# Voltage Controlled Oscillator ROS-ED10118/1

## *Typical Performance Data*

| V TUNE | TUNE SENS (MHz/V) | FREQUENCY (MHz) | | | POWER OUTPUT (dBm) | | | HARMONICS (dBc) | | | FREQ. PUSH (MHz/V) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | -55°C | +25°C | +85°C | -55°C | +25°C | +85°C | F2 | F3 | F4 | |
| 0.1 | 11.74 | 454.0 | 451.9 | 449.9 | -1.61 | -1.91 | -2.09 | -14.6 | -34.0 | -31.3 | 0.18 |
| 0.3 | 11.39 | 455.5 | 453.3 | 451.3 | -1.61 | -1.85 | -2.09 | -14.7 | -33.3 | -30.8 | 0.14 |
| 0.4 | 11.06 | 456.9 | 454.7 | 452.6 | -1.61 | -1.85 | -2.04 | -14.7 | -33.9 | -30.7 | 0.12 |
| 0.5 | 10.95 | 458.3 | 456.0 | 454.0 | -1.54 | -1.84 | -2.03 | -14.8 | -34.1 | -30.6 | 0.10 |
| 0.6 | 10.82 | 459.7 | 457.4 | 455.3 | -1.54 | -1.84 | -2.03 | -14.8 | -34.9 | -30.6 | 0.07 |
| 0.8 | 10.88 | 461.1 | 458.8 | 456.6 | -1.54 | -1.76 | -2.02 | -14.8 | -34.4 | -30.3 | 0.06 |
| 0.9 | 11.06 | 462.5 | 460.1 | 458.0 | -1.60 | -1.76 | -1.96 | -14.9 | -34.8 | -30.4 | 0.05 |
| 1.0 | 11.13 | 464.0 | 461.5 | 459.3 | -1.61 | -1.75 | -1.95 | -15.0 | -35.3 | -30.3 | 0.02 |
| 1.1 | 11.43 | 465.5 | 463.0 | 460.7 | -1.60 | -1.81 | -1.94 | -15.1 | -35.4 | -30.2 | 0.01 |
| 1.3 | 11.67 | 467.0 | 464.4 | 462.1 | -1.60 | -1.81 | -1.94 | -15.2 | -35.1 | -30.1 | 0.00 |
| 1.4 | 12.01 | 468.6 | 465.9 | 463.6 | -1.46 | -1.80 | -2.00 | -15.1 | -35.7 | -30.1 | 0.01 |
| 1.5 | 12.27 | 470.2 | 467.5 | 465.1 | -1.46 | -1.80 | -2.00 | -15.1 | -35.9 | -30.0 | 0.02 |
| 1.6 | 12.58 | 471.8 | 469.0 | 466.6 | -1.47 | -1.65 | -1.99 | -15.2 | -36.7 | -29.7 | 0.02 |
| 1.8 | 13.02 | 473.5 | 470.7 | 468.2 | -1.45 | -1.65 | -1.84 | -15.3 | -36.4 | -29.6 | 0.01 |
| 1.9 | 13.25 | 475.3 | 472.3 | 469.8 | -1.45 | -1.65 | -1.84 | -15.4 | -36.9 | -29.5 | 0.00 |
| 2.0 | 13.55 | 477.0 | 474.0 | 471.4 | -1.46 | -1.63 | -1.84 | -15.4 | -36.5 | -29.1 | 0.02 |
| 2.1 | 13.79 | 478.8 | 475.7 | 473.1 | -1.68 | -1.63 | -1.82 | -15.5 | -37.3 | -29.0 | 0.07 |
| 2.3 | 13.90 | 480.6 | 477.5 | 474.8 | -1.69 | -1.63 | -1.82 | -15.5 | -37.6 | -29.0 | 0.13 |
| 2.4 | 14.03 | 482.4 | 479.2 | 476.5 | -1.71 | -1.85 | -1.82 | -15.6 | -37.5 | -28.8 | 0.20 |
| 2.5 | 14.08 | 484.2 | 481.0 | 478.3 | -1.53 | -1.85 | -2.04 | -15.6 | -38.6 | -28.7 | 0.29 |
| 2.6 | 14.06 | 485.9 | 482.7 | 480.0 | -1.54 | -1.66 | -2.04 | -15.7 | -39.4 | -28.2 | 0.38 |
| 2.8 | 13.89 | 487.7 | 484.5 | 481.7 | -1.57 | -1.67 | -2.04 | -15.7 | -39.7 | -28.3 | 0.49 |
| 2.9 | 13.75 | 489.4 | 486.2 | 483.4 | -1.58 | -1.68 | -1.86 | -15.9 | -40.1 | -28.3 | 0.59 |
| 3.0 | 13.50 | 491.1 | 487.9 | 485.1 | -1.60 | -1.70 | -1.86 | -16.0 | -40.4 | -28.1 | 0.71 |
| 3.1 | 13.24 | 492.8 | 489.5 | 486.8 | -1.65 | -1.71 | -1.87 | -16.0 | -41.8 | -27.9 | 0.81 |
| 3.3 | 12.99 | 494.4 | 491.2 | 488.4 | -1.66 | -1.72 | -1.89 | -16.0 | -42.1 | -27.9 | 0.92 |
| 3.4 | 12.50 | 495.9 | 492.7 | 490.0 | -1.67 | -1.77 | -1.90 | -16.1 | -43.0 | -27.8 | 1.02 |
| 3.5 | 12.18 | 497.5 | 494.2 | 491.5 | -1.67 | -1.77 | -1.90 | -16.2 | -43.0 | -27.7 | 1.10 |
| 3.6 | 11.72 | 498.9 | 495.7 | 493.0 | -1.73 | -1.77 | -1.95 | -16.4 | -44.0 | -27.6 | 1.18 |
| 3.8 | 11.32 | 500.3 | 497.1 | 494.4 | -1.73 | -1.77 | -1.95 | -16.5 | -43.2 | -27.5 | 1.24 |
| 3.9 | 10.86 | 501.7 | 498.5 | 495.8 | -1.73 | -1.82 | -1.95 | -16.6 | -43.8 | -27.3 | 1.31 |
| 4.0 | 10.42 | 503.0 | 499.8 | 497.1 | -1.76 | -1.82 | -1.96 | -16.7 | -44.5 | -27.2 | 1.36 |
| 4.1 | 10.01 | 504.2 | 501.0 | 498.4 | -1.75 | -1.81 | -2.00 | -16.7 | -44.5 | -27.2 | 1.39 |
| 4.3 | 9.52 | 505.4 | 502.2 | 499.5 | -1.74 | -1.80 | -2.00 | -16.9 | -44.8 | -27.2 | 1.41 |
| 4.4 | 9.01 | 506.6 | 503.4 | 500.7 | -1.73 | -1.83 | -1.99 | -16.9 | -44.4 | -27.3 | 1.41 |
| 4.5 | 8.61 | 507.6 | 504.4 | 501.7 | -1.81 | -1.82 | -1.98 | -17.1 | -44.3 | -27.2 | 1.41 |
| 4.6 | 8.07 | 508.7 | 505.4 | 502.7 | -1.80 | -1.81 | -2.01 | -17.2 | -44.2 | -27.3 | 1.39 |
| 4.8 | 7.66 | 509.6 | 506.4 | 503.7 | -1.78 | -1.79 | -2.00 | -17.2 | -45.3 | -27.1 | 1.36 |
| 4.9 | 7.16 | 510.5 | 507.3 | 504.6 | -1.77 | -1.78 | -1.98 | -17.3 | -44.3 | -27.1 | 1.32 |
| 5.0 | 6.71 | 511.4 | 508.1 | 505.4 | -1.75 | -1.85 | -1.97 | -17.4 | -44.6 | -27.2 | 1.27 |

| FREQ OFFSET (KHz) | PHASE NOISE (dBc/Hz) |
|---|---|
| 1 | -87 |
| 10 | -110 |
| 100 | -130 |
| 1000 | -150 |