

# Voltage Controlled Oscillator

ROS-EDR5305

## 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    |                          |                         |                            |
| 0.3       | 9.72                    | 348.5              | 347.1 | 346.3 | 2.07                  | 0.52  | -0.58 | -27.8           | -46.1 | -40.2 | -0.07                    | 1                       | -93                        |
| 0.5       | 8.51                    | 350.5              | 349.2 | 348.3 | 2.06                  | 0.50  | -0.57 | -27.8           | -46.4 | -39.6 | -0.04                    | 10                      | -114                       |
| 0.8       | 7.74                    | 352.4              | 351.2 | 350.3 | 2.04                  | 0.50  | -0.54 | -27.8           | -47.0 | -39.6 | -0.02                    | 100                     | -136                       |
| 1.0       | 7.28                    | 354.2              | 353.0 | 352.1 | 2.01                  | 0.50  | -0.55 | -27.7           | -46.7 | -39.1 | -0.01                    | 1000                    | -148                       |
| 1.3       | 6.98                    | 356.0              | 354.7 | 353.8 | 1.97                  | 0.50  | -0.54 | -27.7           | -47.0 | -39.0 | 0.00                     |                         |                            |
| 1.5       | 6.78                    | 357.8              | 356.4 | 355.5 | 1.91                  | 0.50  | -0.54 | -27.7           | -47.5 | -38.6 | 0.00                     |                         |                            |
| 1.8       | 6.66                    | 359.5              | 358.1 | 357.1 | 1.86                  | 0.50  | -0.54 | -27.6           | -47.5 | -38.3 | 0.01                     |                         |                            |
| 2.0       | 6.55                    | 361.2              | 359.7 | 358.8 | 1.82                  | 0.51  | -0.54 | -27.6           | -47.7 | -38.0 | 0.01                     |                         |                            |
| 2.3       | 6.54                    | 362.9              | 361.4 | 360.4 | 1.80                  | 0.51  | -0.56 | -27.6           | -47.9 | -37.8 | 0.01                     |                         |                            |
| 2.5       | 6.58                    | 364.6              | 363.0 | 362.1 | 1.78                  | 0.52  | -0.57 | -27.6           | -47.9 | -37.5 | 0.01                     |                         |                            |
| 2.8       | 6.64                    | 366.3              | 364.7 | 363.8 | 1.75                  | 0.52  | -0.58 | -27.6           | -48.0 | -37.3 | 0.02                     |                         |                            |
| 3.0       | 6.74                    | 368.1              | 366.4 | 365.5 | 1.73                  | 0.52  | -0.61 | -27.6           | -48.0 | -37.2 | 0.02                     |                         |                            |
| 3.3       | 6.87                    | 369.9              | 368.1 | 367.2 | 1.70                  | 0.52  | -0.63 | -27.6           | -47.5 | -36.8 | 0.03                     |                         |                            |
| 3.5       | 7.02                    | 371.7              | 369.8 | 369.0 | 1.68                  | 0.51  | -0.65 | -27.4           | -47.9 | -36.5 | 0.05                     |                         |                            |
| 3.8       | 7.22                    | 373.6              | 371.6 | 370.8 | 1.67                  | 0.49  | -0.67 | -27.4           | -47.8 | -36.3 | 0.06                     |                         |                            |
| 4.0       | 7.43                    | 375.4              | 373.5 | 372.7 | 1.65                  | 0.47  | -0.68 | -27.4           | -48.0 | -35.9 | 0.08                     |                         |                            |
| 4.3       | 7.66                    | 377.3              | 375.4 | 374.6 | 1.63                  | 0.43  | -0.70 | -27.3           | -48.6 | -35.6 | 0.09                     |                         |                            |
| 4.5       | 7.89                    | 379.3              | 377.4 | 376.5 | 1.62                  | 0.39  | -0.72 | -27.1           | -48.6 | -35.3 | 0.10                     |                         |                            |
| 4.8       | 8.16                    | 381.3              | 379.4 | 378.5 | 1.60                  | 0.36  | -0.73 | -27.3           | -48.4 | -35.3 | 0.10                     |                         |                            |
| 5.0       | 8.38                    | 383.3              | 381.5 | 380.6 | 1.59                  | 0.33  | -0.74 | -27.1           | -49.5 | -34.8 | 0.11                     |                         |                            |
| 5.3       | 8.58                    | 385.4              | 383.7 | 382.7 | 1.57                  | 0.31  | -0.75 | -27.1           | -49.2 | -34.3 | 0.11                     |                         |                            |
| 5.5       | 8.82                    | 387.6              | 385.9 | 384.9 | 1.55                  | 0.29  | -0.77 | -26.9           | -49.5 | -33.6 | 0.11                     |                         |                            |
| 5.8       | 9.06                    | 389.8              | 388.1 | 387.1 | 1.51                  | 0.27  | -0.77 | -26.7           | -49.4 | -32.9 | 0.10                     |                         |                            |
| 6.0       | 9.19                    | 392.2              | 390.4 | 389.3 | 1.46                  | 0.26  | -0.77 | -26.7           | -48.8 | -32.2 | 0.09                     |                         |                            |
| 6.3       | 9.41                    | 394.6              | 392.8 | 391.7 | 1.42                  | 0.25  | -0.79 | -26.5           | -48.8 | -31.9 | 0.08                     |                         |                            |
| 6.5       | 9.60                    | 397.0              | 395.2 | 394.0 | 1.41                  | 0.24  | -0.80 | -26.3           | -48.2 | -31.0 | 0.05                     |                         |                            |
| 6.8       | 9.67                    | 399.4              | 397.6 | 396.4 | 1.41                  | 0.24  | -0.81 | -26.3           | -47.9 | -30.5 | 0.02                     |                         |                            |
| 7.0       | 9.75                    | 401.9              | 400.0 | 398.9 | 1.40                  | 0.24  | -0.81 | -26.5           | -47.2 | -29.7 | -0.03                    |                         |                            |