

# Voltage Controlled Oscillator

# ROS-13301PH19R+

## Typical Performance Data

V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ OFFSET (kHz)	PHASE NOISE (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C	F2	F3	F4			
0.00	46.4	1172.0	1163.5	1157.0	5.4	4.3	2.8	-23.4	-33.3	-36.6	0.9	1	-80
0.25	41.2	1183.1	1175.1	1169.1	5.2	4.1	2.7	-22.1	-34.1	-36.8	0.5	10	-106
0.50	38.2	1193.1	1185.5	1179.6	5.1	4.0	2.6	-20.7	-34.5	-34.8	0.3	100	-128
0.75	36.2	1202.5	1195.0	1189.3	5.1	3.9	2.5	-20.6	-35.8	-33.8	0.2	1000	-145
1.00	35.0	1211.5	1204.1	1198.5	5.1	3.9	2.5	-20.0	-36.3	-33.5	0.1		
1.25	34.7	1220.4	1212.8	1207.2	5.1	4.0	2.5	-19.7	-37.3	-33.1	0.1		
1.50	34.6	1229.3	1221.5	1215.8	5.0	4.0	2.6	-19.7	-38.5	-32.1	0.0		
1.75	34.7	1238.2	1230.1	1224.3	4.9	4.0	2.6	-19.0	-39.2	-32.5	0.0		
2.00	35.0	1247.1	1238.8	1232.9	4.8	3.9	2.6	-19.0	-39.8	-31.5	0.1		
2.25	35.4	1256.1	1247.6	1241.4	4.7	3.8	2.6	-18.5	-40.8	-31.2	0.1		
2.50	35.9	1265.2	1256.4	1250.1	4.6	3.7	2.5	-18.4	-40.9	-30.9	0.1		
2.75	36.4	1274.4	1265.4	1258.9	4.5	3.7	2.5	-18.6	-41.1	-31.3	0.1		
3.00	37.0	1283.8	1274.5	1267.8	4.4	3.7	2.5	-18.7	-42.2	-30.8	0.1		
3.25	38.0	1293.4	1283.7	1276.9	4.3	3.7	2.5	-18.7	-42.0	-31.7	0.1		
3.50	39.0	1303.2	1293.2	1286.1	4.2	3.6	2.5	-18.6	-41.5	-31.9	0.2		
3.75	40.0	1313.3	1303.0	1295.6	4.1	3.6	2.5	-18.6	-41.7	-32.0	0.1		
4.00	40.8	1323.5	1313.0	1305.4	4.1	3.5	2.5	-19.4	-42.3	-32.7	0.1		
4.25	41.5	1333.9	1323.2	1315.3	4.0	3.5	2.5	-19.4	-42.5	-32.5	0.1		
4.50	42.1	1344.5	1333.5	1325.5	4.0	3.5	2.5	-19.8	-42.9	-32.9	0.0		
4.75	42.7	1355.3	1344.1	1335.8	4.0	3.5	2.5	-19.8	-43.6	-34.0	0.1		
5.00	43.1	1366.2	1354.7	1346.3	4.0	3.5	2.5	-20.4	-43.9	-33.7	0.2		
5.25	43.4	1377.1	1365.5	1356.9	4.0	3.5	2.6	-20.4	-44.0	-35.0	0.3		
5.50	43.6	1388.1	1376.4	1367.6	4.0	3.6	2.6	-21.5	-44.3	-35.6	0.4		
5.75	43.8	1399.2	1387.3	1378.3	4.0	3.6	2.6	-22.0	-44.9	-35.7	0.6		
6.00	44.0	1410.3	1398.2	1389.1	4.0	3.6	2.7	-21.8	-43.9	-36.1	0.8		
6.25	43.8	1421.4	1409.2	1400.0	3.9	3.6	2.7	-21.9	-42.9	-35.9	1.0		
6.50	43.2	1432.3	1420.1	1410.8	3.9	3.5	2.7	-22.4	-42.6	-35.5	1.1		
6.75	42.3	1443.0	1430.9	1421.6	3.8	3.5	2.6	-22.3	-40.4	-35.7	1.3		
7.00	42.3	1453.6	1441.5	1432.2	3.9	3.4	2.6	-22.8	-39.0	-34.7	1.4		

**Notes**

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