

# Voltage Controlled Oscillator

JTOS-ED6817

## 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    |                          |                         |                            |
| 1.0       | 67.40                   | 1691.5             | 1678.3 | 1657.6 | 6.22                  | 5.84  | 5.09  | -18.8           | -29.0 | -41.5 | 2.87                     | 1                       | -63                        |
| 2.0       | 64.90                   | 1756.0             | 1743.2 | 1723.4 | 6.98                  | 6.55  | 5.47  | -20.7           | -30.8 | -38.8 | 2.40                     | 10                      | -92                        |
| 3.0       | 74.80                   | 1831.1             | 1818.0 | 1798.3 | 6.73                  | 6.60  | 5.73  | -22.4           | -32.1 | -37.9 | 2.28                     | 100                     | -114                       |
| 4.0       | 97.80                   | 1929.1             | 1915.8 | 1894.6 | 7.81                  | 7.34  | 5.81  | -23.5           | -31.7 | -39.5 | 2.30                     | 1000                    | -133                       |
| 5.0       | 122.40                  | 2049.5             | 2038.2 | 2022.0 | 8.32                  | 8.20  | 7.14  | -25.9           | -31.8 | -43.3 | 0.46                     |                         |                            |
| 6.0       | 131.10                  | 2178.3             | 2169.3 | 2159.2 | 8.79                  | 8.65  | 7.76  | -36.9           | -45.2 | -43.7 | 1.11                     |                         |                            |
| 7.0       | 126.50                  | 2303.3             | 2295.8 | 2286.8 | 8.80                  | 8.59  | 7.73  | -29.5           | -43.1 | -45.3 | 1.65                     |                         |                            |
| 8.0       | 105.00                  | 2408.7             | 2400.8 | 2390.4 | 7.83                  | 7.55  | 7.11  | -27.9           | -39.9 | -45.1 | 1.09                     |                         |                            |
| 9.0       | 83.90                   | 2493.0             | 2484.8 | 2473.3 | 7.77                  | 7.76  | 7.06  | -28.3           | -38.7 | -44.7 | 0.73                     |                         |                            |
| 10.0      | 69.20                   | 2562.4             | 2553.9 | 2542.1 | 6.98                  | 6.82  | 6.26  | -28.7           | -41.9 | -44.7 | 0.43                     |                         |                            |
| 11.0      | 59.50                   | 2621.9             | 2613.4 | 2601.3 | 6.88                  | 6.60  | 5.80  | -29.1           | -48.4 | -52.4 | 0.09                     |                         |                            |
| 12.0      | 51.70                   | 2673.7             | 2665.1 | 2652.8 | 6.40                  | 6.26  | 5.65  | -29.4           | -47.2 | -53.4 | 0.25                     |                         |                            |
| 13.0      | 46.40                   | 2720.1             | 2711.5 | 2699.1 | 5.51                  | 5.44  | 4.77  | -29.4           | -45.1 | -52.1 | 0.37                     |                         |                            |
| 14.0      | 41.80                   | 2762.0             | 2753.3 | 2740.8 | 5.07                  | 4.50  | 3.79  | -29.3           | -42.7 | -51.2 | 0.54                     |                         |                            |
| 15.0      | 38.60                   | 2800.6             | 2791.9 | 2779.2 | 4.64                  | 4.39  | 3.39  | -29.3           | -42.0 | -51.3 | 0.59                     |                         |                            |
| 16.0      | 35.50                   | 2836.1             | 2827.4 | 2814.7 | 4.16                  | 3.71  | 3.17  | -28.9           | -41.9 | -49.2 |                          |                         |                            |
| 17.0      | 33.20                   | 2869.4             | 2860.6 | 2847.6 | 3.34                  | 3.19  | 2.51  | -28.5           | -41.3 | -49.7 |                          |                         |                            |
| 18.0      | 31.20                   | 2900.6             | 2891.7 | 2878.5 | 2.60                  | 2.41  | 1.64  | -28.2           | -40.5 | -48.0 |                          |                         |                            |
| 19.0      | 29.10                   | 2929.8             | 2920.8 | 2907.4 | 2.09                  | 1.82  | 1.24  | -27.7           | -40.2 | -48.3 |                          |                         |                            |
| 20.0      | 27.30                   | 2957.4             | 2948.2 | 2934.3 | 1.78                  | 1.35  | 0.72  | -27.1           | -38.9 | -47.8 |                          |                         |                            |