

# VOLTAGE CONTROLLED OSCILLATOR

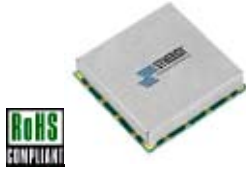
## SURFACE MOUNT MODEL: DCRO5383-5

**OPTIMIZED BANDWIDTH**

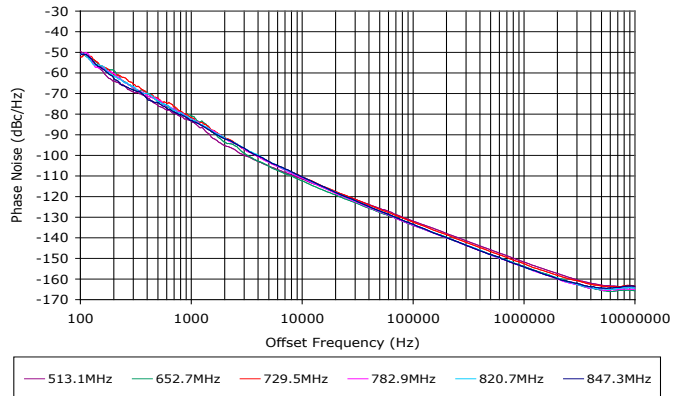
**534 - 830 MHz**

**FEATURES:**

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



**Phase Noise**



**SPECIFICATIONS (Rev. A 07/20/09)**

Frequency	534 - 830 MHz
Tuning Voltage	See table below.
Bias Voltage	+5 VDC @ 26 mA (Max.)
Output Power	0 dBm (Min.)
Tuning Sensitivity	9 - 28 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	18 dB (Typ.)
Frequency Pulling	2 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	1 MHz/V (Typ.)
Tuning Port Capacitance	124 pF (Typ.)
Phase Noise @ 10 kHz	-112 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

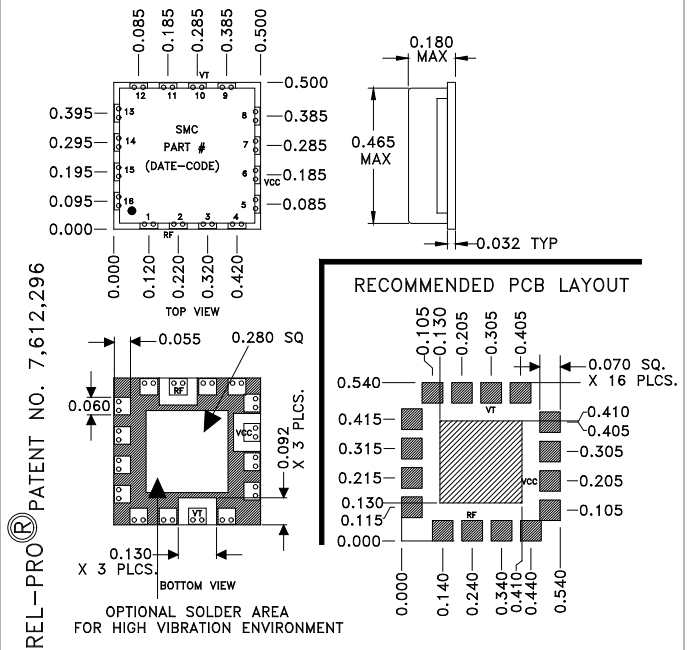
**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	534 (Max.)
5	580 (Min.)
8	665 (Min.)
12	750 (Min.)
16	800 (Min.)
20	830 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+24.0 V
DC Voltage Applied to RF Out	± 25 V

Package # 278LF



REL-PRO® PATENT NO. 7,612,296

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

DIMENSIONS ARE IN INCHES.

ALL UNLABELED PINS TO BE GROUNDING.

PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300

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; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 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; 2,563,174; 7,580,693; 7,612,296; 2,524,751

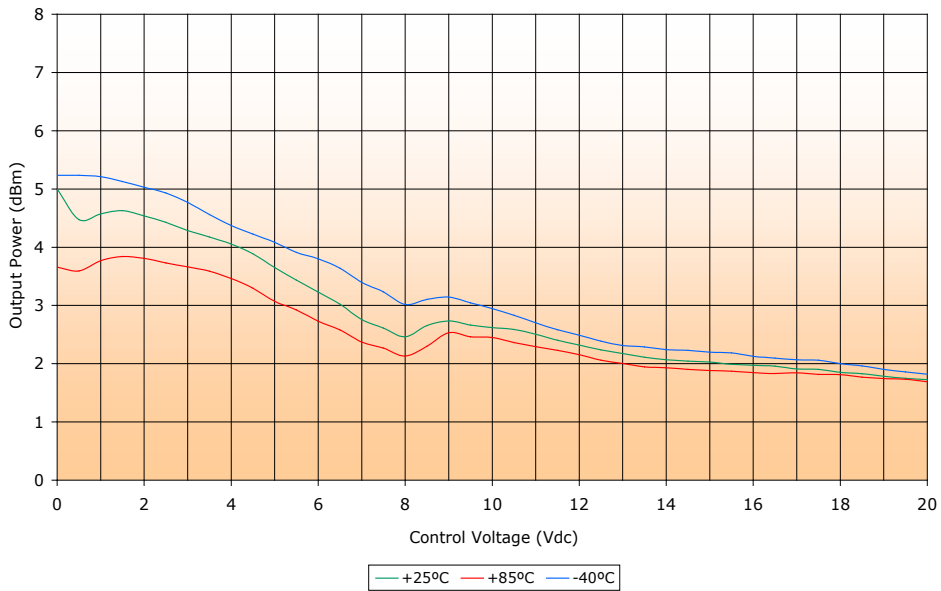
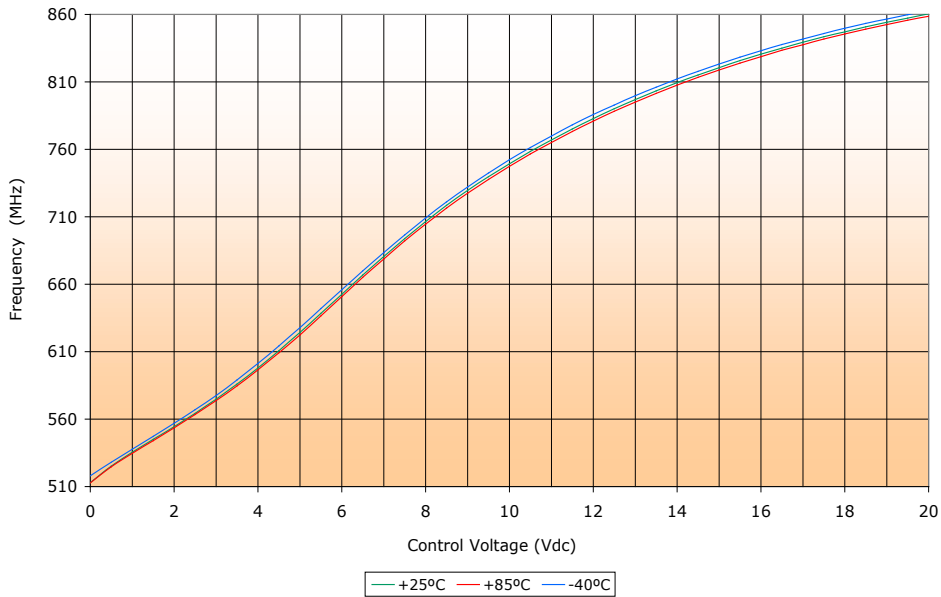
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PERFORMANCE PLOTS



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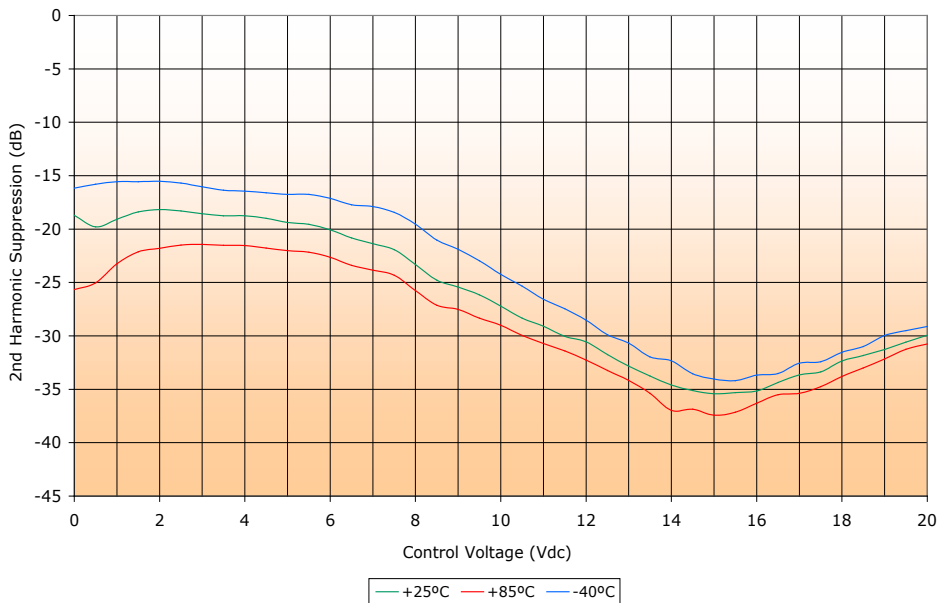
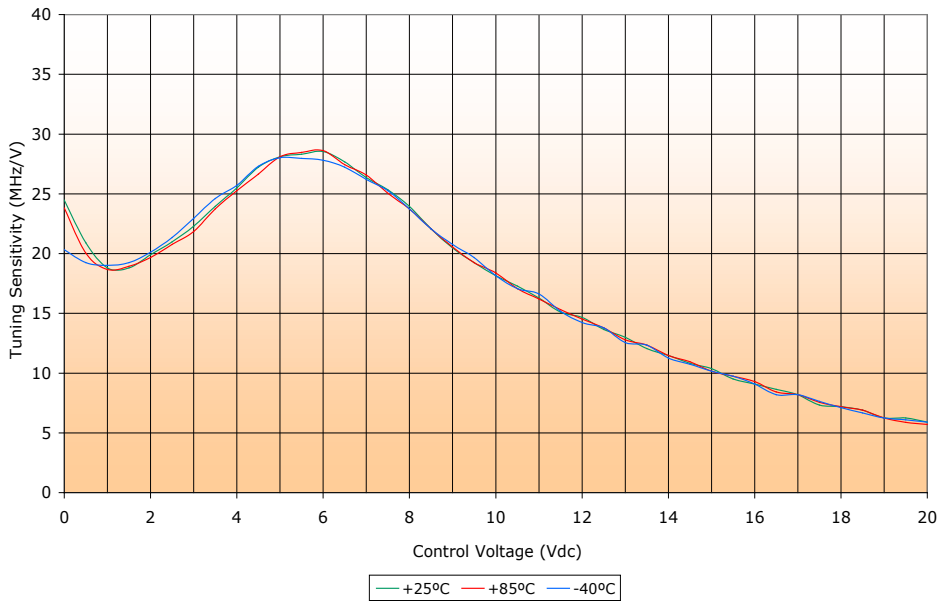


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