

# M3500-0305 (300-500 MHz)

## 1D. M3500-0305 VCO TECHNICAL SPECIFICATIONS

| ABSOLUTE MAXIMUM / MINIMUM RATINGS |        |
|------------------------------------|--------|
| PARAMETER                          | RATING |
| Maximum Supply Voltage             | +14.5V |
| Tuning Voltage Min/Max             | 0/20V  |

| GUARANTEED PERFORMANCE (0-70° C) |                              |
|----------------------------------|------------------------------|
| PARAMETER                        | DATA                         |
| Power Dissipation                | 360 mW max<br>(30 mA @ +12V) |
| Frequency Tuning Range           | 300 to 500 MHz min           |
| Power Output (50 )               | 9 dBm min                    |

| TYPICAL PERFORMANCE (0-70° C)        |                          |                       |
|--------------------------------------|--------------------------|-----------------------|
| PARAMETER                            |                          | DATA                  |
| Nominal Supply Voltage               |                          | +12V                  |
| Power Output (50 )                   |                          | +12 dBm               |
| Typical Current                      |                          | 26mA                  |
| Tuning Voltage                       |                          | 1.6-14.0 V            |
| FM(Phase)Noise:                      | 1 kHz Offset             | -78 dBc/Hz            |
|                                      | 10 kHz Offset            | <-100 dBc/Hz          |
|                                      | 100 kHz Offset           | <-118 dBc/Hz          |
|                                      | 1 MHz Offset             | <-130 dBc/Hz          |
| Frequency Pushing                    |                          | 1.5 MHz/V for 12 ± 1V |
| Frequency Pulling (12dB Return Loss) |                          | 8 MHz peak-peak       |
| Harmonic Spurious (Average)          |                          | -4 dBc                |
| Tuning Port Bandwidth:               | @ Tuning Voltage = 1.6V  | 1.1 MHz               |
|                                      | @ Tuning Voltage = 6.2V  | 1.8 MHz               |
|                                      | @ Tuning Voltage = 13.4V | 3.9 MHz               |

## 2D. PERFORMANCE CURVES FOR M3500-0305

