

# Voltage Controlled Oscillator

ROS-EDR10275

## Typical Performance Data

| V<br>TUNE | TUNE<br>SENS<br>(MHz/V) | FREQUENCY<br>(MHz) |        |        | POWER OUTPUT<br>(dBm) |       |       | HARMONICS<br>(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       | 73.81                   | 757.8              | 738.8  | 719.7  | 13.69                 | 13.79 | 13.68 | -25.74             | -19.09 | -40.66 | 0.41                     | 1                       | -72                        |
| 0.5       | 74.91                   | 794.2              | 775.7  | 758.4  | 13.40                 | 13.49 | 13.35 | -23.83             | -19.25 | -43.88 | 0.45                     | 10                      | -100                       |
| 1.0       | 74.49                   | 831.6              | 813.2  | 795.9  | 13.32                 | 13.24 | 13.02 | -23.60             | -19.67 | -41.49 | 0.48                     | 100                     | -123                       |
| 1.5       | 74.38                   | 868.7              | 850.4  | 833.7  | 13.22                 | 13.12 | 12.81 | -20.55             | -19.97 | -38.29 | 0.47                     | 1000                    | -144                       |
| 2.0       | 74.78                   | 905.7              | 887.6  | 871.3  | 13.10                 | 12.96 | 12.61 | -20.42             | -20.95 | -35.74 | 0.47                     |                         |                            |
| 2.5       | 75.22                   | 942.4              | 925.0  | 909.0  | 12.95                 | 12.81 | 12.41 | -19.33             | -22.25 | -33.24 | 0.51                     |                         |                            |
| 3.0       | 75.02                   | 979.4              | 962.6  | 946.9  | 12.81                 | 12.60 | 12.21 | -17.69             | -25.18 | -31.75 | 0.50                     |                         |                            |
| 3.5       | 76.42                   | 1017.6             | 1000.1 | 984.6  | 12.70                 | 12.51 | 12.11 | -17.18             | -28.50 | -31.26 | 0.48                     |                         |                            |
| 4.0       | 74.03                   | 1055.9             | 1038.4 | 1022.4 | 12.68                 | 12.43 | 11.94 | -16.25             | -32.13 | -30.19 | 0.46                     |                         |                            |
| 4.5       | 73.12                   | 1093.2             | 1075.4 | 1059.5 | 12.65                 | 12.35 | 11.89 | -16.17             | -31.33 | -29.03 | 0.42                     |                         |                            |
| 5.0       | 72.26                   | 1129.9             | 1111.9 | 1096.0 | 12.58                 | 12.27 | 11.78 | -15.37             | -28.60 | -28.26 | 0.39                     |                         |                            |
| 5.5       | 70.23                   | 1165.7             | 1148.1 | 1132.2 | 12.63                 | 12.27 | 11.70 | -14.77             | -25.92 | -26.98 | 0.36                     |                         |                            |
| 6.0       | 68.56                   | 1200.6             | 1183.2 | 1167.5 | 12.57                 | 12.25 | 11.71 | -13.68             | -24.08 | -26.75 | 0.34                     |                         |                            |
| 6.5       | 68.02                   | 1234.4             | 1217.4 | 1202.3 | 12.41                 | 12.12 | 11.61 | -13.53             | -23.40 | -27.36 | 0.33                     |                         |                            |
| 7.0       | 67.44                   | 1268.8             | 1251.5 | 1236.2 | 12.29                 | 11.95 | 11.49 | -13.19             | -22.83 | -27.51 | 0.31                     |                         |                            |
| 7.5       | 65.49                   | 1302.2             | 1285.2 | 1270.2 | 12.24                 | 11.85 | 11.34 | -12.89             | -22.20 | -26.14 | 0.27                     |                         |                            |
| 8.0       | 66.07                   | 1335.2             | 1317.9 | 1303.1 | 12.15                 | 11.77 | 11.27 | -12.84             | -21.45 | -25.19 | 0.25                     |                         |                            |
| 8.5       | 64.49                   | 1368.6             | 1351.0 | 1335.8 | 12.03                 | 11.62 | 11.12 | -12.61             | -20.98 | -24.10 | 0.23                     |                         |                            |
| 9.0       | 62.91                   | 1400.4             | 1383.2 | 1368.5 | 11.91                 | 11.53 | 11.01 | -12.82             | -20.28 | -23.28 | 0.20                     |                         |                            |
| 9.5       | 63.26                   | 1432.3             | 1414.7 | 1399.8 | 11.71                 | 11.38 | 10.92 | -13.00             | -19.53 | -22.26 | 0.17                     |                         |                            |
| 10.0      | 61.39                   | 1464.0             | 1446.3 | 1431.4 | 11.54                 | 11.20 | 10.74 | -13.43             | -18.96 | -21.99 | 0.14                     |                         |                            |
| 10.5      | 59.97                   | 1494.3             | 1477.0 | 1462.3 | 11.44                 | 11.09 | 10.62 | -13.34             | -18.56 | -20.97 | 0.09                     |                         |                            |
| 11.0      | 59.56                   | 1524.5             | 1507.0 | 1492.2 | 11.19                 | 10.96 | 10.56 | -13.94             | -18.41 | -21.06 | 0.03                     |                         |                            |
| 11.5      | 56.89                   | 1554.1             | 1536.8 | 1521.9 | 11.02                 | 10.80 | 10.41 | -14.76             | -17.91 | -21.37 | 0.05                     |                         |                            |
| 12.0      | 55.95                   | 1582.4             | 1565.2 | 1550.7 | 10.84                 | 10.70 | 10.33 | -15.83             | -17.58 | -21.94 | 0.16                     |                         |                            |
| 12.5      | 55.64                   | 1609.9             | 1593.2 | 1578.6 | 10.69                 | 10.57 | 10.23 | -16.77             | -17.83 | -25.39 | 0.30                     |                         |                            |
| 13.0      | 55.47                   | 1637.7             | 1621.0 | 1606.4 | 10.63                 | 10.51 | 10.13 | -17.36             | -18.81 | -27.24 | 0.44                     |                         |                            |
| 13.5      | 53.58                   | 1667.3             | 1648.7 | 1633.4 | 10.68                 | 10.45 | 10.06 | -19.34             | -19.82 | -28.15 | 0.45                     |                         |                            |
| 14.0      | 53.58                   | 1695.2             | 1675.5 | 1659.8 | 10.71                 | 10.39 | 9.99  | -20.39             | -19.27 | -27.43 | 0.40                     |                         |                            |

### Notes

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