VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR1600-5

FEATURES:
- Optimized Tuning Frequency Band
- Exceptional Phase Noise Performance
- Small Size, Surface Mount
- Lead Free Patented REL-PRO® Technology
- Planar Resonator Construction

1600 MHz

SPECIFICATIONS (Rev. A 10/01/10)

Frequency
1600 MHz

Tuning Voltage
0.5 - 5.0 VDC

Bias Voltage
+5.0 VDC @ 32 mA (Max.)

Output Power
0 dBm (Min.)

Tuning Sensitivity
4.0 - 6.0 MHz/V (Typ.)

Output Impedance
50 Ohms (Nom.)

Harmonic Suppression
15.0 dB (Typ.)

Frequency Pulling
0.85 MHz (Typ. @ 1.75:1 VSWR)

Frequency Pushing
0.70 MHz/V (Typ.)

Tuning Port Capacitance
90 pF (Typ.)

Phase Noise @ 10 kHz
-117 dBc/Hz (Typ.)

Operating Temperature Range
-40 to +85 °C

Absolute Maximum Ratings

Storage Temp. Range
-55 to +125 °C

Bias Voltage
5.5 V

Tuning Voltage
+7 V

DC Voltage Applied to RF Out
± 25 V

Phase Noise

OFFSET FREQUENCY (Hz)
100 1000 10000 100000 1000000 10000000

OFFSET FREQUENCY (Hz)

Phase Noise (dBc/Hz)
-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10

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OPTIMIZED FREQUENCY

1600 MHz

PERFORMANCE PLOTS

Control Voltage (Vdc)

Frequency (MHz)

Output Power (dBm)

+25°C  +85°C  -40°C

+25°C  +85°C  -40°C

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