

# Voltage Controlled Oscillator

ROS-EDR6592

## 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       | 36.52                   | 1729.4             | 1722.5 | 1707.2 | 5.55                  | 5.07  | 4.31  | -24.2           | -42.9 | -37.6 | -0.43                    | 1                       | -82                        |
| 0.5       | 33.44                   | 1738.2             | 1731.7 | 1717.2 | 5.61                  | 5.11  | 4.45  | -25.1           | -44.7 | -39.1 | -0.33                    | 10                      | -108                       |
| 0.8       | 31.26                   | 1746.4             | 1740.0 | 1726.3 | 5.64                  | 5.14  | 4.56  | -25.4           | -45.2 | -39.2 | -0.26                    | 100                     | -128                       |
| 1.0       | 29.41                   | 1754.1             | 1747.9 | 1734.6 | 5.65                  | 5.16  | 4.62  | -24.8           | -43.7 | -39.5 | -0.21                    | 1000                    | -148                       |
| 1.3       | 28.08                   | 1761.3             | 1755.2 | 1742.5 | 5.62                  | 5.17  | 4.66  | -23.8           | -41.7 | -38.5 | -0.17                    |                         |                            |
| 1.5       | 27.15                   | 1768.2             | 1762.2 | 1749.9 | 5.63                  | 5.16  | 4.68  | -22.8           | -40.4 | -37.3 | -0.13                    |                         |                            |
| 1.8       | 26.42                   | 1775.0             | 1769.0 | 1757.1 | 5.68                  | 5.16  | 4.71  | -22.4           | -40.3 | -36.7 | -0.09                    |                         |                            |
| 2.0       | 25.66                   | 1781.5             | 1775.6 | 1764.0 | 5.70                  | 5.18  | 4.71  | -22.2           | -40.8 | -36.0 | -0.06                    |                         |                            |
| 2.3       | 25.05                   | 1787.9             | 1782.0 | 1770.8 | 5.69                  | 5.19  | 4.70  | -22.6           | -41.9 | -36.7 | -0.04                    |                         |                            |
| 2.5       | 24.63                   | 1794.1             | 1788.3 | 1777.4 | 5.65                  | 5.16  | 4.74  | -23.1           | -43.3 | -37.5 | -0.02                    |                         |                            |
| 2.8       | 24.26                   | 1800.2             | 1794.4 | 1783.8 | 5.54                  | 5.12  | 4.77  | -23.5           | -45.4 | -38.5 | 0.00                     |                         |                            |
| 3.0       | 23.87                   | 1806.3             | 1800.5 | 1790.2 | 5.42                  | 5.05  | 4.78  | -23.5           | -44.7 | -39.8 | 0.02                     |                         |                            |
| 3.3       | 23.70                   | 1812.2             | 1806.5 | 1796.4 | 5.42                  | 4.95  | 4.77  | -23.8           | -44.1 | -40.4 | 0.04                     |                         |                            |
| 3.5       | 23.50                   | 1818.2             | 1812.4 | 1802.6 | 5.42                  | 4.90  | 4.75  | -24.0           | -43.2 | -39.8 | 0.05                     |                         |                            |
| 3.8       | 23.38                   | 1824.0             | 1818.3 | 1808.8 | 5.41                  | 4.88  | 4.76  | -23.9           | -43.6 | -39.8 | 0.06                     |                         |                            |
| 4.0       | 23.30                   | 1829.9             | 1824.1 | 1814.8 | 5.39                  | 4.87  | 4.73  | -23.6           | -41.9 | -38.5 | 0.07                     |                         |                            |
| 4.3       | 23.20                   | 1835.7             | 1830.0 | 1820.9 | 5.31                  | 4.81  | 4.72  | -23.2           | -40.7 | -37.5 | 0.08                     |                         |                            |
| 4.5       | 23.17                   | 1841.5             | 1835.8 | 1826.9 | 5.19                  | 4.73  | 4.72  | -22.8           | -40.3 | -36.6 | 0.09                     |                         |                            |
| 4.8       | 23.19                   | 1847.3             | 1841.5 | 1832.9 | 5.11                  | 4.64  | 4.70  | -22.8           | -41.2 | -35.9 | 0.10                     |                         |                            |
| 5.0       | 23.21                   | 1853.1             | 1847.3 | 1838.9 | 5.04                  | 4.54  | 4.65  | -23.3           | -43.2 | -35.9 | 0.09                     |                         |                            |
| 5.3       | 23.26                   | 1859.0             | 1853.1 | 1844.9 | 4.98                  | 4.47  | 4.57  | -24.0           | -43.0 | -37.0 | 0.10                     |                         |                            |
| 5.5       | 23.42                   | 1864.8             | 1859.0 | 1850.8 | 4.92                  | 4.40  | 4.47  | -24.5           | -42.4 | -37.3 | 0.11                     |                         |                            |
| 5.8       | 23.51                   | 1870.7             | 1864.8 | 1856.8 | 4.85                  | 4.31  | 4.44  | -25.1           | -40.8 | -36.9 | 0.12                     |                         |                            |
| 6.0       | 23.56                   | 1876.6             | 1870.7 | 1862.8 | 4.76                  | 4.24  | 4.42  | -25.3           | -41.1 | -36.4 | 0.13                     |                         |                            |
| 6.3       | 23.67                   | 1882.5             | 1876.6 | 1868.8 | 4.59                  | 4.16  | 4.37  | -25.2           | -40.3 | -36.4 | 0.14                     |                         |                            |
| 6.5       | 23.71                   | 1888.5             | 1882.5 | 1874.9 | 4.50                  | 4.02  | 4.33  | -25.1           | -38.9 | -37.2 | 0.14                     |                         |                            |
| 6.8       | 24.02                   | 1894.5             | 1888.4 | 1881.0 | 4.46                  | 3.87  | 4.29  | -25.0           | -38.3 | -37.3 | 0.15                     |                         |                            |
| 7.0       | 24.02                   | 1900.6             | 1894.4 | 1887.1 | 4.41                  | 3.80  | 4.26  | -24.7           | -37.4 | -37.2 | 0.16                     |                         |                            |