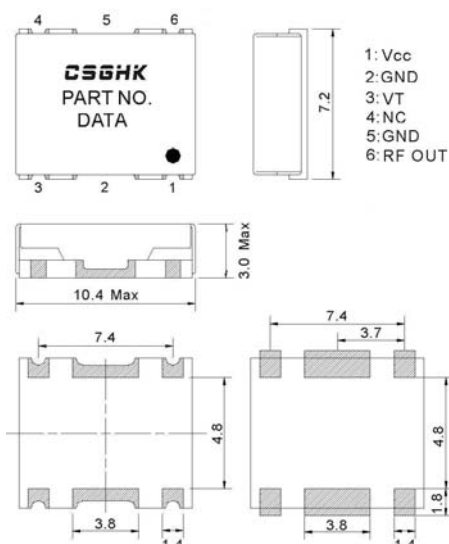


SURFACE MOUNT MODEL

VOLTAGE CONTROLLED OSCILLATOR

Frequency **500-540MHz**

VP520M



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)

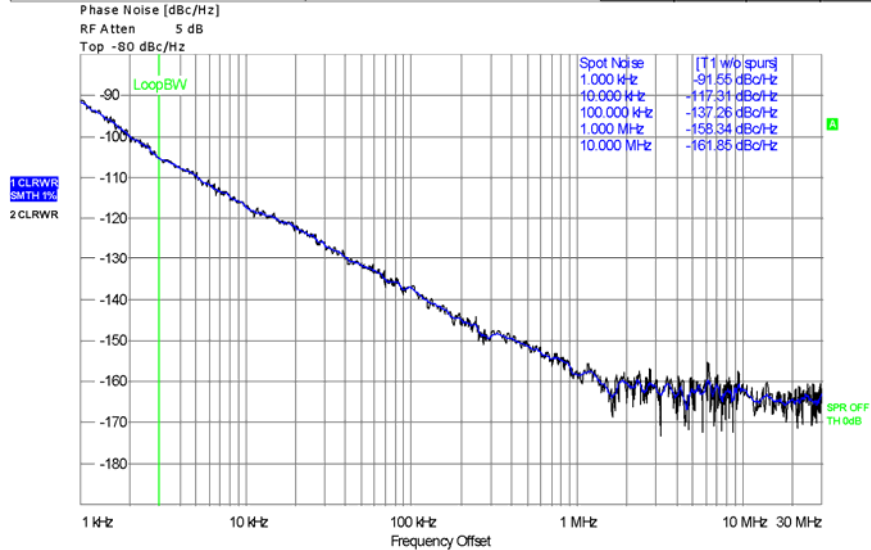
Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		500		540	MHz
Tuning Voltage (V)		0.5		4.5	V
RF Output Power	500-540MHz	0.0		4.0	dBm
Supply Voltage (Vcc)		4.75	5.0	5.25	V
Supply Current (Icc)			24	27	mA
Phase Noise :					
	@10kHz Offset:		-115	-112	dBc/Hz
	@100kHz Offset:		-136	-133	dBc/Hz
Average Tuning Sensitivity	500-540MHz		16.6		MHz/V
Harmonic Outputs			-10		dBc
OperatingTemperature Range		-40		+85	$^\circ\text{C}$
Tune Input Capacitance			82		PF
Output Impedance -			50		Ω
Package Type	SK605(10.4X7.2X3.0mm)				

Comments

X Indicates parameter to be tested 100% in production

V TUNE	TUNING SENS. (MHz/V)	FREQUENCY(MHz)			POWER OUTPUT(dBm)			HARMONIC(dBc)		
		-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.5	14.0	489.3	486.0	484.0	1.7	1.1	0.8	-12.8	-13.2	-13.6
1.0	13.9	496.3	493.3	491.0	1.8	1.3	0.9	-12.9	-13.3	-13.7
1.5	14.4	503.5	500.3	498.0	2.0	1.5	1.0	-13.0	-13.4	-13.8
2.0	15.4	511.3	507.8	505.5	2.3	1.6	1.0	-13.6	-13.7	-14.0
2.5	16.6	519.5	515.8	513.5	2.4	1.8	1.1	-14.0	-14.3	-14.6
3.0	17.7	528.0	524.5	522.3	2.5	1.8	1.1	-14.1	-14.6	-15.3
3.5	18.8	537.3	533.8	531.5	2.5	1.8	1.0	-13.8	-14.7	-15.6
4.0	19.5	546.8	543.3	541.3	2.5	1.6	0.8	-13.8	-14.7	-15.7
4.5	20.6	556.3	553.5	551.5	2.4	1.3	0.5	-14.1	-15.2	-16.1

R&S FSUP Signal Source Analyzer				LOCKED
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +0 dB
Signal Frequency:	520.313977 MHz	Int PHN (1.0 k .. 30.0 M)	-63.7 dBc	
Signal Level:	1.65 dBm	Residual PM	53.144 m°	
Cross Corr Mode	Harmonic 1	Residual FM	816.558 Hz	
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.2837 ps	



Measurement Aborted

Date: 15.NOV.2011 13:45:12