

# Voltage Controlled Oscillator

MOS-EDR5666/7

## 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       | 46.33                   | 1651.5             | 1644.6 | 1636.4 | -0.54                 | -0.06 | -0.03 | -22.6           | -28.5 | -40.3 | 0.20                     | 1                       | -79                        |
| 0.5       | 40.87                   | 1661.5             | 1654.8 | 1647.0 | -0.64                 | -0.12 | -0.07 | -23.0           | -28.7 | -41.2 | 0.19                     | 10                      | -103                       |
| 0.8       | 37.54                   | 1670.7             | 1664.2 | 1656.6 | -0.70                 | -0.20 | -0.14 | -23.4           | -29.3 | -42.0 | 0.18                     | 100                     | -123                       |
| 1.0       | 35.53                   | 1679.3             | 1673.1 | 1665.6 | -0.74                 | -0.25 | -0.22 | -23.8           | -30.0 | -43.3 | 0.18                     | 1000                    | -142                       |
| 1.3       | 33.34                   | 1687.6             | 1681.4 | 1674.1 | -0.77                 | -0.29 | -0.26 | -24.2           | -30.5 | -44.1 | 0.18                     |                         |                            |
| 1.5       | 31.89                   | 1695.5             | 1689.4 | 1682.1 | -0.80                 | -0.32 | -0.30 | -24.6           | -30.9 | -44.9 | 0.18                     |                         |                            |
| 1.8       | 30.75                   | 1703.1             | 1697.1 | 1689.9 | -0.86                 | -0.36 | -0.35 | -24.8           | -31.4 | -46.4 | 0.17                     |                         |                            |
| 2.0       | 29.82                   | 1710.6             | 1704.5 | 1697.3 | -0.96                 | -0.43 | -0.40 | -25.0           | -31.8 | -47.1 | 0.17                     |                         |                            |
| 2.3       | 29.09                   | 1717.9             | 1711.8 | 1704.6 | -1.06                 | -0.53 | -0.48 | -25.2           | -31.9 | -48.4 | 0.17                     |                         |                            |
| 2.5       | 28.66                   | 1725.0             | 1719.0 | 1711.7 | -1.13                 | -0.60 | -0.56 | -25.4           | -32.2 | -50.7 | 0.17                     |                         |                            |
| 2.8       | 27.99                   | 1732.0             | 1726.0 | 1718.7 | -1.20                 | -0.66 | -0.62 | -25.7           | -32.4 | -52.2 | 0.17                     |                         |                            |
| 3.0       | 27.48                   | 1738.9             | 1732.8 | 1725.5 | -1.27                 | -0.72 | -0.68 | -25.9           | -32.8 | -53.5 | 0.17                     |                         |                            |
| 3.3       | 27.08                   | 1745.7             | 1739.6 | 1732.3 | -1.34                 | -0.79 | -0.75 | -26.2           | -33.2 | -57.6 | 0.17                     |                         |                            |
| 3.5       | 26.76                   | 1752.5             | 1746.3 | 1738.9 | -1.41                 | -0.88 | -0.84 | -26.5           | -33.6 | -58.9 | 0.17                     |                         |                            |
| 3.8       | 26.57                   | 1759.2             | 1752.9 | 1745.5 | -1.47                 | -0.95 | -0.93 | -26.8           | -33.8 | -59.7 | 0.17                     |                         |                            |
| 4.0       | 26.34                   | 1765.8             | 1759.5 | 1752.0 | -1.53                 | -1.01 | -1.02 | -27.0           | -34.2 | -62.2 | 0.17                     |                         |                            |
| 4.3       | 26.14                   | 1772.4             | 1766.1 | 1758.5 | -1.59                 | -1.07 | -1.08 | -27.3           | -34.3 | -59.6 | 0.17                     |                         |                            |
| 4.5       | 25.99                   | 1778.9             | 1772.6 | 1764.9 | -1.65                 | -1.11 | -1.11 | -27.6           | -34.4 | -57.7 | 0.17                     |                         |                            |
| 4.8       | 25.88                   | 1785.5             | 1779.0 | 1771.3 | -1.70                 | -1.15 | -1.15 | -27.8           | -34.3 | -57.3 | 0.16                     |                         |                            |
| 5.0       | 25.78                   | 1792.0             | 1785.5 | 1777.6 | -1.78                 | -1.22 | -1.20 | -28.1           | -34.3 | -54.4 | 0.17                     |                         |                            |
| 5.3       | 25.74                   | 1798.5             | 1791.9 | 1783.9 | -1.87                 | -1.30 | -1.27 | -28.3           | -34.5 | -54.1 | 0.17                     |                         |                            |
| 5.5       | 25.72                   | 1805.0             | 1798.3 | 1790.2 | -1.96                 | -1.40 | -1.36 | -28.4           | -34.2 | -54.9 | 0.17                     |                         |                            |
| 5.8       | 25.70                   | 1811.6             | 1804.8 | 1796.5 | -2.04                 | -1.48 | -1.45 | -28.8           | -34.3 | -52.7 | 0.17                     |                         |                            |
| 6.0       | 25.68                   | 1818.1             | 1811.2 | 1802.8 | -2.14                 | -1.56 | -1.55 | -29.3           | -34.2 | -52.5 | 0.17                     |                         |                            |
| 6.3       | 25.69                   | 1824.6             | 1817.6 | 1809.0 | -2.24                 | -1.67 | -1.65 | -29.8           | -34.3 | -52.0 | 0.18                     |                         |                            |
| 6.5       | 25.73                   | 1831.2             | 1824.0 | 1815.3 | -2.35                 | -1.77 | -1.76 | -30.1           | -34.4 | -51.7 | 0.18                     |                         |                            |
| 6.8       | 25.78                   | 1837.7             | 1830.5 | 1821.5 | -2.44                 | -1.86 | -1.86 | -30.4           | -34.0 | -51.7 | 0.18                     |                         |                            |
| 7.0       | 25.82                   | 1844.3             | 1836.9 | 1827.6 | -2.53                 | -1.96 | -1.98 | -30.6           | -33.7 | -51.6 | 0.18                     |                         |                            |