

# Voltage Controlled Oscillator

ROS-EDR6113

## 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       | 29.16                   | 794.2              | 790.1 | 786.1 | 0.31                  | 0.91  | 1.17  | -13.3           | -35.7 | -31.5 | -0.87                    | 1                       | -88                        |
| 0.5       | 24.48                   | 800.0              | 796.2 | 792.5 | 0.37                  | 0.96  | 1.25  | -13.2           | -35.1 | -32.8 | -0.50                    | 10                      | -114                       |
| 0.8       | 21.81                   | 805.3              | 801.6 | 798.2 | 0.41                  | 0.97  | 1.27  | -13.1           | -34.1 | -33.6 | -0.28                    | 100                     | -134                       |
| 1.0       | 20.06                   | 810.2              | 806.7 | 803.3 | 0.44                  | 0.97  | 1.27  | -13.2           | -33.2 | -33.8 | -0.13                    | 1000                    | -144                       |
| 1.3       | 18.79                   | 814.7              | 811.3 | 808.1 | 0.44                  | 0.95  | 1.24  | -13.2           | -32.1 | -33.8 | -0.03                    |                         |                            |
| 1.5       | 17.84                   | 819.1              | 815.8 | 812.7 | 0.40                  | 0.92  | 1.21  | -13.3           | -31.0 | -33.6 | 0.03                     |                         |                            |
| 1.8       | 17.10                   | 823.3              | 820.1 | 817.1 | 0.30                  | 0.84  | 1.16  | -13.5           | -30.0 | -33.1 | 0.06                     |                         |                            |
| 2.0       | 16.84                   | 827.6              | 824.3 | 821.3 | 0.29                  | 0.73  | 1.07  | -13.6           | -29.1 | -32.6 | 0.07                     |                         |                            |
| 2.3       | 16.81                   | 831.6              | 828.5 | 825.4 | 0.27                  | 0.68  | 0.95  | -13.8           | -28.2 | -32.0 | 0.04                     |                         |                            |
| 2.5       | 16.10                   | 835.6              | 832.5 | 829.5 | 0.21                  | 0.63  | 0.90  | -14.0           | -27.5 | -31.6 | 0.01                     |                         |                            |
| 2.8       | 15.74                   | 839.4              | 836.5 | 833.5 | 0.13                  | 0.57  | 0.87  | -14.3           | -26.9 | -31.3 | -0.01                    |                         |                            |
| 3.0       | 15.46                   | 843.3              | 840.3 | 837.4 | 0.05                  | 0.49  | 0.83  | -14.4           | -26.4 | -30.8 | -0.01                    |                         |                            |
| 3.3       | 15.26                   | 847.1              | 844.1 | 841.2 | -0.04                 | 0.43  | 0.78  | -14.7           | -25.9 | -30.6 | -0.01                    |                         |                            |
| 3.5       | 15.05                   | 850.9              | 847.9 | 845.0 | -0.11                 | 0.37  | 0.75  | -14.9           | -25.5 | -30.6 | 0.01                     |                         |                            |
| 3.8       | 14.86                   | 854.6              | 851.6 | 848.7 | -0.19                 | 0.33  | 0.72  | -15.1           | -25.1 | -30.7 | 0.04                     |                         |                            |
| 4.0       | 14.68                   | 858.3              | 855.3 | 852.3 | -0.25                 | 0.28  | 0.68  | -15.3           | -24.8 | -30.7 | 0.08                     |                         |                            |
| 4.3       | 14.52                   | 862.0              | 858.9 | 855.9 | -0.32                 | 0.25  | 0.64  | -15.4           | -24.5 | -30.6 | 0.13                     |                         |                            |
| 4.5       | 14.34                   | 865.6              | 862.5 | 859.5 | -0.40                 | 0.21  | 0.61  | -15.6           | -24.3 | -30.6 | 0.18                     |                         |                            |
| 4.8       | 14.13                   | 869.2              | 866.0 | 863.0 | -0.50                 | 0.16  | 0.57  | -15.7           | -24.2 | -31.0 | 0.24                     |                         |                            |
| 5.0       | 14.05                   | 872.9              | 869.5 | 866.5 | -0.46                 | 0.09  | 0.52  | -15.9           | -24.1 | -31.5 | 0.30                     |                         |                            |
| 5.3       | 14.61                   | 876.6              | 873.2 | 870.0 | -0.41                 | 0.10  | 0.43  | -16.0           | -24.0 | -31.7 | 0.36                     |                         |                            |
| 5.5       | 14.32                   | 880.1              | 876.8 | 873.6 | -0.38                 | 0.14  | 0.31  | -16.1           | -23.8 | -31.9 | 0.40                     |                         |                            |
| 5.8       | 13.95                   | 883.7              | 880.3 | 877.2 | -0.37                 | 0.16  | 0.27  | -16.2           | -23.8 | -32.2 | 0.41                     |                         |                            |
| 6.0       | 13.84                   | 887.1              | 883.7 | 880.8 | -0.37                 | 0.13  | 0.20  | -16.3           | -23.8 | -32.8 | 0.36                     |                         |                            |
| 6.3       | 13.86                   | 890.6              | 887.2 | 884.4 | -0.39                 | 0.07  | 0.08  | -16.4           | -23.9 | -33.5 | 0.21                     |                         |                            |
| 6.5       | 14.03                   | 894.0              | 890.7 | 888.0 | -0.42                 | -0.05 | -0.06 | -16.6           | -23.9 | -34.0 | -0.07                    |                         |                            |
| 6.8       | 14.32                   | 897.4              | 894.3 | 891.7 | -0.48                 | -0.20 | -0.22 | -16.8           | -24.0 | -34.6 | -0.38                    |                         |                            |
| 7.0       | 14.66                   | 900.9              | 897.9 | 895.4 | -0.62                 | -0.39 | -0.38 | -17.1           | -24.1 | -35.3 | -0.61                    |                         |                            |