

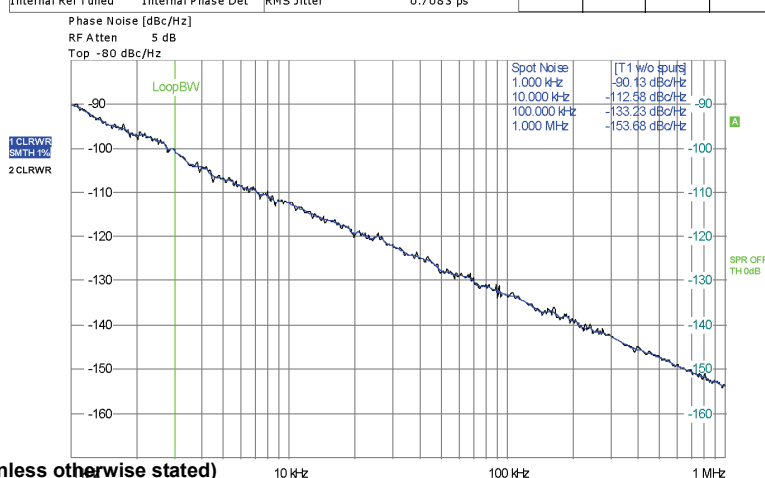
SURFACE MOUNT MODEL VOLTAGE CONTROLLED OSCILLATOR

Frequency 274-282MHz

VJ278M



R&S FSUP Signal Source Analyzer				LOCKED
Settings		Residual Noise [T1 w/o spurs]		Phase Detector +20 dB
Signal Frequency:	277.993920 MHz	Int PHN (1.0 k .. 1.0 M)	-61.2 dBc	
Signal Level:	4.33 dBm	Residual PM	70.881 m°	
Cross Corr. Mode	Harmonic 1	Residual FM	29.829 Hz	
Internal Ref Tuned	Internal Phase Det	RMS Jitter	0.7083 ps	



FEATURES

- ▶ Miniature Size
- ▶ Surface Mount Package
- ▶ Low Phase Noise Performance
- ▶ Electrically Shielded
- ▶ Highly Linear Tuning

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

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Rangs		274		282	MHz
Tuning Voltage (V)		0.5		2.5	V
RF Output Power	274-282MHz	2.0		6.0	dBm
Supply Voltage (Vcc)		3.10		3.50	V
Supply Current (Icc)			15	18	mA
Phase Noise :					
	@10kHz Offset:		-112	-109	dBc/Hz
	@100kHz Offset:		-132	-129	dBc/Hz
Average Tuning Sensitivity	274-282MHz		20.8		MHz/V
Harmonic Outputs			-10		dBc
Operating Temperature 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)		
		-40℃	+25℃	+85℃	-40℃	+25℃	+85℃	-40℃	+25℃	+85℃
0.5	22.7	262.4	259.2	257.2	4.2	4.4	4.5	-12.5	-13.1	-15.1
1.0	21.0	273.3	270.3	268.6	4.0	4.2	4.3	-13.3	-15.1	-16.9
1.5	20.0	283.4	280.6	279.1	4.1	4.1	4.2	-14.9	-17.4	-19.2
2.0	19.5	293.7	290.7	288.9	4.0	4.0	4.0	-17.6	-19.1	-21.2
2.5	19.3	303.9	300.8	299.2	3.8	3.8	3.8	-18.8	-19.5	-20.7
3.0	20.6	313.8	310.8	309.2	3.7	3.6	3.6	-18.2	-21.5	-11.8
3.5	21.0	324.7	321.4	319.2	3.6	3.4	3.5	-19.5	-23.3	-23.2
4.0	21.4	336.0	332.1	329.9	3.2	3.3	3.2	-24.0	-35.9	-25.3
4.5	21.9	347.3	343.0	341.4	3.2	3.3	3.0	-29.3	-33.7	-24.7

