

# Voltage Controlled Oscillator

ROS-ED8763/2

## 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    |                          |                         |                            |
| 0.2       | 23.73                   | 1706.5             | 1698.6 | 1689.5 | 2.56                  | 4.40  | 4.09  | -31.4           | -23.2 | -38.5 | 0.00                     | 1                       | -88                        |
| 0.3       | 21.68                   | 1709.9             | 1701.9 | 1692.9 | 2.99                  | 4.46  | 4.16  | -31.6           | -23.7 | -38.2 | 0.03                     | 10                      | -110                       |
| 0.5       | 19.79                   | 1712.8             | 1704.8 | 1696.0 | 3.12                  | 4.54  | 4.20  | -31.8           | -24.1 | -38.0 | 0.09                     | 100                     | -130                       |
| 0.6       | 18.74                   | 1715.4             | 1707.7 | 1698.8 | 3.15                  | 4.60  | 4.26  | -31.3           | -24.3 | -38.1 | 0.09                     | 1000                    | -148                       |
| 0.8       | 17.60                   | 1718.0             | 1710.3 | 1701.5 | 3.18                  | 4.66  | 4.29  | -31.7           | -24.7 | -38.3 | 0.09                     |                         |                            |
| 0.9       | 16.85                   | 1720.4             | 1712.8 | 1704.0 | 3.24                  | 4.71  | 4.34  | -31.9           | -24.9 | -38.4 | 0.12                     |                         |                            |
| 1.1       | 16.24                   | 1722.8             | 1715.3 | 1706.5 | 3.30                  | 4.77  | 4.38  | -31.8           | -25.2 | -38.4 | 0.12                     |                         |                            |
| 1.2       | 15.73                   | 1725.2             | 1717.6 | 1709.4 | 3.36                  | 4.81  | 4.41  | -31.7           | -25.4 | -38.9 | 0.15                     |                         |                            |
| 1.4       | 15.30                   | 1727.5             | 1719.9 | 1711.7 | 3.41                  | 4.87  | 4.45  | -32.1           | -26.0 | -38.3 | 0.15                     |                         |                            |
| 1.5       | 14.80                   | 1729.7             | 1722.1 | 1713.9 | 3.45                  | 4.93  | 4.48  | -32.0           | -26.5 | -38.3 | 0.15                     |                         |                            |
| 1.7       | 14.49                   | 1731.8             | 1724.3 | 1716.0 | 3.51                  | 4.96  | 4.52  | -32.3           | -26.6 | -38.5 | 0.15                     |                         |                            |
| 1.8       | 14.27                   | 1734.0             | 1726.4 | 1718.2 | 3.55                  | 5.01  | 4.55  | -32.1           | -26.3 | -38.6 | 0.15                     |                         |                            |
| 2.0       | 13.97                   | 1736.1             | 1728.5 | 1720.3 | 3.62                  | 5.05  | 4.59  | -32.4           | -26.5 | -38.4 | 0.15                     |                         |                            |
| 2.1       | 13.81                   | 1738.1             | 1730.6 | 1722.3 | 3.68                  | 5.10  | 4.63  | -32.5           | -26.8 | -38.2 | 0.15                     |                         |                            |
| 2.3       | 13.63                   | 1740.2             | 1732.7 | 1724.3 | 3.74                  | 5.14  | 4.64  | -32.4           | -27.5 | -38.3 | 0.16                     |                         |                            |
| 2.4       | 13.47                   | 1742.2             | 1734.7 | 1726.3 | 3.80                  | 5.19  | 4.69  | -32.6           | -27.5 | -38.1 | 0.16                     |                         |                            |
| 2.6       | 13.29                   | 1744.2             | 1736.7 | 1728.3 | 3.86                  | 5.24  | 4.71  | -32.6           | -27.8 | -37.9 | 0.15                     |                         |                            |
| 2.7       | 13.23                   | 1746.2             | 1738.7 | 1730.2 | 3.91                  | 5.28  | 4.75  | -32.6           | -28.4 | -38.0 | 0.16                     |                         |                            |
| 2.9       | 13.12                   | 1748.2             | 1740.6 | 1732.2 | 3.99                  | 5.33  | 4.78  | -32.4           | -28.5 | -37.8 | 0.16                     |                         |                            |
| 3.0       | 12.92                   | 1750.2             | 1742.6 | 1734.1 | 4.04                  | 5.38  | 4.80  | -32.9           | -28.4 | -37.9 | 0.16                     |                         |                            |
| 3.2       | 12.95                   | 1752.2             | 1744.5 | 1736.0 | 4.08                  | 5.42  | 4.84  | -33.2           | -28.6 | -37.9 | 0.16                     |                         |                            |
| 3.3       | 12.96                   | 1754.1             | 1746.4 | 1737.9 | 4.16                  | 5.47  | 4.87  | -33.4           | -29.0 | -37.5 | 0.16                     |                         |                            |
| 3.5       | 12.75                   | 1756.1             | 1748.4 | 1739.8 | 4.20                  | 5.52  | 4.90  | -33.5           | -29.0 | -37.6 | 0.16                     |                         |                            |
| 3.6       | 12.83                   | 1758.0             | 1750.3 | 1741.7 | 4.27                  | 5.57  | 4.94  | -33.4           | -29.4 | -37.9 | 0.16                     |                         |                            |
| 3.8       | 12.81                   | 1760.0             | 1752.2 | 1743.6 | 4.31                  | 5.61  | 4.97  | -33.6           | -29.7 | -37.9 | 0.16                     |                         |                            |
| 3.9       | 12.75                   | 1762.0             | 1754.1 | 1745.5 | 4.35                  | 5.66  | 5.00  | -33.6           | -30.1 | -37.7 | 0.16                     |                         |                            |
| 4.1       | 12.76                   | 1763.9             | 1756.0 | 1747.4 | 4.42                  | 5.70  | 5.03  | -33.7           | -30.0 | -37.1 | 0.13                     |                         |                            |
| 4.2       | 12.67                   | 1765.9             | 1757.9 | 1749.2 | 4.46                  | 5.76  | 5.07  | -33.7           | -30.6 | -37.2 | 0.16                     |                         |                            |
| 4.4       | 12.81                   | 1767.8             | 1759.9 | 1751.1 | 4.52                  | 5.80  | 5.10  | -33.6           | -30.6 | -37.0 | 0.13                     |                         |                            |
| 4.5       | 12.61                   | 1769.8             | 1761.7 | 1753.0 | 4.56                  | 5.84  | 5.15  | -34.1           | -30.8 | -37.2 | 0.13                     |                         |                            |
| 4.7       | 12.81                   | 1771.8             | 1763.7 | 1754.9 | 4.59                  | 5.89  | 5.17  | -34.1           | -31.1 | -37.4 | 0.13                     |                         |                            |
| 4.8       | 12.75                   | 1773.7             | 1765.6 | 1756.8 | 4.64                  | 5.93  | 5.19  | -34.0           | -31.0 | -37.6 | 0.13                     |                         |                            |
| 5.0       | 12.75                   | 1775.7             | 1767.5 | 1758.6 | 4.68                  | 5.96  | 5.24  | -33.7           | -31.5 | -37.7 | 0.13                     |                         |                            |
| 5.1       | 12.68                   | 1777.7             | 1769.4 | 1760.5 | 4.72                  | 6.01  | 5.26  | -33.9           | -31.5 | -37.3 | 0.09                     |                         |                            |
| 5.3       | 12.67                   | 1779.6             | 1771.3 | 1762.4 | 4.76                  | 6.05  | 5.28  | -34.0           | -32.0 | -37.8 | 0.09                     |                         |                            |
| 5.4       | 12.75                   | 1781.6             | 1773.2 | 1764.3 | 4.80                  | 6.09  | 5.32  | -34.3           | -32.5 | -37.5 | 0.06                     |                         |                            |
| 5.6       | 12.67                   | 1783.6             | 1775.1 | 1766.2 | 4.84                  | 6.11  | 5.34  | -34.4           | -33.1 | -37.9 | 0.03                     |                         |                            |
| 5.7       | 12.75                   | 1785.6             | 1777.0 | 1768.1 | 4.88                  | 6.14  | 5.38  | -34.5           | -32.9 | -37.5 | 0.06                     |                         |                            |
| 5.9       | 12.60                   | 1787.6             | 1778.9 | 1769.9 | 4.92                  | 6.18  | 5.40  | -34.6           | -33.0 | -37.4 | 0.03                     |                         |                            |
| 6.0       | 12.59                   | 1789.5             | 1780.8 | 1771.8 | 4.96                  | 6.21  | 5.41  | -34.8           | -33.2 | -37.2 | 0.03                     |                         |                            |