

VOLTAGE CONTROLLED OSCILLATOR

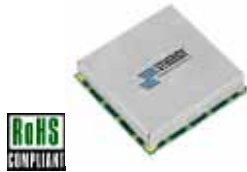
SURFACE MOUNT MODEL: DCRO200210-10

OPTIMIZED BANDWIDTH

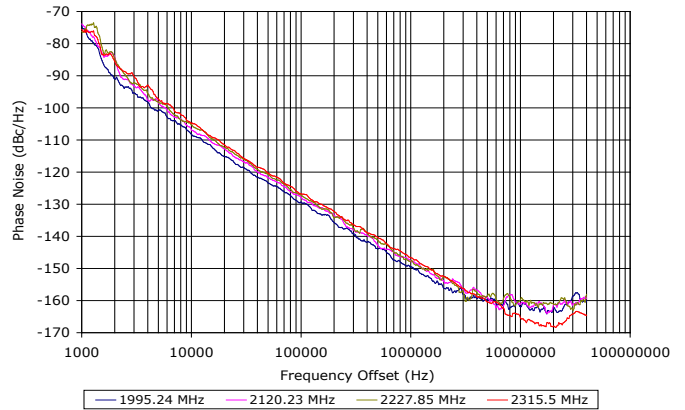
2000 - 2300 MHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size, Surface Mount
- ▶ Lead Free Patented REL-PRO® Technology
- ▶ Planar Resonator Construction



Phase Noise



SPECIFICATIONS (Rev. D 12/02/10)

Frequency	2000 - 2300 MHz
Tuning Voltage	See table below.
Bias Voltage	+10 VDC @ 40 mA (Max.)
Output Power	+1 dBm (Min.)
Tuning Sensitivity	35 - 42MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	12 dB (Typ.)
Frequency Pulling	5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	2 MHz/V (Typ.)
Tuning Port Capacitance	40 pF (Typ.)
Phase Noise @ 10 kHz	-108 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	2000 (Max.)
5	2100 (Min.)
12	2300 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+10.5 V
Tuning Voltage	+18 V
DC Voltage Applied to RF Out	±25 V

Package # 278LF

REL-PRO® PATENT NO. 7,612,296

RECOMMENDED PCB LAYOUT

DIMENSIONS ARE IN INCHES.
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
 ALL UNLABELED PINS TO BE GROUNDED.
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300

OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT

This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,282,670; 7,285,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,886,381; 7,605,670; 7,536,021; 2,533,623
 Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,963,174; 7,580,693; 7,612,296; 2,524,751



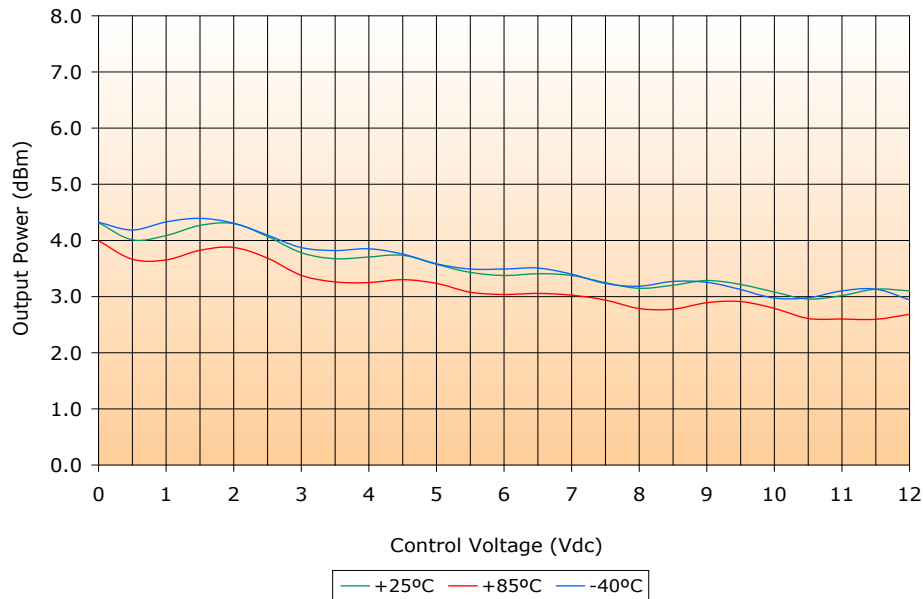
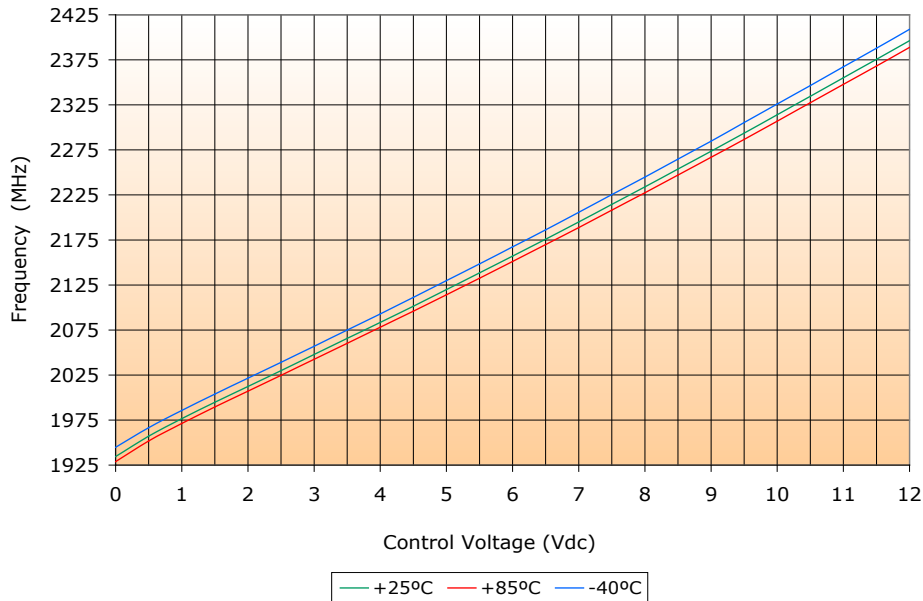
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PERFORMANCE PLOTS



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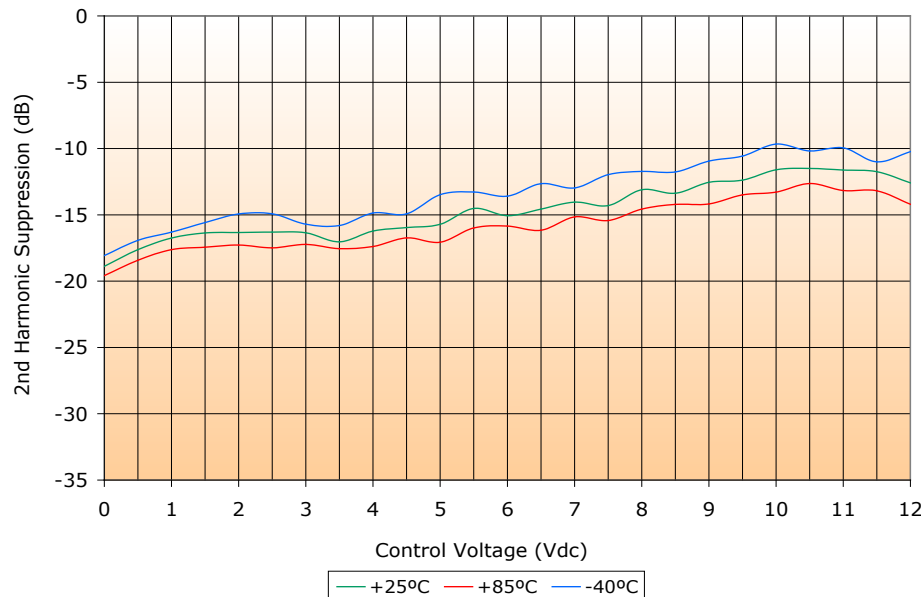
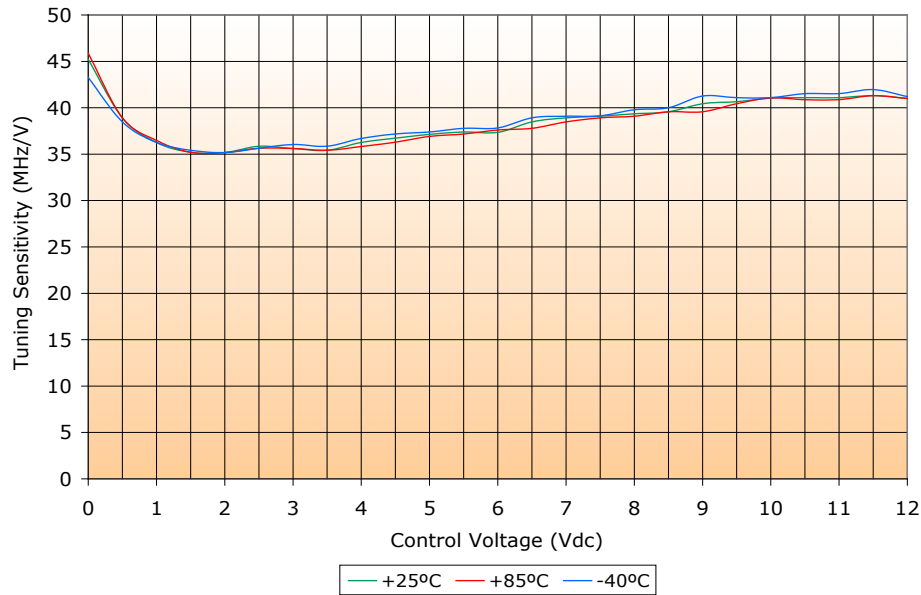
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