

# Voltage Controlled Oscillator

ROS-EDR5956

## 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    |                          |                         |                            |
| 0.3       | 21.58                   | 1875.4             | 1871.0 | 1866.7 | -0.77                 | -0.92 | -1.55 | -39.4           | -24.8 | -41.0 | -0.03                    | 1                       | -80                        |
| 0.5       | 21.97                   | 1881.0             | 1876.5 | 1872.1 | -0.71                 | -0.91 | -1.52 | -39.2           | -24.7 | -42.5 | -0.02                    | 10                      | -105                       |
| 0.8       | 23.48                   | 1887.0             | 1882.4 | 1877.9 | -0.62                 | -0.86 | -1.49 | -39.4           | -23.9 | -41.5 | -0.01                    | 100                     | -125                       |
| 1.0       | 25.53                   | 1893.6             | 1888.7 | 1884.1 | -0.53                 | -0.75 | -1.44 | -39.2           | -24.0 | -41.4 | 0.00                     | 1000                    | -145                       |
| 1.3       | 28.56                   | 1901.1             | 1895.9 | 1891.1 | -0.45                 | -0.64 | -1.33 | -38.6           | -24.9 | -39.1 | 0.02                     |                         |                            |
| 1.5       | 32.59                   | 1909.6             | 1904.0 | 1899.0 | -0.40                 | -0.57 | -1.21 | -37.8           | -25.3 | -39.9 | 0.03                     |                         |                            |
| 1.8       | 36.72                   | 1919.3             | 1913.2 | 1908.0 | -0.38                 | -0.53 | -1.18 | -37.5           | -24.8 | -39.4 | 0.04                     |                         |                            |
| 2.0       | 41.74                   | 1930.3             | 1923.7 | 1918.0 | -0.30                 | -0.51 | -1.15 | -37.1           | -24.9 | -36.4 | 0.02                     |                         |                            |
| 2.3       | 46.56                   | 1942.4             | 1935.3 | 1929.4 | -0.26                 | -0.44 | -1.14 | -36.0           | -26.0 | -36.3 | -0.04                    |                         |                            |
| 2.5       | 50.95                   | 1955.7             | 1948.0 | 1941.8 | -0.28                 | -0.39 | -1.06 | -34.5           | -27.0 | -35.8 | -0.13                    |                         |                            |
| 2.8       | 54.54                   | 1969.7             | 1961.7 | 1955.3 | -0.33                 | -0.39 | -0.97 | -31.8           | -27.6 | -35.0 | -0.29                    |                         |                            |
| 3.0       | 56.78                   | 1984.2             | 1975.9 | 1969.1 | -0.21                 | -0.35 | -0.96 | -28.9           | -30.3 | -33.3 | -0.66                    |                         |                            |
| 3.3       | 57.35                   | 1998.7             | 1990.2 | 1983.6 | -0.34                 | -0.37 | -1.04 | -27.1           | -31.0 | -32.2 | -1.06                    |                         |                            |
| 3.5       | 55.56                   | 2012.7             | 2004.1 | 1997.5 | -0.47                 | -0.47 | -1.02 | -26.1           | -32.7 | -32.1 | -1.71                    |                         |                            |
| 3.8       | 51.78                   | 2025.4             | 2017.0 | 2010.6 | -0.39                 | -0.49 | -1.10 | -24.5           | -35.0 | -31.4 | -2.43                    |                         |                            |
| 4.0       | 46.29                   | 2036.9             | 2028.6 | 2022.6 | -0.42                 | -0.45 | -1.13 | -23.4           | -36.0 | -32.7 | -3.05                    |                         |                            |
| 4.3       | 40.97                   | 2047.0             | 2038.8 | 2033.0 | -0.41                 | -0.45 | -1.12 | -22.2           | -35.8 | -31.6 | -3.44                    |                         |                            |
| 4.5       | 35.68                   | 2055.9             | 2047.8 | 2042.1 | -0.41                 | -0.43 | -1.11 | -22.0           | -37.1 | -31.0 | -3.60                    |                         |                            |
| 4.8       | 30.79                   | 2063.2             | 2055.5 | 2049.9 | -0.38                 | -0.41 | -1.11 | -21.8           | -37.3 | -31.8 | -3.52                    |                         |                            |
| 5.0       | 26.11                   | 2069.1             | 2062.0 | 2056.5 | -0.31                 | -0.47 | -1.14 | -21.1           | -37.3 | -31.7 | -3.17                    |                         |                            |
| 5.3       | 21.04                   | 2074.1             | 2067.3 | 2061.9 | -0.24                 | -0.50 | -1.20 | -21.0           | -37.7 | -32.3 | -2.68                    |                         |                            |
| 5.5       | 16.89                   | 2078.1             | 2071.5 | 2066.3 | -0.18                 | -0.48 | -1.27 | -21.1           | -37.9 | -31.9 | -2.18                    |                         |                            |
| 5.8       | 13.60                   | 2081.3             | 2074.9 | 2069.8 | -0.15                 | -0.48 | -1.31 | -21.3           | -37.9 | -32.2 | -1.67                    |                         |                            |
| 6.0       | 10.89                   | 2083.9             | 2077.6 | 2072.6 | -0.11                 | -0.45 | -1.33 | -21.5           | -38.0 | -32.8 | -1.20                    |                         |                            |
| 6.3       | 8.74                    | 2085.9             | 2079.8 | 2074.8 | -0.13                 | -0.49 | -1.35 | -21.6           | -38.4 | -33.1 | -0.82                    |                         |                            |
| 6.5       | 7.11                    | 2087.6             | 2081.6 | 2076.6 | -0.13                 | -0.50 | -1.35 | -21.7           | -38.6 | -33.4 | -0.53                    |                         |                            |
| 6.8       | 5.91                    | 2089.0             | 2083.0 | 2078.2 | -0.13                 | -0.52 | -1.36 | -21.6           | -38.9 | -33.5 | -0.33                    |                         |                            |
| 7.0       | 5.04                    | 2090.1             | 2084.3 | 2079.5 | -0.13                 | -0.53 | -1.37 | -21.6           | -38.9 | -33.7 | -0.19                    |                         |                            |