

# Voltage Controlled Oscillator

ROS-ED12663/3

## Typical Performance Data

| V<br>TUNE | TUNE<br>SENS<br>(MHz/V) | FREQUENCY<br>(MHz) |        |        | POWER OUTPUT<br>(dBm) |       |       | HARMONICS (dBc) |        |        | FREQ.<br>PUSH<br>(MHz/V) | FREQ<br>OFFSET<br>(KHz) | PHASE<br>NOISE<br>(dBc/Hz) |
|-----------|-------------------------|--------------------|--------|--------|-----------------------|-------|-------|-----------------|--------|--------|--------------------------|-------------------------|----------------------------|
|           |                         | -55°C              | +25°C  | +85°C  | -55°C                 | +25°C | +85°C | F2              | F3     | F4     |                          |                         |                            |
| 0.0       | 8.30                    | 980.7              | 979.9  | 979.1  | -0.29                 | -0.75 | -1.27 | -22.69          | -37.25 | -43.83 | 0.30                     | 1                       | -95                        |
| 0.5       | 6.69                    | 984.4              | 983.7  | 982.9  | -0.21                 | -0.67 | -1.14 | -22.64          | -36.60 | -42.17 | 0.16                     | 10                      | -125                       |
| 1.0       | 6.25                    | 987.7              | 986.9  | 986.1  | -0.14                 | -0.59 | -1.04 | -22.55          | -35.94 | -40.84 | 0.11                     | 100                     | -145                       |
| 1.5       | 6.16                    | 990.8              | 990.0  | 989.2  | -0.08                 | -0.51 | -0.94 | -22.44          | -35.25 | -39.60 | 0.08                     | 1000                    | -160                       |
| 2.0       | 6.17                    | 994.0              | 993.1  | 992.3  | -0.02                 | -0.43 | -0.85 | -22.39          | -34.66 | -38.29 | 0.06                     |                         |                            |
| 2.5       | 6.20                    | 997.1              | 996.2  | 995.3  | 0.03                  | -0.36 | -0.76 | -22.34          | -34.24 | -36.81 | 0.06                     |                         |                            |
| 3.0       | 6.16                    | 1000.2             | 999.3  | 998.4  | 0.07                  | -0.28 | -0.67 | -22.27          | -33.83 | -35.23 | 0.08                     |                         |                            |
| 3.5       | 6.08                    | 1003.3             | 1002.4 | 1001.5 | 0.13                  | -0.22 | -0.58 | -22.23          | -33.64 | -34.13 | 0.10                     |                         |                            |
| 4.0       | 5.94                    | 1006.4             | 1005.4 | 1004.5 | 0.16                  | -0.16 | -0.51 | -22.19          | -33.06 | -33.49 | 0.14                     |                         |                            |
| 4.5       | 5.76                    | 1009.3             | 1008.3 | 1007.4 | 0.19                  | -0.12 | -0.46 | -22.19          | -32.57 | -32.93 | 0.17                     |                         |                            |
| 5.0       | 5.55                    | 1012.2             | 1011.2 | 1010.3 | 0.21                  | -0.07 | -0.41 | -22.24          | -32.13 | -32.31 | 0.19                     |                         |                            |
| 5.5       | 5.31                    | 1014.9             | 1013.9 | 1013.0 | 0.24                  | -0.03 | -0.35 | -22.23          | -31.87 | -31.60 | 0.21                     |                         |                            |
| 6.0       | 5.07                    | 1017.5             | 1016.5 | 1015.6 | 0.25                  | -0.01 | -0.32 | -22.27          | -31.87 | -30.83 | 0.21                     |                         |                            |
| 6.5       | 4.85                    | 1020.1             | 1019.0 | 1018.1 | 0.27                  | 0.02  | -0.28 | -22.27          | -31.91 | -30.25 | 0.21                     |                         |                            |
| 7.0       | 4.63                    | 1022.5             | 1021.4 | 1020.5 | 0.28                  | 0.04  | -0.26 | -22.24          | -31.70 | -29.99 | 0.20                     |                         |                            |
| 7.5       | 4.42                    | 1024.8             | 1023.7 | 1022.8 | 0.29                  | 0.05  | -0.24 | -22.17          | -31.43 | -29.90 | 0.19                     |                         |                            |
| 8.0       | 4.22                    | 1027.0             | 1025.9 | 1025.0 | 0.29                  | 0.06  | -0.22 | -22.13          | -31.15 | -29.74 | 0.17                     |                         |                            |