

# VOLTAGE CONTROLLED OSCILLATOR

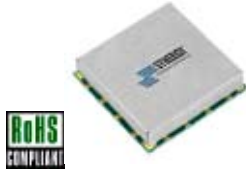
## SURFACE MOUNT MODEL: DCRO425514-10

**OPTIMIZED BANDWIDTH**

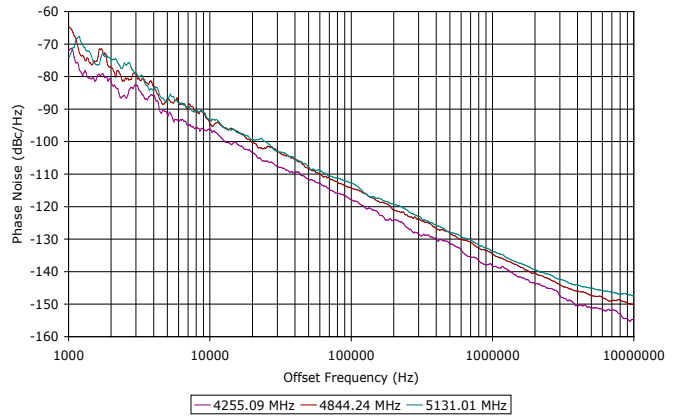
**4255 - 5145 MHz**

**FEATURES:**

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



**Phase Noise**



**SPECIFICATIONS (Rev. A 01/13/09)**

Frequency	4255 - 5145 MHz
Tuning Voltage	See table below.
Bias Voltage	+10 VDC @ 40 mA (Max.)
Output Power	+1 dBm (Min.)
Tuning Sensitivity	18 - 62 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	20 dB (Typ.)
Frequency Pulling	5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	3 MHz/V (Typ.)
Tuning Port Capacitance	24 pF (Typ.)
Phase Noise @ 10 kHz	-94 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

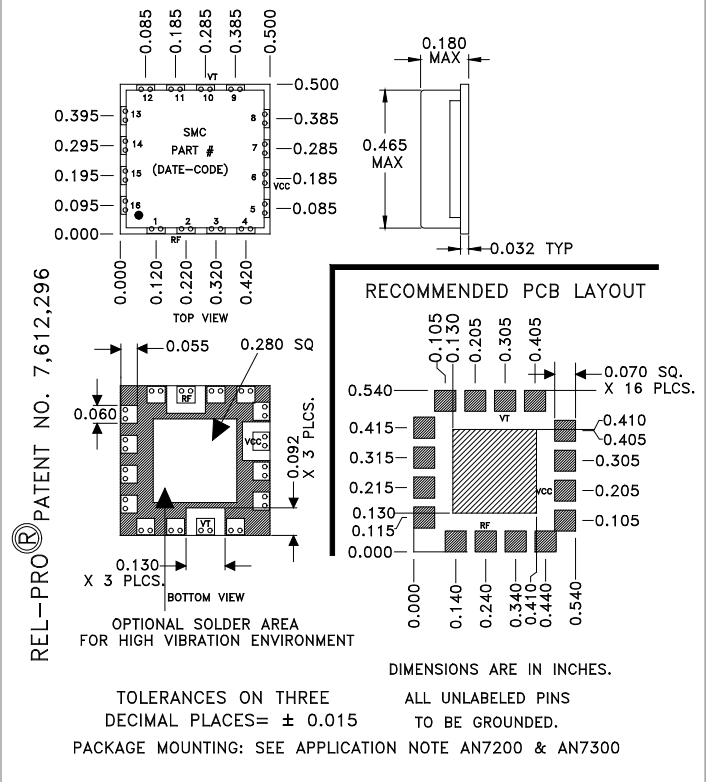
**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	4255 (Max.)
5	4300 (Min.)
10	4450 (Min.)
15	4700 (Min.)
20	4950 (Min.)
24	5145 (Min.)

**Absolute Maximum Ratings**

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



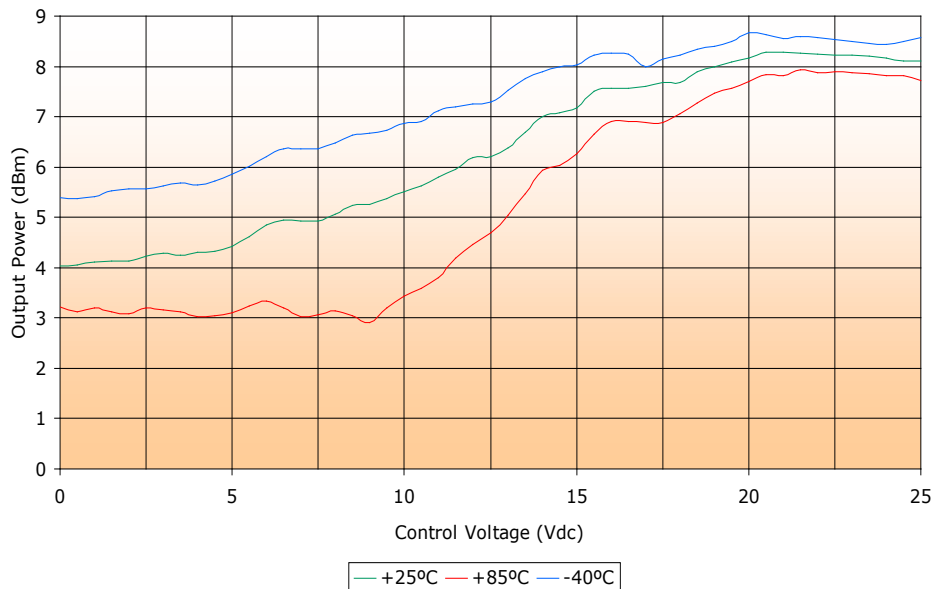
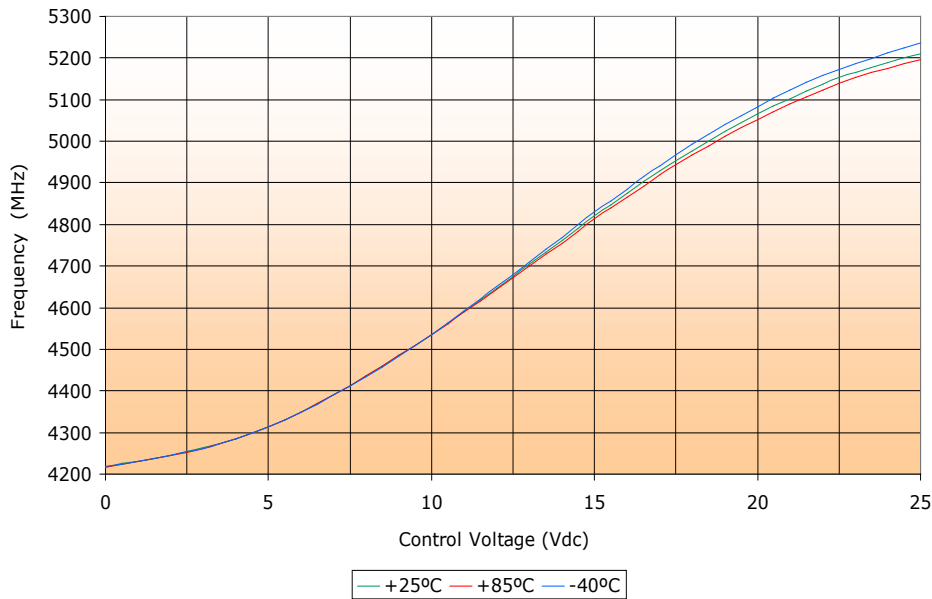
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OPTIMIZED BANDWIDTH

4255 - 5145 MHz

PERFORMANCE PLOTS



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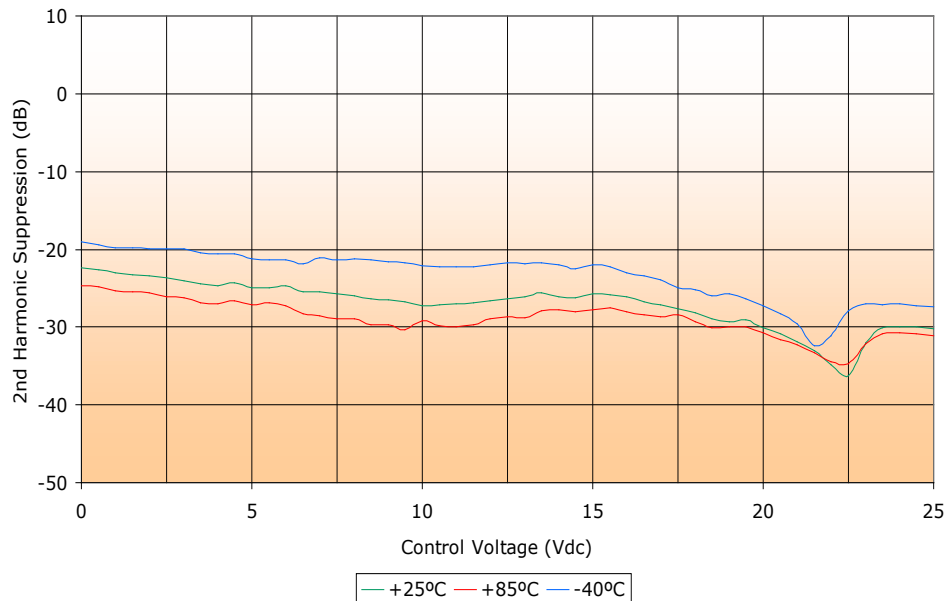
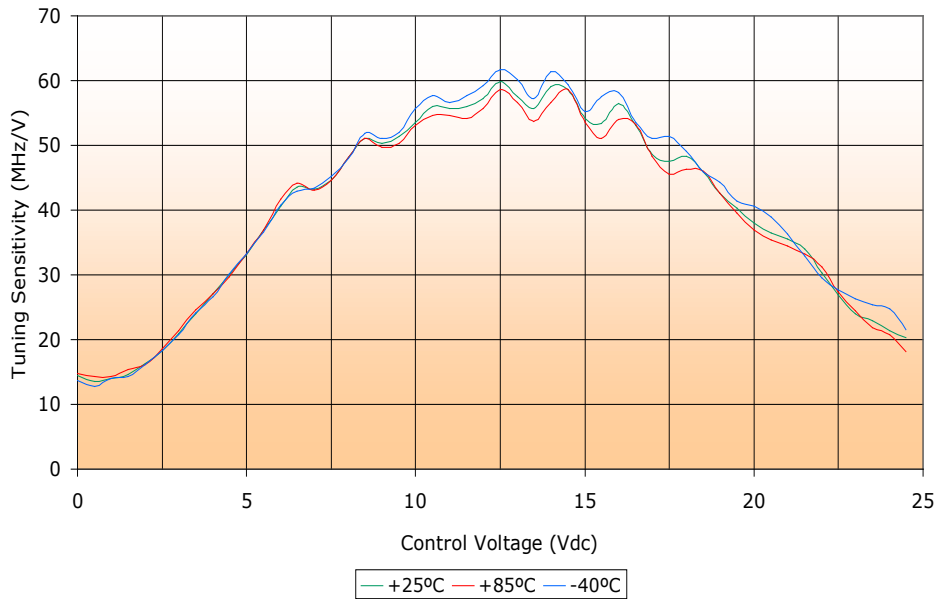
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