

# Voltage Controlled Oscillator

**ROSA-ED10174/1**

## 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    |                          |                         |                            |
| 0.5       | 22.58                   | 2489.4             | 2486.4 | 2484.7 | -0.79                 | -1.49 | -2.12 | -43.9           | -44.8 | -44.1 | 1.26                     | 1                       | -83                        |
| 1.0       | 20.22                   | 2499.5             | 2496.5 | 2494.8 | -0.57                 | -1.24 | -1.89 | -43.5           | -45.0 | -44.5 | 1.28                     | 10                      | -109                       |
| 1.5       | 19.58                   | 2509.3             | 2506.3 | 2504.5 | -0.32                 | -1.00 | -1.67 | -44.8           | -44.9 | -44.2 | 1.32                     | 100                     | -129                       |
| 2.0       | 19.86                   | 2519.3             | 2516.3 | 2514.3 | -0.13                 | -0.80 | -1.47 | -44.8           | -44.2 | -44.6 | 1.40                     | 1000                    | -149                       |
| 2.5       | 20.40                   | 2529.7             | 2526.5 | 2524.5 | -0.01                 | -0.67 | -1.33 | -45.8           | -43.1 | -44.7 | 1.46                     |                         |                            |
| 3.0       | 21.30                   | 2540.4             | 2537.1 | 2535.0 | 0.05                  | -0.59 | -1.25 | -44.9           | -42.0 | -44.2 | 1.44                     |                         |                            |
| 3.5       | 21.92                   | 2551.4             | 2548.1 | 2545.9 | 0.08                  | -0.55 | -1.23 | -44.7           | -41.3 | -44.2 | 1.40                     |                         |                            |
| 4.0       | 22.34                   | 2562.5             | 2559.2 | 2557.0 | 0.06                  | -0.59 | -1.25 | -44.4           | -37.4 | -45.0 | 1.40                     |                         |                            |
| 4.5       | 22.38                   | 2573.7             | 2570.4 | 2568.1 | 0.02                  | -0.62 | -1.32 | -44.8           | -35.5 | -44.4 | 1.34                     |                         |                            |
| 5.0       | 22.16                   | 2584.7             | 2581.5 | 2579.2 | -0.06                 | -0.69 | -1.40 | -44.8           | -35.5 | -44.8 | 1.26                     |                         |                            |
| 5.5       | 21.58                   | 2595.5             | 2592.3 | 2590.0 | -0.16                 | -0.79 | -1.49 | -44.9           | -37.1 | -45.3 | 1.20                     |                         |                            |
| 6.0       | 21.00                   | 2605.9             | 2602.8 | 2600.5 | -0.29                 | -0.96 | -1.65 | -45.5           | -36.6 | -44.3 | 1.20                     |                         |                            |
| 6.5       | 20.14                   | 2616.0             | 2612.9 | 2610.6 | -0.42                 | -1.10 | -1.80 | -44.5           | -37.5 | -43.8 | 1.12                     |                         |                            |
| 7.0       | 19.40                   | 2625.6             | 2622.6 | 2620.3 | -0.52                 | -1.19 | -1.89 | -45.0           | -37.0 | -44.0 | 1.20                     |                         |                            |
| 7.5       | 18.66                   | 2634.9             | 2631.9 | 2629.6 | -0.56                 | -1.26 | -1.96 | -44.8           | -36.5 | -43.4 | 1.20                     |                         |                            |
| 8.0       | 17.86                   | 2643.8             | 2640.8 | 2638.5 | -0.59                 | -1.32 | -2.00 | -44.7           | -36.1 | -43.5 | 1.20                     |                         |                            |
| 8.5       | 17.20                   | 2652.3             | 2649.4 | 2647.1 | -0.64                 | -1.33 | -2.05 | -42.9           | -36.2 | -43.6 | 1.26                     |                         |                            |
| 9.0       | 16.54                   | 2660.6             | 2657.7 | 2655.3 | -0.62                 | -1.35 | -2.07 | -43.5           | -35.4 | -43.8 | 1.34                     |                         |                            |
| 9.5       | 15.86                   | 2668.5             | 2665.6 | 2663.3 | -0.60                 | -1.42 | -2.09 | -41.0           | -34.9 | -42.5 | 1.26                     |                         |                            |
| 10.0      | 15.34                   | 2676.1             | 2673.3 | 2670.9 | -0.64                 | -1.42 | -2.19 | -40.2           | -34.0 | -42.8 | 1.34                     |                         |                            |