

VOLTAGE CONTROLLED OSCILLATOR

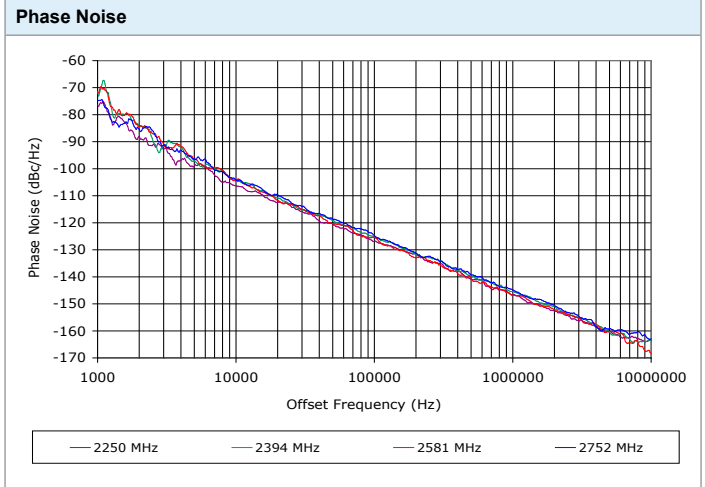
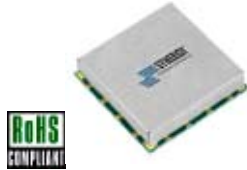
SURFACE MOUNT MODEL: DCRO225275-10

OPTIMIZED BANDWIDTH

2250 - 2750 MHz

FEATURES:

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



SPECIFICATIONS (Rev. C 11/12/09)

| | |
|-----------------------------|----------------------------|
| Frequency | 2250 - 2750 MHz |
| Tuning Voltage | See table below. |
| Bias Voltage | +10 VDC @ 35 mA (Max.) |
| Output Power | +3 dBm (Min.) |
| Tuning Sensitivity | 5 - 40 MHz/V (Typ.) |
| Output Impedance | 50 Ohms (Nom.) |
| Harmonic Suppression | 15 dB (Typ.) |
| Frequency Pulling | 5 MHz (Typ. @ 1.75:1 VSWR) |
| Frequency Pushing | 5 MHz/V (Typ.) |
| Tuning Port Capacitance | 50 pF (Typ.) |
| Phase Noise @ 10 kHz | -104 dBc/Hz (Typ.) |
| Operating Temperature Range | -40 to +85 °C |

Guaranteed Tuning Specifications

| Tuning Voltage (V) | Frequency (MHz) |
|----------------------|-------------------|
| 0.5 | 2250 (Max.) |
| 7 | 2270 (Min.) |
| 14 | 2460 (Min.) |
| 21 | 2655 (Min.) |
| 28 | 2750 (Min.) |

Absolute Maximum Ratings

| | |
|------------------------------|----------------|
| Storage Temp. Range | -55 to +125 °C |
| Bias Voltage | +10.5 V |
| Tuning Voltage | +30 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

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; 7,886,381; 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



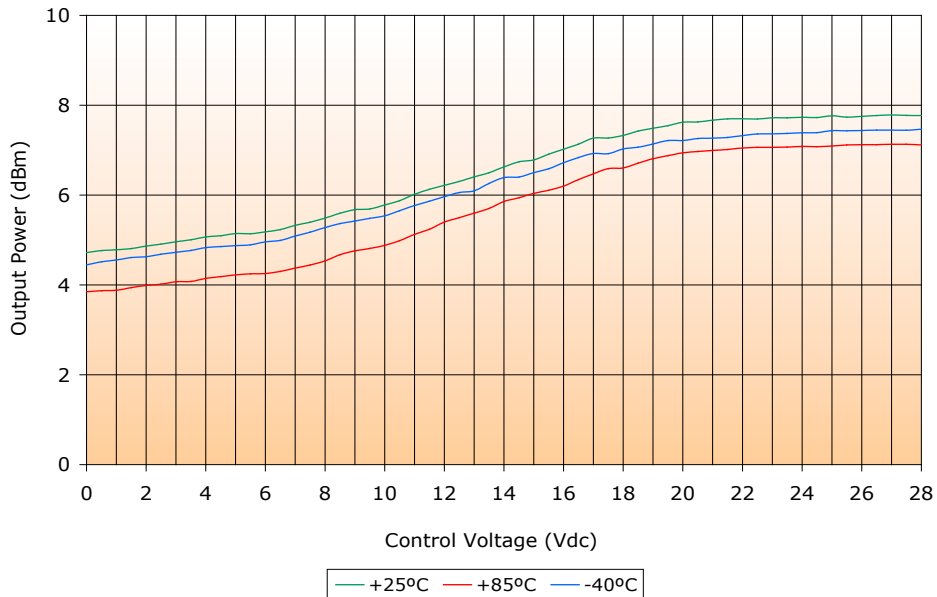
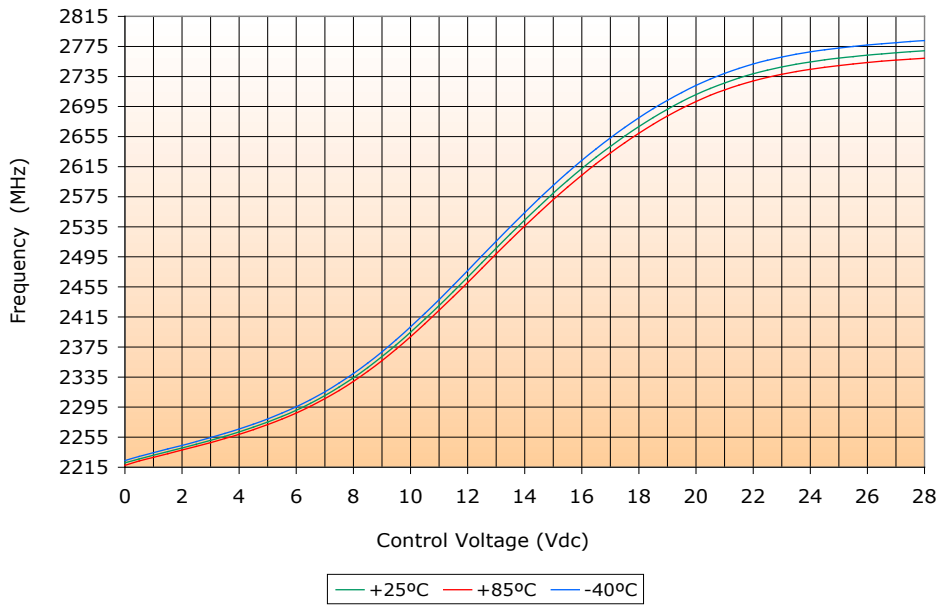
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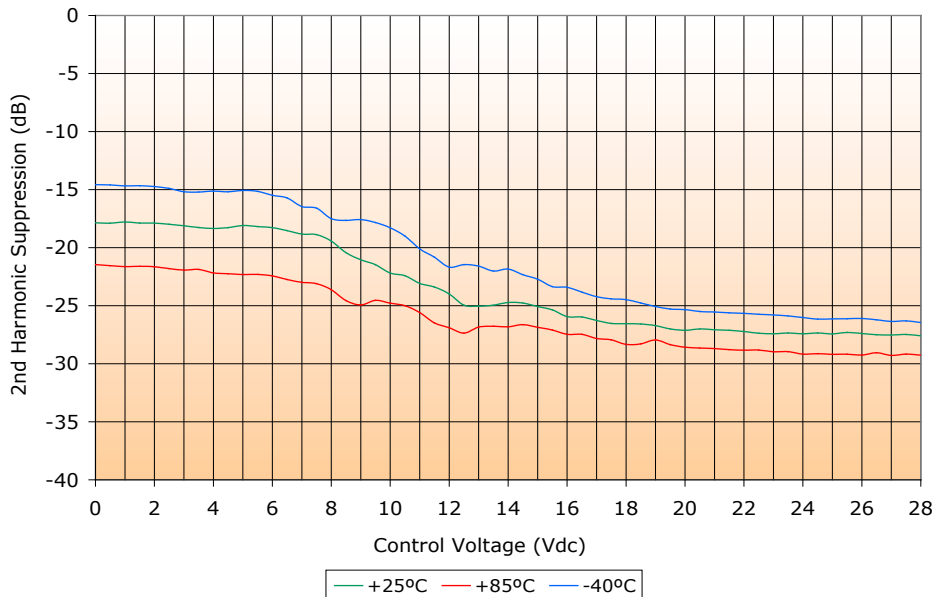
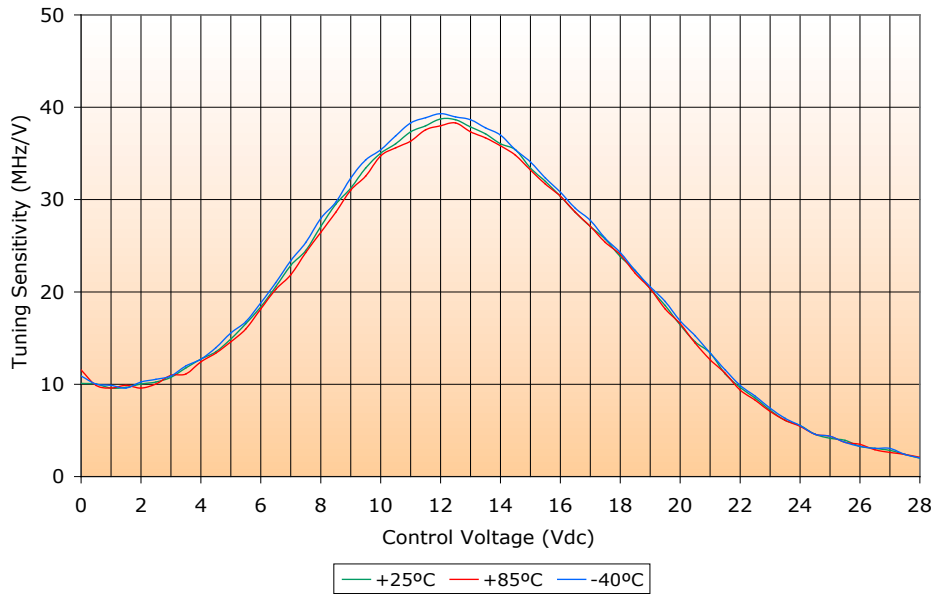
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