

# Voltage Controlled Oscillator

ROS-EDR3980/1

## 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    |                          |                         |                            |
| 0.3       | 141.30                  | 1997.1             | 1966.0 | 1942.5 | 5.24                  | 4.84  | 4.36  | -15.2           | -35.1 | -40.2 | -0.19                    | 1                       | -65                        |
| 0.5       | 133.60                  | 2027.1             | 1999.4 | 1978.2 | 5.32                  | 5.09  | 4.33  | -15.8           | -35.0 | -39.8 | -0.38                    | 10                      | -91                        |
| 0.8       | 116.20                  | 2062.0             | 2028.5 | 2007.3 | 5.24                  | 5.06  | 4.60  | -16.8           | -35.3 | -41.0 | 0.06                     | 100                     | -114                       |
| 1.0       | 137.70                  | 2090.5             | 2062.9 | 2037.1 | 5.60                  | 4.98  | 4.58  | -15.6           | -36.4 | -40.9 | 0.13                     | 1000                    | -136                       |
| 1.3       | 112.90                  | 2122.4             | 2091.1 | 2069.3 | 5.79                  | 5.27  | 4.57  | -15.3           | -36.8 | -41.5 | -0.26                    |                         |                            |
| 1.5       | 126.00                  | 2151.4             | 2122.6 | 2099.9 | 5.85                  | 5.35  | 4.53  | -15.6           | -36.3 | -40.6 | -0.13                    |                         |                            |
| 1.8       | 116.20                  | 2186.1             | 2151.7 | 2130.5 | 5.52                  | 5.32  | 4.69  | -15.7           | -35.7 | -41.1 | 0.06                     |                         |                            |
| 2.0       | 141.10                  | 2217.8             | 2186.9 | 2159.6 | 5.73                  | 4.96  | 4.59  | -14.9           | -37.2 | -38.7 | -0.45                    |                         |                            |
| 2.3       | 127.00                  | 2245.9             | 2218.7 | 2195.1 | 5.86                  | 5.17  | 4.40  | -15.7           | -37.2 | -38.9 | -0.70                    |                         |                            |
| 2.5       | 112.10                  | 2277.3             | 2246.7 | 2227.2 | 5.71                  | 5.21  | 4.38  | -15.9           | -38.8 | -38.9 | -0.58                    |                         |                            |
| 2.8       | 126.50                  | 2310.3             | 2278.3 | 2257.0 | 5.60                  | 5.07  | 4.28  | -15.6           | -38.5 | -38.6 | -1.41                    |                         |                            |
| 3.0       | 134.90                  | 2339.6             | 2312.1 | 2288.6 | 5.43                  | 4.87  | 4.12  | -15.1           | -36.6 | -38.6 | -1.60                    |                         |                            |
| 3.3       | 120.30                  | 2367.0             | 2342.1 | 2321.8 | 5.36                  | 4.66  | 4.04  | -15.9           | -35.1 | -39.4 | -1.28                    |                         |                            |
| 3.5       | 109.10                  | 2398.3             | 2369.4 | 2351.7 | 4.87                  | 4.56  | 3.71  | -16.0           | -31.8 | -40.3 | -2.11                    |                         |                            |
| 3.8       | 125.20                  | 2429.3             | 2400.7 | 2381.7 | 4.47                  | 4.18  | 3.50  | -17.3           | -29.9 | -40.2 | -3.26                    |                         |                            |
| 4.0       | 121.90                  | 2457.3             | 2431.2 | 2411.2 | 4.10                  | 3.92  | 3.31  | -19.5           | -28.7 | -41.5 | -1.60                    |                         |                            |
| 4.3       | 109.60                  | 2483.8             | 2458.6 | 2439.6 | 3.97                  | 3.69  | 3.24  | -22.3           | -28.4 | -42.9 | -1.34                    |                         |                            |
| 4.5       | 102.90                  | 2513.0             | 2484.3 | 2467.0 | 3.73                  | 3.56  | 2.96  | -24.3           | -28.1 | -43.5 | -3.84                    |                         |                            |
| 4.8       | 114.70                  | 2536.5             | 2513.0 | 2491.8 | 3.92                  | 3.25  | 2.81  | -25.0           | -28.3 | -43.5 | -2.37                    |                         |                            |
| 5.0       | 94.70                   | 2556.9             | 2536.6 | 2518.7 | 3.75                  | 3.43  | 2.64  | -27.5           | -28.2 | -45.0 | -0.26                    |                         |                            |