

# Voltage Controlled Oscillator

POSA-ED8383A/2

## 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    |                          |                         |                            |
| 1.00      | 2.46                    | 137.9              | 136.9 | 136.1 | 11.93                 | 11.81 | 11.62 | -23.4           | -56.8 | -72.4 | 0.02                     | 1                       | -100                       |
| 2.00      | 2.17                    | 140.2              | 139.2 | 138.4 | 11.91                 | 11.81 | 11.61 | -24.5           | -56.7 | -73.6 | 0.02                     | 10                      | -125                       |
| 3.00      | 2.09                    | 142.3              | 141.4 | 140.5 | 11.89                 | 11.80 | 11.60 | -25.5           | -57.9 | -73.8 | 0.01                     | 100                     | -145                       |
| 4.00      | 2.14                    | 144.5              | 143.5 | 142.6 | 11.86                 | 11.79 | 11.59 | -26.5           | -58.4 | -71.0 | 0.01                     | 1000                    | -161                       |
| 5.00      | 2.26                    | 146.7              | 145.6 | 144.8 | 11.83                 | 11.78 | 11.56 | -27.4           | -59.2 | -71.3 | 0.01                     |                         |                            |
| 6.00      | 2.43                    | 149.0              | 148.0 | 147.1 | 11.80                 | 11.75 | 11.54 | -28.4           | -60.2 | -70.8 | 0.01                     |                         |                            |
| 7.00      | 2.65                    | 151.6              | 150.5 | 149.6 | 11.78                 | 11.72 | 11.52 | -29.5           | -60.3 | -72.8 | 0.02                     |                         |                            |
| 8.00      | 2.81                    | 154.2              | 153.2 | 152.4 | 11.75                 | 11.66 | 11.48 | -30.7           | -61.1 | -71.8 | 0.03                     |                         |                            |
| 9.00      | 2.93                    | 157.1              | 156.0 | 155.2 | 11.72                 | 11.60 | 11.43 | -31.8           | -61.2 | -72.9 | 0.04                     |                         |                            |
| 10.00     | 2.98                    | 159.9              | 159.0 | 158.2 | 11.66                 | 11.53 | 11.37 | -32.9           | -61.7 | -73.5 | 0.06                     |                         |                            |
| 11.00     | 3.01                    | 162.9              | 162.0 | 161.2 | 11.60                 | 11.47 | 11.33 | -34.0           | -62.5 | -73.6 | 0.06                     |                         |                            |
| 12.00     | 3.05                    | 165.9              | 165.0 | 164.2 | 11.52                 | 11.42 | 11.28 | -35.0           | -64.2 | -72.8 | 0.06                     |                         |                            |
| 13.00     | 3.06                    | 169.0              | 168.1 | 167.2 | 11.46                 | 11.37 | 11.24 | -36.1           | -63.6 | -72.4 | 0.05                     |                         |                            |
| 14.00     | 3.05                    | 172.0              | 171.1 | 170.3 | 11.40                 | 11.34 | 11.21 | -37.0           | -64.4 | -72.1 | 0.05                     |                         |                            |
| 15.00     | 2.97                    | 175.0              | 174.2 | 173.3 | 11.35                 | 11.32 | 11.17 | -37.9           | -65.1 | -71.8 | 0.07                     |                         |                            |
| 16.00     | 2.81                    | 177.9              | 177.1 | 176.3 | 11.32                 | 11.30 | 11.13 | -38.7           | -66.0 | -72.0 | 0.10                     |                         |                            |
| 17.00     | 2.63                    | 180.6              | 179.8 | 179.2 | 11.31                 | 11.30 | 11.08 | -39.6           | -66.0 | -72.4 | 0.14                     |                         |                            |
| 18.00     | 2.43                    | 183.1              | 182.4 | 181.8 | 11.31                 | 11.29 | 11.04 | -40.2           | -65.1 | -73.0 | 0.19                     |                         |                            |
| 19.00     | 2.20                    | 185.5              | 184.7 | 184.2 | 11.32                 | 11.27 | 11.01 | -40.8           | -65.1 | -72.3 | 0.22                     |                         |                            |
| 20.00     | 1.93                    | 187.5              | 186.8 | 186.2 | 11.33                 | 11.24 | 10.98 | -41.5           | -66.2 | -73.3 | 0.23                     |                         |                            |