

# Voltage Controlled Oscillator

ROS-EDR5070

## 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    |                          |                         |                            |
| 0.5       | 12.26                   | 773.3              | 769.7 | 768.3 | 8.34                  | 8.07  | 7.64  | -25.9           | -33.0 | -38.7 | -0.07                    | 1                       | -88                        |
| 1.0       | 9.86                    | 778.1              | 774.6 | 773.3 | 8.38                  | 8.05  | 7.64  | -25.9           | -33.0 | -36.4 | -0.07                    | 10                      | -111                       |
| 1.5       | 8.76                    | 782.4              | 779.0 | 777.7 | 8.42                  | 8.01  | 7.65  | -26.1           | -33.1 | -38.4 | -0.08                    | 100                     | -132                       |
| 2.0       | 8.17                    | 786.5              | 783.1 | 781.9 | 8.44                  | 7.97  | 7.66  | -26.4           | -33.1 | -36.9 | -0.08                    | 1000                    | -151                       |
| 2.5       | 7.85                    | 790.3              | 787.0 | 785.8 | 8.44                  | 7.92  | 7.67  | -26.3           | -33.3 | -39.6 | -0.09                    |                         |                            |
| 3.0       | 7.73                    | 794.1              | 790.9 | 789.6 | 8.41                  | 7.87  | 7.65  | -26.6           | -33.3 | -36.3 | -0.09                    |                         |                            |
| 3.5       | 7.72                    | 797.9              | 794.7 | 793.4 | 8.37                  | 7.81  | 7.62  | -26.7           | -33.3 | -38.9 | -0.09                    |                         |                            |
| 4.0       | 7.79                    | 801.8              | 798.6 | 797.2 | 8.28                  | 7.74  | 7.57  | -26.9           | -33.5 | -36.2 | -0.09                    |                         |                            |
| 4.5       | 7.95                    | 805.8              | 802.6 | 801.0 | 8.15                  | 7.66  | 7.51  | -27.1           | -33.4 | -37.8 | -0.10                    |                         |                            |
| 5.0       | 8.17                    | 809.9              | 806.7 | 805.0 | 8.01                  | 7.58  | 7.42  | -27.2           | -33.4 | -36.9 | -0.10                    |                         |                            |
| 5.5       | 8.46                    | 814.3              | 810.9 | 809.1 | 7.88                  | 7.51  | 7.32  | -27.2           | -33.3 | -37.4 | -0.09                    |                         |                            |
| 6.0       | 8.76                    | 818.9              | 815.3 | 813.4 | 7.76                  | 7.47  | 7.23  | -27.4           | -33.3 | -37.6 | -0.09                    |                         |                            |
| 6.5       | 9.19                    | 823.7              | 819.9 | 817.9 | 7.69                  | 7.45  | 7.16  | -27.3           | -34.4 | -38.6 | -0.09                    |                         |                            |
| 7.0       | 9.66                    | 828.8              | 824.7 | 822.7 | 7.65                  | 7.45  | 7.12  | -27.3           | -33.9 | -38.1 | -0.08                    |                         |                            |
| 7.5       | 10.16                   | 834.0              | 829.8 | 827.7 | 7.64                  | 7.46  | 7.10  | -27.3           | -34.5 | -38.0 | -0.09                    |                         |                            |
| 8.0       | 10.65                   | 839.5              | 835.1 | 833.0 | 7.65                  | 7.43  | 7.09  | -27.2           | -34.9 | -38.1 | -0.09                    |                         |                            |
| 8.5       | 11.14                   | 845.3              | 840.7 | 838.5 | 7.62                  | 7.44  | 7.09  | -27.0           | -33.9 | -38.4 | -0.09                    |                         |                            |
| 9.0       | 11.58                   | 851.2              | 846.5 | 844.2 | 7.58                  | 7.47  | 7.06  | -26.8           | -34.1 | -38.1 | -0.10                    |                         |                            |
| 9.5       | 11.92                   | 857.3              | 852.4 | 850.1 | 7.50                  | 7.47  | 6.99  | -26.6           | -35.8 | -38.1 | -0.12                    |                         |                            |
| 10.0      | 12.13                   | 863.4              | 858.5 | 856.3 | 7.41                  | 7.43  | 6.85  | -26.4           | -33.7 | -38.0 | -0.14                    |                         |                            |
| 10.5      | 12.24                   | 869.6              | 864.6 | 862.5 | 7.33                  | 7.36  | 6.67  | -26.1           | -37.2 | -38.9 | -0.17                    |                         |                            |
| 11.0      | 12.16                   | 875.7              | 870.7 | 868.8 | 7.25                  | 7.27  | 6.46  | -26.1           | -35.1 | -37.6 | -0.21                    |                         |                            |
| 11.5      | 12.02                   | 881.7              | 876.7 | 875.0 | 7.18                  | 7.16  | 6.26  | -25.8           | -37.7 | -37.1 | -0.26                    |                         |                            |
| 12.0      | 11.89                   | 887.5              | 882.7 | 881.2 | 7.11                  | 7.00  | 6.06  | -25.7           | -40.6 | -38.0 | -0.32                    |                         |                            |
| 12.5      | 11.71                   | 893.0              | 888.5 | 887.1 | 7.03                  | 6.79  | 5.87  | -25.7           | -39.8 | -37.0 | -0.37                    |                         |                            |
| 13.0      | 11.43                   | 898.3              | 894.2 | 892.9 | 6.94                  | 6.55  | 5.66  | -25.6           | -42.0 | -37.0 | -0.40                    |                         |                            |
| 13.5      | 11.11                   | 903.5              | 899.8 | 898.4 | 6.82                  | 6.28  | 5.46  | -25.6           | -44.3 | -36.9 | -0.41                    |                         |                            |
| 14.0      | 10.71                   | 908.5              | 905.1 | 903.7 | 6.65                  | 6.02  | 5.27  | -25.5           | -45.7 | -37.3 | -0.42                    |                         |                            |
| 14.5      | 10.30                   | 913.4              | 910.3 | 908.8 | 6.44                  | 5.76  | 5.07  | -25.4           | -45.4 | -36.4 | -0.41                    |                         |                            |
| 15.0      | 9.87                    | 918.3              | 915.2 | 913.6 | 6.17                  | 5.52  | 4.89  | -25.3           | -44.9 | -35.9 | -0.39                    |                         |                            |