

SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 389-397MHz

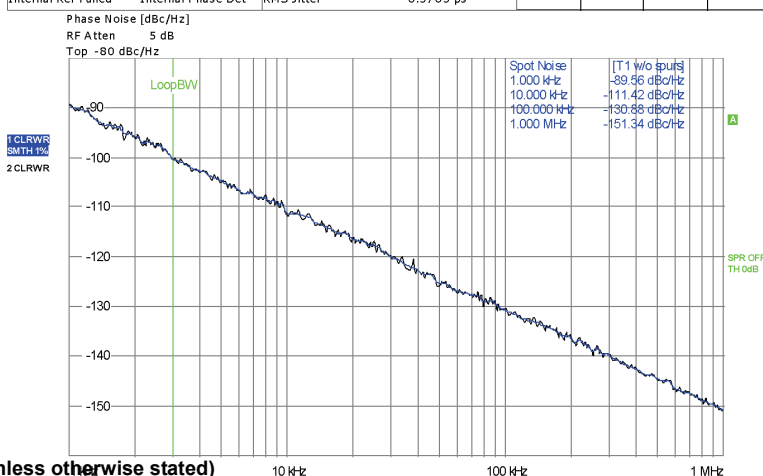
VJ393M



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:	393.102244 MHz	Int PHN (1.0 k .. 1.0 M)	-59.9 dBc				
Signal Level:	4.8 dBm	Residual PM	81.585 m°				
Cross Corr. Mode	Harmonic 1	Residual FM	41.498 Hz				
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.5765 ps				



Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{CC} = +3.3\text{V}$ (unless otherwise stated)

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		389		397	MHz
Tuning Voltage (V)		0.5		2.5	V
RF Output Power	389-397MHz	2.0		6.0	dBm
Supply Voltage (Vcc)		3.10		3.50	V
Supply Current (Icc)			13	16	mA
Phase Noise :					
	@10kHz Offset:		-110	-107	dBc/Hz
	@100kHz Offset:		-130	-127	dBc/Hz
Average Tuning Sensitivity	389-397MHz		17.4		MHz/V
Harmonic Outputs			-9		dBc
OperatingTemperature Range		-40		+85	°C
Tune Input Capacitance			-		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) 2 ⁿ		
		-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.5	16.2	379.0	373.6	371.4	4.2	4.5	4.4	-9.4	-9.9	-11.3
1.0	16.3	387.4	382.3	380.2	4.3	4.5	4.4	-8.8	-9.9	-11.6
1.5	17.2	395.8	390.6	388.7	4.2	4.5	4.4	-7.9	-9.6	-11.5
2.0	17.7	404.4	399.3	397.6	4.2	4.4	4.4	-7.2	-9.4	-11.4
2.5	18.3	412.9	408.4	406.5	4.3	4.4	4.3	-6.7	-9.3	-11.1
3.0	19.2	421.9	417.6	415.5	4.3	4.3	4.2	-6.6	-9.5	-11.0
3.5	19.3	431.8	427.3	424.7	4.2	4.3	4.3	-7.1	-10.0	-11.4
4.0	19.5	442.1	437.0	434.0	4.2	4.3	4.3	-7.8	-10.5	-11.7
4.5	19.2	452.4	446.6	443.0	4.2	4.4	4.3	-8.5	-11.0	-12.0

