

# Voltage Controlled Oscillator

POS-ED6986/1

## 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    |                          |                         |                            |
| 1.0       | 45.70                   | 920.5              | 909.9  | 899.7  | 7.00                  | 7.16  | 7.32  | -15.2           | -25.4 | -49.2 | 2.44                     | 1                       | -73                        |
| 2.0       | 52.10                   | 973.6              | 962.1  | 951.6  | 6.92                  | 7.09  | 7.04  | -13.4           | -25.9 | -49.1 | 2.34                     | 10                      | -92                        |
| 3.0       | 61.70                   | 1036.5             | 1023.8 | 1012.7 | 7.59                  | 7.45  | 7.18  | -11.9           | -27.4 | -47.0 | 2.35                     | 100                     | -114                       |
| 4.0       | 70.30                   | 1107.7             | 1094.1 | 1082.7 | 7.32                  | 7.62  | 7.14  | -10.8           | -29.0 | -48.7 | 2.27                     | 1000                    | -132                       |
| 5.0       | 75.30                   | 1182.8             | 1169.4 | 1157.6 | 7.25                  | 7.26  | 7.40  | -9.7            | -30.0 | -52.0 | 2.36                     |                         |                            |
| 6.0       | 70.60                   | 1253.9             | 1240.0 | 1228.2 | 7.09                  | 7.51  | 7.61  | -11.8           | -38.8 | -43.6 | 2.38                     |                         |                            |
| 7.0       | 65.30                   | 1318.6             | 1305.3 | 1294.0 | 7.21                  | 7.13  | 7.34  | -10.5           | -38.3 | -37.3 | 2.45                     |                         |                            |
| 8.0       | 59.40                   | 1377.8             | 1364.7 | 1353.8 | 7.35                  | 7.23  | 6.94  | -10.5           | -38.0 | -29.3 | 2.44                     |                         |                            |
| 9.0       | 54.10                   | 1431.9             | 1418.8 | 1408.0 | 7.34                  | 7.42  | 7.49  | -10.8           | -38.1 | -23.9 | 2.54                     |                         |                            |
| 10.0      | 51.30                   | 1483.5             | 1470.0 | 1458.9 | 6.83                  | 7.11  | 7.28  | -10.8           | -40.7 | -21.8 | 2.54                     |                         |                            |
| 11.0      | 47.30                   | 1530.1             | 1517.3 | 1506.3 | 6.76                  | 6.73  | 6.71  | -10.8           | -42.0 | -22.8 | 2.45                     |                         |                            |
| 12.0      | 45.60                   | 1576.9             | 1562.9 | 1551.3 | 7.45                  | 7.54  | 7.28  | -10.6           | -46.9 | -29.6 | 2.96                     |                         |                            |
| 13.0      | 39.80                   | 1615.7             | 1602.7 | 1591.9 | 7.73                  | 7.78  | 7.61  | -11.3           | -45.6 | -32.9 | 2.08                     |                         |                            |
| 14.0      | 36.80                   | 1651.9             | 1639.5 | 1629.1 | 7.46                  | 7.61  | 7.63  | -12.0           | -44.1 | -32.3 | 3.12                     |                         |                            |
| 15.0      | 34.10                   | 1685.8             | 1673.6 | 1663.7 | 7.56                  | 7.44  | 7.33  | -12.7           | -42.7 | -34.7 | 3.09                     |                         |                            |
| 16.0      | 32.00                   | 1717.3             | 1705.6 | 1695.9 | 7.92                  | 7.80  | 7.55  | -13.6           | -39.3 | -37.6 | 2.94                     |                         |                            |
| 17.0      | 30.10                   | 1747.1             | 1735.7 | 1726.2 | 8.26                  | 8.14  | 7.91  | -14.1           | -36.6 | -35.7 | 2.72                     |                         |                            |
| 18.0      | 27.90                   | 1774.8             | 1763.6 | 1754.2 | 8.50                  | 8.39  | 8.17  | -14.9           | -35.9 | -37.4 | 2.51                     |                         |                            |
| 19.0      | 25.20                   | 1800.0             | 1788.8 | 1779.5 | 8.25                  | 8.45  | 8.09  | -15.5           | -33.3 | -37.0 | 2.37                     |                         |                            |
| 20.0      | 22.40                   | 1822.5             | 1811.2 | 1801.8 | 8.14                  | 8.23  | 8.19  | -16.1           | -30.9 | -37.8 | 2.30                     |                         |                            |
| 21.0      | 19.50                   | 1842.0             | 1830.7 | 1821.3 | 8.04                  | 7.97  | 8.10  | -16.7           | -29.7 | -37.8 |                          |                         |                            |
| 22.0      | 16.80                   | 1859.0             | 1847.6 | 1838.0 | 8.08                  | 8.06  | 8.02  | -17.3           | -28.4 | -37.9 |                          |                         |                            |
| 23.0      | 14.50                   | 1873.6             | 1862.1 | 1852.3 | 8.05                  | 8.11  | 8.09  | -17.8           | -28.3 | -38.7 |                          |                         |                            |
| 24.0      | 12.30                   | 1886.1             | 1874.4 | 1864.5 | 8.10                  | 8.10  | 8.14  | -18.4           | -27.1 | -38.8 |                          |                         |                            |
| 25.0      | 10.40                   | 1896.7             | 1884.8 | 1874.7 | 8.14                  | 8.09  | 8.14  | -18.5           | -25.4 | -38.2 |                          |                         |                            |