

# Voltage Controlled Oscillator

ROS-EDR11294/1

## 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    |                          |                         |                            |
| 0.0       | 129.1                   | 1635.9             | 1601.6 | 1572.5 | 6.9                   | 6.2   | 5.1   | -11.9           | -26.1 | -27.2 | 1.4                      | 1                       | -68                        |
| 0.25      | 118.1                   | 1666.1             | 1633.9 | 1607.3 | 6.8                   | 6.2   | 5.0   | -12.3           | -25.8 | -28.0 | 1.6                      | 10                      | -94                        |
| 0.5       | 107.1                   | 1696.3             | 1666.2 | 1642.1 | 6.8                   | 6.2   | 4.8   | -12.7           | -25.5 | -28.8 | 1.8                      | 100                     | -117                       |
| 1.0       | 98.9                    | 1746.7             | 1719.7 | 1699.7 | 6.8                   | 6.3   | 4.8   | -13.7           | -23.4 | -29.4 | 1.8                      | 1000                    | -137                       |
| 1.5       | 95.9                    | 1797.5             | 1769.2 | 1749.7 | 6.9                   | 6.2   | 4.9   | -14.8           | -23.0 | -29.3 | 1.9                      |                         |                            |
| 2.0       | 95.7                    | 1843.9             | 1817.1 | 1800.1 | 6.9                   | 6.4   | 5.1   | -14.9           | -22.1 | -29.4 | 1.9                      |                         |                            |
| 2.5       | 98.2                    | 1893.0             | 1864.9 | 1847.1 | 6.9                   | 6.4   | 5.3   | -16.0           | -21.3 | -28.1 | 2.1                      |                         |                            |
| 3.0       | 98.4                    | 1940.8             | 1914.0 | 1896.7 | 7.0                   | 6.5   | 5.4   | -15.8           | -20.5 | -27.7 | 2.1                      |                         |                            |
| 3.5       | 103.1                   | 1990.7             | 1963.3 | 1944.5 | 7.0                   | 6.6   | 5.7   | -16.0           | -20.7 | -28.1 | 2.3                      |                         |                            |
| 4.0       | 99.5                    | 2041.9             | 2014.8 | 1995.1 | 7.1                   | 6.6   | 5.8   | -17.4           | -21.3 | -26.2 | 2.4                      |                         |                            |
| 4.5       | 105.3                   | 2093.5             | 2064.5 | 2045.3 | 7.0                   | 6.7   | 6.1   | -18.1           | -21.0 | -26.3 | 2.3                      |                         |                            |
| 5.0       | 99.2                    | 2143.5             | 2117.2 | 2098.1 | 7.1                   | 6.7   | 6.1   | -18.1           | -20.1 | -26.9 | 2.0                      |                         |                            |
| 5.5       | 103.6                   | 2194.3             | 2166.8 | 2148.1 | 7.1                   | 6.8   | 6.3   | -19.2           | -20.6 | -26.3 | 1.8                      |                         |                            |
| 6.0       | 98.8                    | 2244.0             | 2218.6 | 2200.7 | 7.2                   | 6.8   | 6.2   | -20.4           | -21.4 | -27.7 | 1.5                      |                         |                            |
| 6.5       | 96.5                    | 2294.1             | 2268.0 | 2250.6 | 7.2                   | 6.8   | 6.3   | -21.2           | -22.4 | -27.5 | 1.4                      |                         |                            |
| 7.0       | 94.8                    | 2340.5             | 2316.3 | 2299.9 | 7.1                   | 6.8   | 6.3   | -23.0           | -22.6 | -28.4 | 1.3                      |                         |                            |
| 7.5       | 87.5                    | 2384.2             | 2363.7 | 2347.9 | 7.1                   | 6.7   | 6.2   | -23.0           | -21.4 | -27.0 | 1.0                      |                         |                            |
| 8.0       | 91.8                    | 2429.6             | 2407.5 | 2391.5 | 6.8                   | 6.6   | 6.2   | -23.1           | -21.3 | -26.5 | 0.6                      |                         |                            |
| 8.5       | 84.2                    | 2471.6             | 2453.4 | 2440.2 | 6.7                   | 6.4   | 6.0   | -25.4           | -21.8 | -27.1 | 0.3                      |                         |                            |
| 9.0       | 89.8                    | 2515.8             | 2495.5 | 2481.4 | 6.4                   | 6.3   | 6.0   | -26.9           | -21.6 | -28.1 | 0.0                      |                         |                            |
| 9.5       | 77.7                    | 2555.4             | 2540.4 | 2526.9 | 6.4                   | 6.2   | 5.8   | -25.0           | -20.8 | -28.0 | 0.1                      |                         |                            |
| 10.0      | 84.1                    | 2595.5             | 2579.2 | 2565.4 | 6.3                   | 6.1   | 5.8   | -22.6           | -21.0 | -28.0 | 0.3                      |                         |                            |
| 10.5      | 76.5                    | 2635.6             | 2621.3 | 2607.7 | 6.1                   | 5.9   | 5.5   | -20.9           | -22.3 | -27.9 | 0.3                      |                         |                            |
| 11.0      | 81.6                    | 2674.3             | 2659.5 | 2647.5 | 5.9                   | 5.7   | 5.3   | -20.1           | -21.0 | -28.1 | 0.3                      |                         |                            |
| 11.5      | 70.3                    | 2713.5             | 2700.3 | 2684.9 | 5.8                   | 5.4   | 5.1   | -20.4           | -21.0 | -27.9 | 0.2                      |                         |                            |
| 12.0      | 70.3                    | 2750.8             | 2735.5 | 2722.4 | 5.4                   | 5.3   | 5.0   | -19.3           | -20.8 | -28.1 | 0.1                      |                         |                            |

### Notes

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