

VOLTAGE CONTROLLED OSCILLATOR

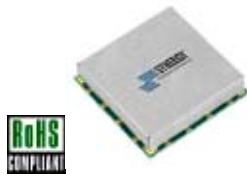
SURFACE MOUNT MODEL: DCRO175290-5

OPTIMIZED BANDWIDTH

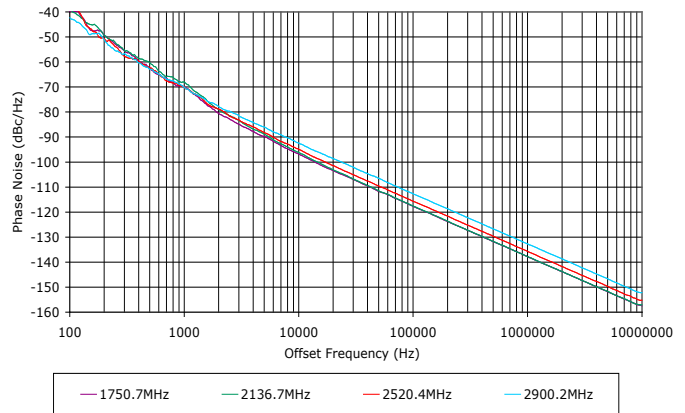
1750 - 2900 MHz

FEATURES:

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



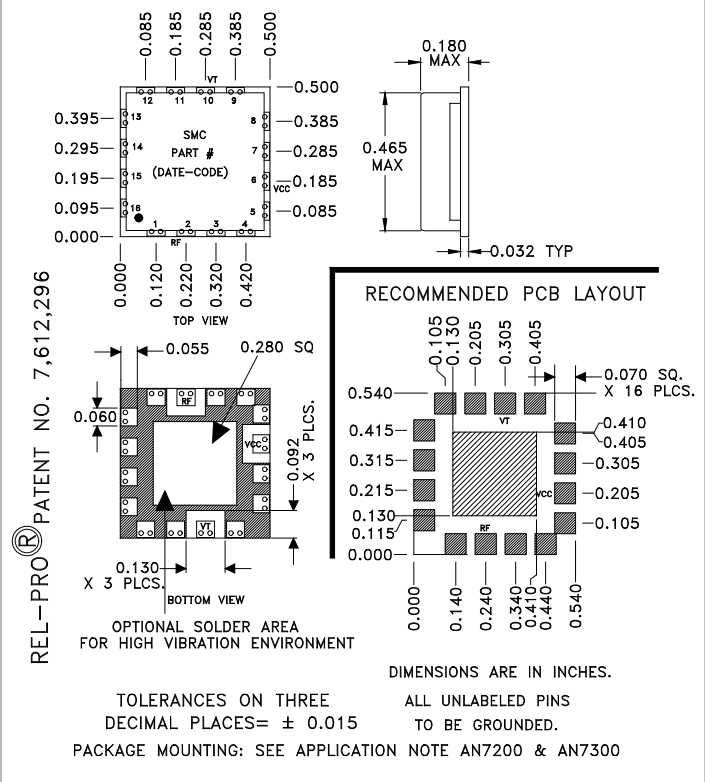
Phase Noise



SPECIFICATIONS (Rev. D 08/24/09)

| | |
|-----------------------------|----------------------------|
| Frequency | 1750 - 2900 MHz |
| Tuning Voltage | See table below. |
| Bias Voltage | +5 VDC @ 24 mA (Max.) |
| Output Power | +4 dBm (Min.) |
| Tuning Sensitivity | 22 - 115 MHz/V (Typ.) |
| Output Impedance | 50 Ohms (Nom.) |
| Harmonic Suppression | 20 dB (Typ.) |
| Frequency Pulling | 5 MHz (Typ. @ 1.75:1 VSWR) |
| Frequency Pushing | 4 MHz/V (Typ.) |
| Tuning Port Capacitance | 106 pF (Typ.) |
| Phase Noise @ 10 kHz | -95 dBc/Hz (Typ.) |
| Operating Temperature Range | -40 to +85 °C |

Package # 278LF



Guaranteed Tuning Specifications

| Tuning Voltage (V) | Frequency (MHz) |
|----------------------|-------------------|
| 0.5 | 1750 (Max.) |
| 5 | 1950 (Min.) |
| 8 | 2250 (Min.) |
| 12 | 2500 (Min.) |
| 15 | 2700 (Min.) |
| 18 | 2800 (Min.) |
| 20 | 2900 (Min.) |

Absolute Maximum Ratings

| | |
|------------------------------|----------------|
| Storage Temp. Range | -55 to +125 °C |
| Bias Voltage | +5.5 V |
| Tuning Voltage | +24 V |
| DC Voltage Applied to RF Out | ± 25 V |

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

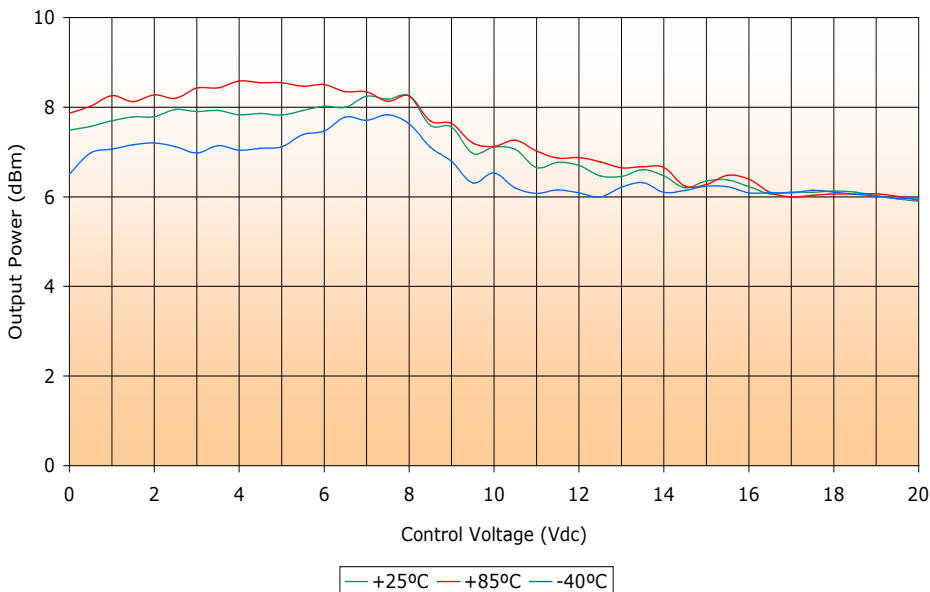
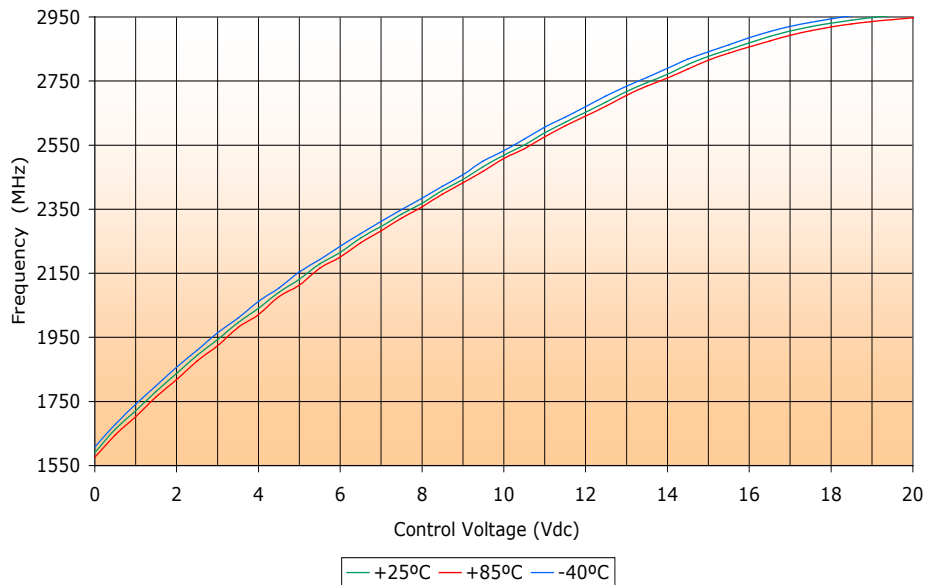
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PERFORMANCE PLOTS



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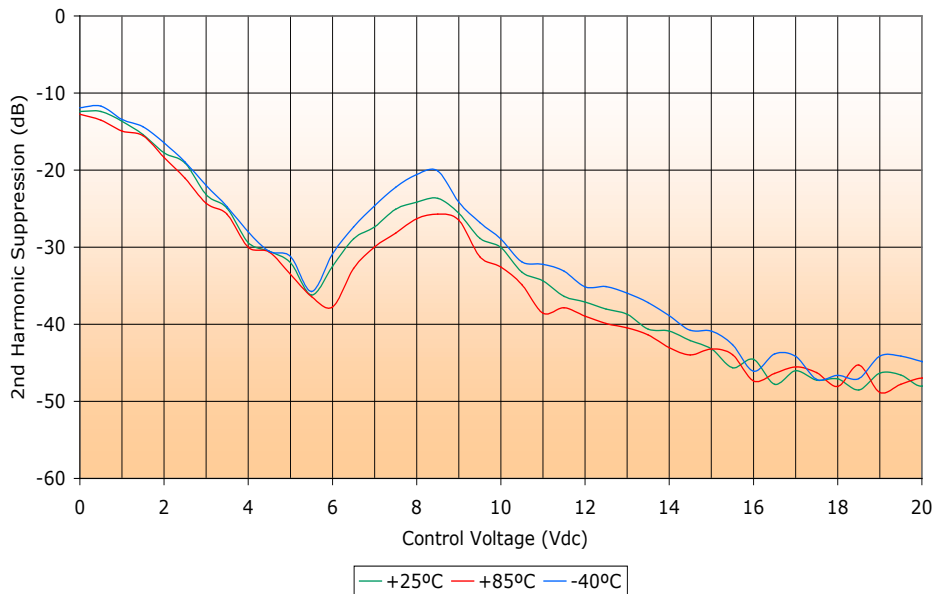
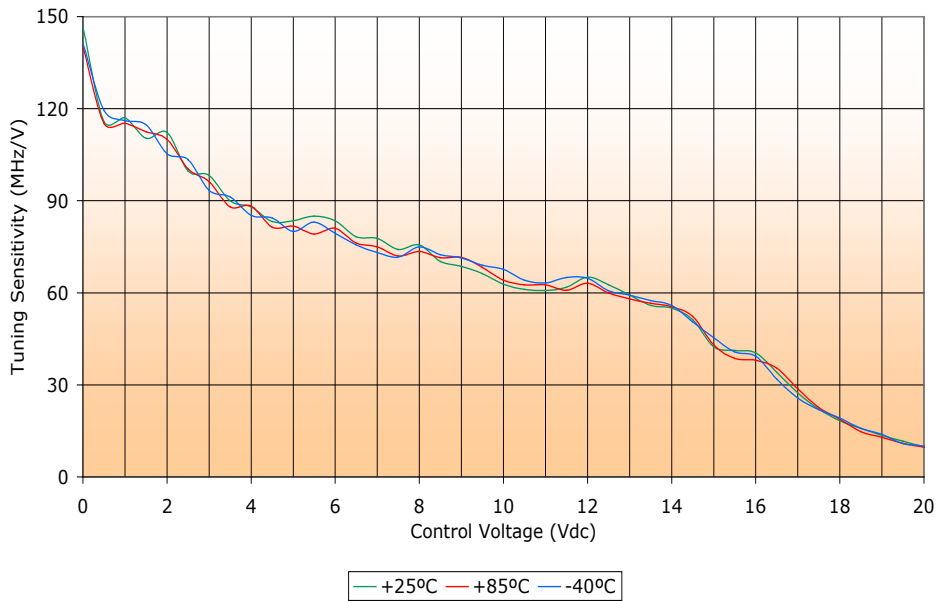
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