VOLTAGE CONTROLLED OSCILLATOR
SURFACE MOUNT MODEL: DCSR4096-10

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

SPECIFICATIONS (Rev. A 03/26/08)

**Frequency**
4096 MHz

**Tuning Voltage**
0.5 - 10 VDC

**Bias Voltage**
+10 VDC @ 42 mA (Max.)

**Output Power**
+5.5 dBm (Min.)

**Tuning Sensitivity**
4.3 - 5.6 MHz/V (Typ.)

**Output Impedance**
50 Ohms (Nom.)

**Harmonic Suppression**
25 dB (Typ.)

**Frequency Pulling**
5 MHz (Typ. @ 1.75 VSWR)

**Frequency Pushing**
2 MHz/V (Typ.)

**Tuning Port Capacitance**
42 pF (Typ.)

**Phase Noise @ 10 kHz**
-110 dBc/Hz (Typ.)

**Operating Temperature Range**
-40 to +85 °C

**Absolute Maximum Ratings**

- **Storage Temp. Range**
  -55 to +125 °C

- **Bias Voltage**
  +10.5 V

- **Tuning Voltage**
  +16 V

- **DC Voltage Applied to RF Out**
  ± 25 V

**Phase Noise**

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**RECOMMENDED PCB LAYOUT**

Dimensions are in inches.

+ All unmarked pins to be grounded.

+ Tolerances on three decimal places = ± 0.005

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OPTIMIZED FREQUENCY

4096 MHz

PERFORMANCE PLOTS
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OPTIMIZED FREQUENCY
4096 MHz

PERFORMANCE PLOTS

Tuning Sensitivity (MHz/V)
Control Voltage (Vdc)

2nd Harmonic Suppression (dB)
Control Voltage (Vdc)

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