

# VOLTAGE CONTROLLED OSCILLATOR

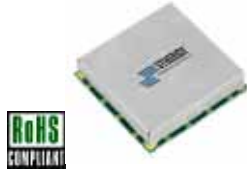
## SURFACE MOUNT MODEL: DCRO205215-10

**OPTIMIZED BANDWIDTH**

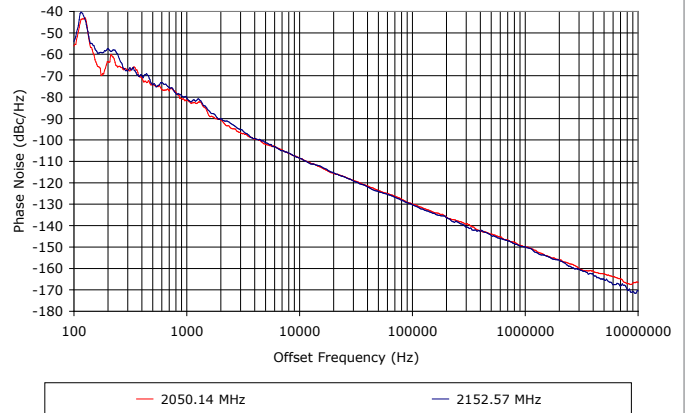
**2050 - 2150 MHz**

**FEATURES:**

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



**Phase Noise**



**SPECIFICATIONS (Rev. B 01/02/12)**

<b>Frequency</b>	2050 - 2150 MHz
<b>Tuning Voltage</b>	See table below.
<b>Bias Voltage</b>	+10 VDC @ 40 mA (Max.)
<b>Output Power</b>	+5 dBm (Min.)
<b>Tuning Sensitivity</b>	19 - 21 MHz/V (Typ.)
<b>Output Impedance</b>	50 Ohms (Nom.)
<b>Harmonic Suppression</b>	24 dB (Typ.)
<b>Frequency Pulling</b>	3 MHz (Typ. @ 1.75:1 VSWR)
<b>Frequency Pushing</b>	5 MHz/V (Typ.)
<b>Tuning Port Capacitance</b>	56 pF (Typ.)
<b>Phase Noise @ 10 kHz</b>	-109 dBc/Hz (Typ.)
<b>Operating Temperature Range</b>	-40 to +85 °C

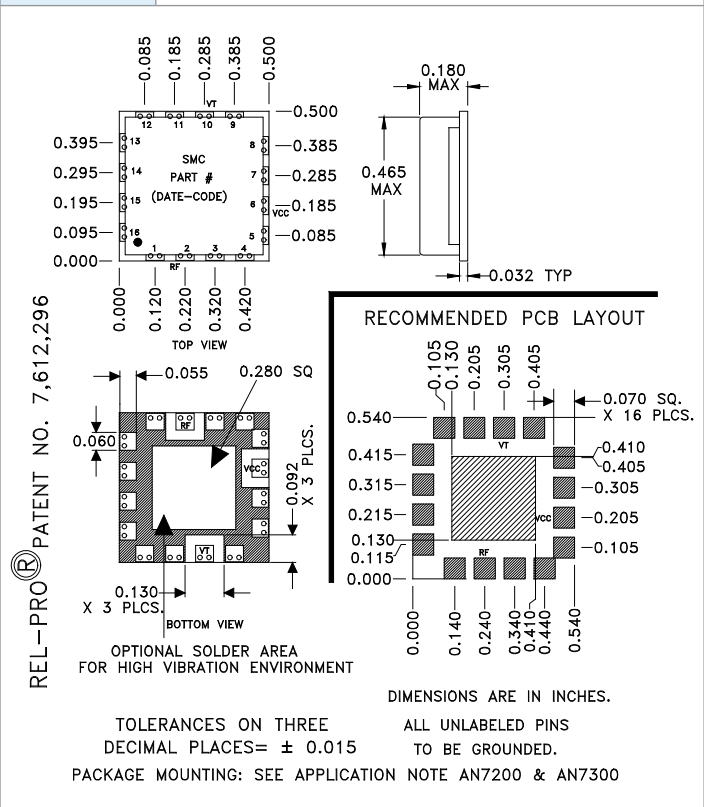
**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	2050 (Max.)
10	2150 (Min.)

**Absolute Maximum Ratings**

<b>Storage Temp. Range</b>	-55 to +125 °C
<b>Bias Voltage</b>	+10.5 V
<b>Tuning Voltage</b>	+28 V
<b>DC Voltage Applied to RF Out</b>	±25 V

**Package #** 278LF



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; 7,886,381; 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



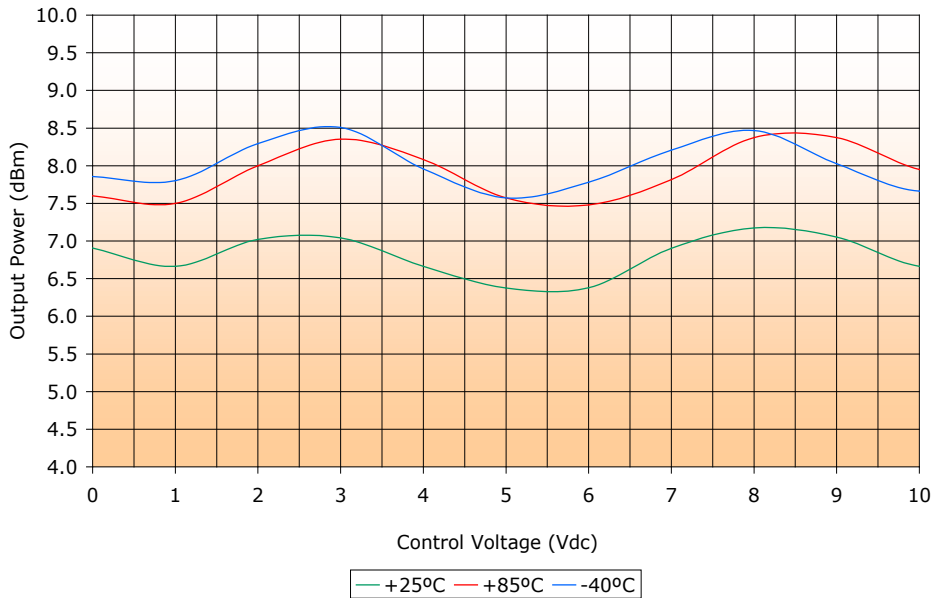
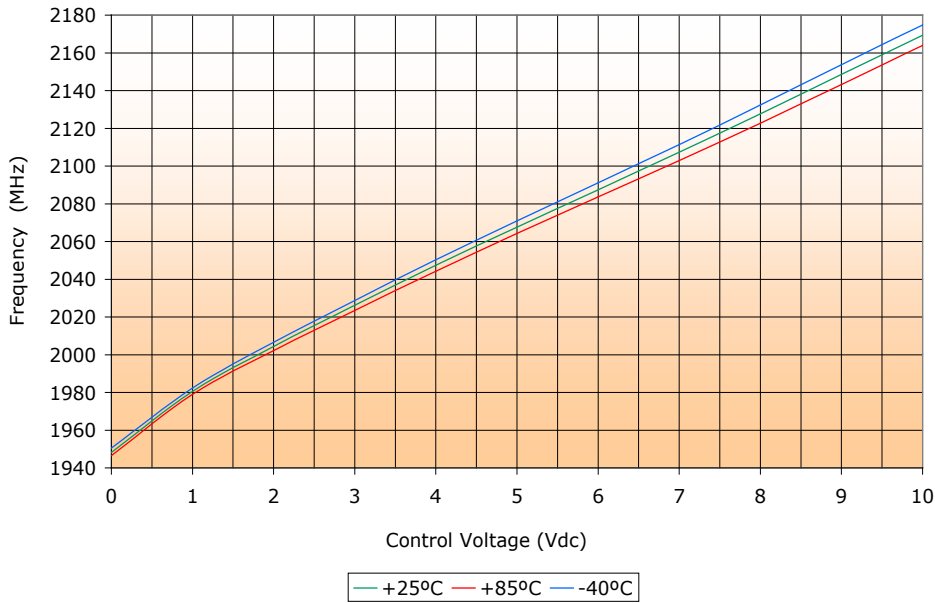
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PERFORMANCE PLOTS



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 201 McLean Boulevard • Paterson, New Jersey 07504 USA • Tel: (973) 881-8800 • Fax: (973) 881-8361  
 E-Mail: sales@synergymwave.com • World Wide Web: http://www.synergymwave.com



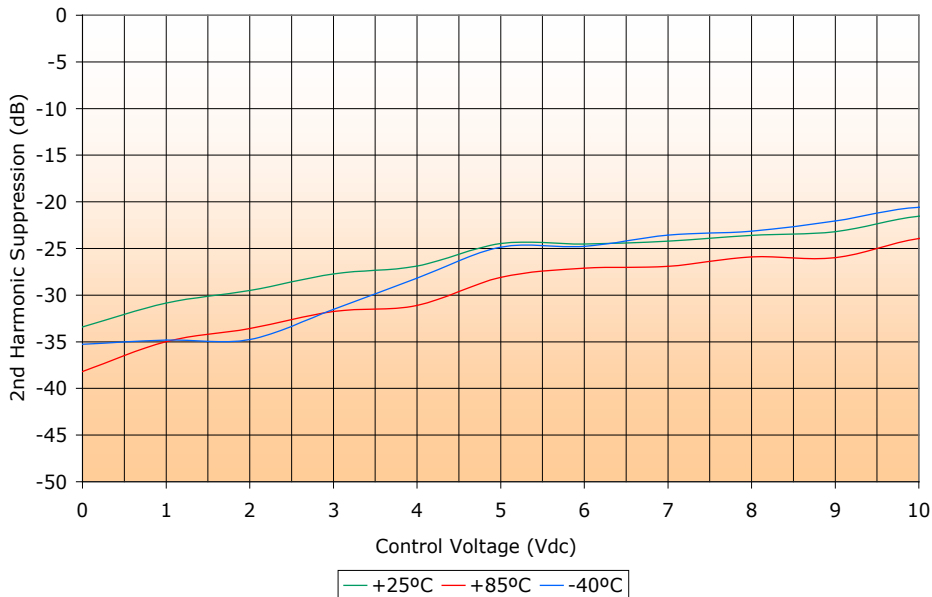
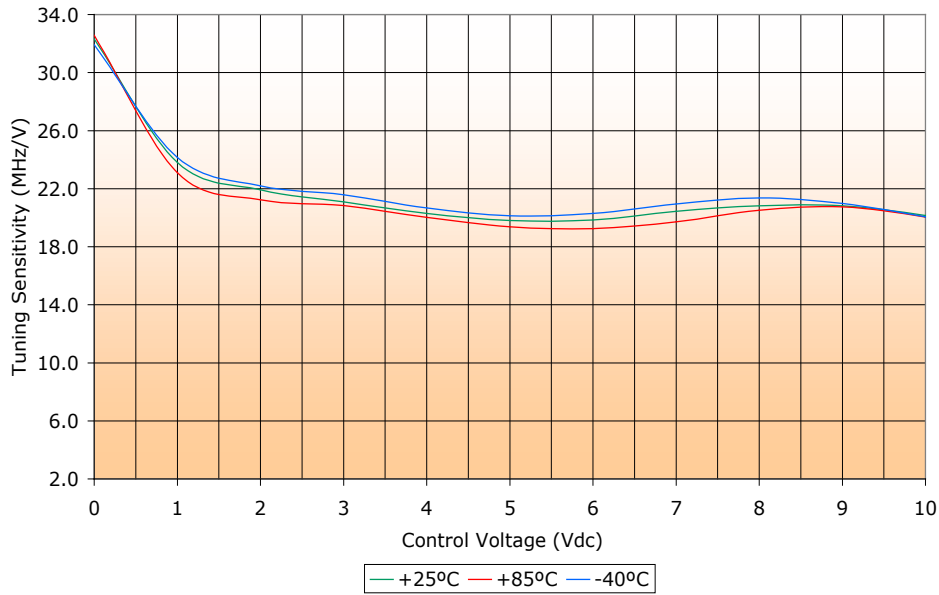
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