

# Voltage Controlled Oscillator

ROS-EDR5988/1

## 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       | 166.18                  | 1635.3             | 1612.4 | 1594.5 | 5.83                  | 6.19  | 5.67  | -19.1           | -30.2 | -49.0 | -9.41                    | 1                       | -70                        |
| 0.5       | 151.39                  | 1671.5             | 1650.3 | 1632.9 | 5.81                  | 6.24  | 5.84  | -18.5           | -31.0 | -47.0 | -7.09                    | 10                      | -96                        |
| 0.8       | 137.81                  | 1705.3             | 1684.7 | 1667.6 | 5.92                  | 6.17  | 5.84  | -18.7           | -31.6 | -47.7 | -5.32                    | 100                     | -116                       |
| 1.0       | 129.64                  | 1737.4             | 1717.2 | 1700.4 | 5.99                  | 6.26  | 5.91  | -19.0           | -32.3 | -51.9 | -4.08                    | 1000                    | -136                       |
| 1.3       | 126.02                  | 1769.0             | 1748.7 | 1731.8 | 5.91                  | 6.27  | 5.95  | -19.4           | -33.3 | -46.2 | -3.17                    |                         |                            |
| 1.5       | 124.46                  | 1800.0             | 1779.8 | 1762.6 | 5.76                  | 6.19  | 5.94  | -20.4           | -34.4 | -46.0 | -2.32                    |                         |                            |
| 1.8       | 122.15                  | 1830.9             | 1810.3 | 1793.2 | 5.62                  | 6.13  | 5.89  | -20.8           | -35.2 | -48.2 | -1.61                    |                         |                            |
| 2.0       | 123.94                  | 1862.2             | 1841.3 | 1823.6 | 5.53                  | 6.00  | 5.86  | -20.6           | -35.3 | -49.8 | -1.01                    |                         |                            |
| 2.3       | 124.16                  | 1893.6             | 1872.3 | 1854.3 | 5.56                  | 5.93  | 5.77  | -21.3           | -35.5 | -49.0 | -0.62                    |                         |                            |
| 2.5       | 124.27                  | 1925.0             | 1903.4 | 1885.2 | 5.59                  | 6.02  | 5.79  | -22.2           | -35.8 | -45.4 | -0.56                    |                         |                            |
| 2.8       | 124.84                  | 1956.4             | 1934.6 | 1916.0 | 5.63                  | 6.05  | 5.86  | -23.7           | -35.1 | -43.0 | -0.88                    |                         |                            |
| 3.0       | 124.24                  | 1987.5             | 1965.7 | 1946.9 | 5.60                  | 6.06  | 5.95  | -25.1           | -33.7 | -40.7 | -1.59                    |                         |                            |
| 3.3       | 121.32                  | 2017.7             | 1996.0 | 1977.5 | 5.55                  | 6.03  | 5.89  | -26.2           | -33.0 | -39.6 | -2.73                    |                         |                            |
| 3.5       | 118.50                  | 2047.6             | 2025.6 | 2007.0 | 5.46                  | 6.01  | 5.95  | -27.0           | -34.5 | -39.1 | -3.68                    |                         |                            |
| 3.8       | 117.64                  | 2076.8             | 2055.0 | 2036.3 | 5.51                  | 5.94  | 5.87  | -27.2           | -40.5 | -38.2 | -4.84                    |                         |                            |
| 4.0       | 110.82                  | 2104.3             | 2082.7 | 2064.4 | 5.62                  | 6.06  | 5.91  | -27.4           | -50.3 | -37.8 | -5.81                    |                         |                            |
| 4.3       | 104.69                  | 2130.7             | 2108.9 | 2090.7 | 5.62                  | 6.10  | 5.99  | -26.7           | -43.4 | -37.8 | -6.75                    |                         |                            |
| 4.5       | 98.29                   | 2155.0             | 2133.5 | 2115.2 | 5.66                  | 6.15  | 6.07  | -26.3           | -40.0 | -38.0 | -7.20                    |                         |                            |
| 4.8       | 89.69                   | 2176.7             | 2155.9 | 2137.9 | 5.73                  | 6.12  | 6.07  | -25.9           | -39.7 | -37.8 | -7.22                    |                         |                            |
| 5.0       | 78.33                   | 2196.2             | 2175.5 | 2158.0 | 5.77                  | 6.23  | 6.06  | -25.7           | -39.4 | -38.2 | -6.77                    |                         |                            |
| 5.3       | 69.01                   | 2213.2             | 2192.8 | 2175.4 | 5.80                  | 6.23  | 6.16  | -25.7           | -38.6 | -38.9 | -6.01                    |                         |                            |
| 5.5       | 59.74                   | 2227.7             | 2207.7 | 2190.4 | 5.77                  | 6.26  | 6.17  | -25.5           | -37.7 | -39.7 | -4.81                    |                         |                            |
| 5.8       | 50.20                   | 2239.9             | 2220.2 | 2203.3 | 5.75                  | 6.24  | 6.16  | -25.3           | -37.4 | -40.6 | -3.49                    |                         |                            |
| 6.0       | 42.29                   | 2250.1             | 2230.8 | 2214.1 | 5.79                  | 6.23  | 6.17  | -25.4           | -37.8 | -41.0 | -2.20                    |                         |                            |
| 6.3       | 35.11                   | 2258.5             | 2239.6 | 2223.1 | 5.80                  | 6.22  | 6.17  | -25.5           | -38.8 | -41.0 | -1.01                    |                         |                            |
| 6.5       | 29.59                   | 2265.4             | 2247.0 | 2230.6 | 5.78                  | 6.22  | 6.14  | -25.4           | -38.5 | -40.9 | -0.04                    |                         |                            |
| 6.8       | 25.08                   | 2271.3             | 2253.3 | 2237.1 | 5.76                  | 6.21  | 6.13  | -25.3           | -38.9 | -41.2 | 0.70                     |                         |                            |
| 7.0       | 21.43                   | 2276.4             | 2258.6 | 2242.6 | 5.76                  | 6.22  | 6.12  | -25.2           | -39.4 | -41.7 | 1.23                     |                         |                            |