

# Voltage Controlled Oscillator

# ROS-2500+

## 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       | 43.50                   | 1415.87            | 1392.10 | 1369.85 | 7.99                  | 7.92  | 7.87  | -13.49          | -18.46 | -26.00 | 0.63                     | 1                       | -62                        |
| 0.5       | 47.36                   | 1440.88            | 1413.85 | 1392.60 | 7.82                  | 7.80  | 7.80  | -14.04          | -18.43 | -25.76 | 0.48                     | 10                      | -89                        |
| 1.0       | 48.94                   | 1466.19            | 1437.53 | 1413.86 | 7.69                  | 7.66  | 7.71  | -14.86          | -18.18 | -27.02 | 0.37                     | 100                     | -111                       |
| 1.5       | 51.98                   | 1490.94            | 1462.00 | 1438.66 | 7.62                  | 7.53  | 7.50  | -15.82          | -18.25 | -27.63 | 0.32                     | 1000                    | -131                       |
| 2.0       | 59.95                   | 1516.27            | 1487.99 | 1465.43 | 7.53                  | 7.41  | 7.32  | -16.54          | -19.51 | -29.61 | 0.06                     |                         |                            |
| 2.5       | 78.00                   | 1545.88            | 1517.97 | 1494.49 | 7.33                  | 7.27  | 7.19  | -17.71          | -19.67 | -33.27 | 0.07                     |                         |                            |
| 3.0       | 90.18                   | 1584.19            | 1556.97 | 1527.28 | 7.16                  | 7.07  | 6.94  | -18.52          | -22.10 | -40.19 | 0.25                     |                         |                            |
| 3.5       | 96.61                   | 1637.31            | 1602.05 | 1571.36 | 7.12                  | 6.92  | 6.67  | -20.25          | -20.61 | -45.80 | 0.02                     |                         |                            |
| 4.0       | 102.48                  | 1692.37            | 1650.36 | 1616.75 | 7.24                  | 6.98  | 6.45  | -21.94          | -20.28 | -42.32 | 0.12                     |                         |                            |
| 4.5       | 107.68                  | 1747.71            | 1701.60 | 1668.27 | 7.54                  | 6.97  | 6.14  | -23.00          | -19.91 | -43.27 | 0.17                     |                         |                            |
| 5.0       | 114.70                  | 1804.98            | 1755.44 | 1723.71 | 7.76                  | 7.07  | 6.08  | -21.74          | -19.64 | -42.05 | 0.08                     |                         |                            |
| 5.5       | 117.92                  | 1859.87            | 1812.79 | 1783.61 | 7.97                  | 7.13  | 5.86  | -19.59          | -19.81 | -39.11 | 0.20                     |                         |                            |
| 6.0       | 116.92                  | 1920.96            | 1871.75 | 1844.18 | 8.40                  | 7.24  | 5.88  | -17.53          | -20.05 | -34.92 | 0.80                     |                         |                            |
| 6.5       | 114.91                  | 1978.15            | 1930.21 | 1905.76 | 8.60                  | 7.42  | 5.90  | -16.32          | -20.44 | -34.50 | 1.38                     |                         |                            |
| 7.0       | 110.92                  | 2030.68            | 1987.67 | 1965.47 | 8.85                  | 7.57  | 6.02  | -15.14          | -22.46 | -33.94 | 1.82                     |                         |                            |
| 7.5       | 106.91                  | 2083.84            | 2043.13 | 2023.11 | 8.87                  | 7.75  | 6.29  | -13.97          | -24.30 | -32.62 | 2.57                     |                         |                            |
| 8.0       | 99.85                   | 2132.19            | 2096.58 | 2079.12 | 9.08                  | 7.92  | 6.47  | -13.02          | -25.97 | -30.57 | 2.74                     |                         |                            |
| 8.5       | 97.04                   | 2180.20            | 2146.51 | 2131.03 | 9.11                  | 8.09  | 6.77  | -12.35          | -27.33 | -28.65 | 3.01                     |                         |                            |
| 9.0       | 91.20                   | 2225.03            | 2195.03 | 2181.94 | 9.25                  | 8.17  | 7.00  | -12.76          | -29.62 | -30.33 | 3.17                     |                         |                            |
| 9.5       | 90.28                   | 2268.78            | 2240.63 | 2228.58 | 9.22                  | 8.23  | 7.24  | -13.36          | -32.14 | -32.01 | 3.20                     |                         |                            |
| 10.0      | 89.08                   | 2311.58            | 2285.77 | 2275.46 | 9.24                  | 8.08  | 7.17  | -14.12          | -33.53 | -33.56 | 2.31                     |                         |                            |
| 10.5      | 87.69                   | 2354.24            | 2330.31 | 2320.49 | 9.03                  | 8.00  | 7.13  | -15.88          | -35.69 | -36.92 | 2.02                     |                         |                            |
| 11.0      | 85.52                   | 2392.95            | 2374.15 | 2363.47 | 8.97                  | 7.84  | 7.06  | -16.78          | -40.25 | -38.89 | 2.60                     |                         |                            |
| 11.5      | 82.46                   | 2436.40            | 2416.91 | 2407.30 | 8.59                  | 7.62  | 6.87  | -16.89          | -36.73 | -38.65 | 1.86                     |                         |                            |
| 12.0      | 76.16                   | 2480.56            | 2458.14 | 2445.86 | 8.31                  | 7.46  | 6.81  | -16.28          | -34.03 | -40.30 | 2.07                     |                         |                            |
| 12.5      | 70.69                   | 2521.11            | 2496.21 | 2483.71 | 8.34                  | 7.44  | 6.77  | -15.54          | -29.98 | -42.80 | 2.24                     |                         |                            |
| 13.0      | 68.17                   | 2558.58            | 2531.56 | 2519.41 | 8.24                  | 7.47  | 6.87  | -14.84          | -27.77 | -45.48 | 2.34                     |                         |                            |
| 13.5      | 64.19                   | 2594.17            | 2565.64 | 2552.22 | 8.19                  | 7.44  | 6.80  | -14.63          | -27.43 | -46.79 | 2.63                     |                         |                            |
| 14.0      | 57.38                   | 2627.33            | 2597.74 | 2584.46 | 8.24                  | 7.37  | 6.81  | -13.96          | -28.07 | -47.46 | 2.32                     |                         |                            |
| 14.5      | 55.52                   | 2658.21            | 2626.43 | 2614.49 | 8.10                  | 7.40  | 6.77  | -13.50          | -28.02 | -49.01 | 2.16                     |                         |                            |
| 15.0      | 52.30                   | 2687.26            | 2654.19 | 2641.36 | 8.28                  | 7.46  | 6.82  | -13.12          | -27.95 | -48.40 | 2.47                     |                         |                            |
| 15.5      | 48.98                   | 2714.10            | 2680.34 | 2668.11 | 8.21                  | 7.49  | 6.80  | -13.45          | -27.76 | -48.19 | 2.30                     |                         |                            |
| 16.0      | 48.98                   | 2737.49            | 2704.83 | 2692.55 | 8.58                  | 7.48  | 6.88  | -13.38          | -27.67 | -48.60 | 2.55                     |                         |                            |



ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs & shopping online see web site

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MMIC MICROWAVE COMPONENTS

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