

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCRO127175-5

OPTIMIZED BANDWIDTH

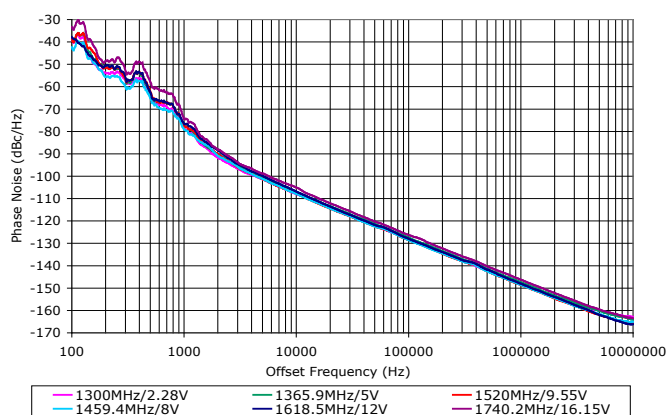
1270 - 1750 MHz

### FEATURES:

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



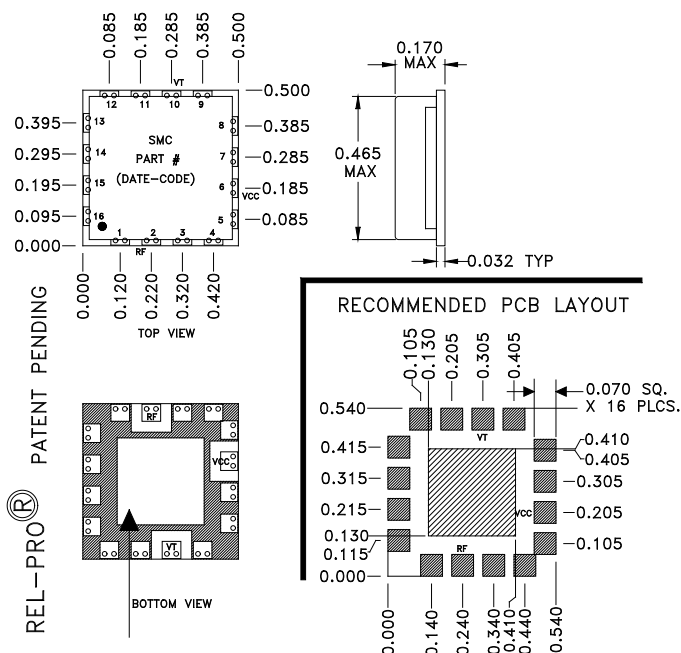
### Phase Noise



### SPECIFICATIONS (Rev. C 11/03/08)

|                             |                            |
|-----------------------------|----------------------------|
| Frequency                   | 1270 - 1750 MHz            |
| Tuning Voltage              | See table below.           |
| Bias Voltage                | +5 VDC @ 35 mA (Max.)      |
| Output Power                | +4 dBm (Min.)              |
| Tuning Sensitivity          | 20 - 40 MHz/V (Typ.)       |
| Output Impedance            | 50 Ohms (Nom.)             |
| Harmonic Suppression        | 12 dB (Typ.)               |
| Frequency Pulling           | 5 MHz (Typ. @ 1.75:1 VSWR) |
| Frequency Pushing           | 5 MHz/V (Typ.)             |
| Tuning Port Capacitance     | 70 pF (Typ.)               |
| Phase Noise @ 10 kHz        | -107 dBc/Hz (Typ.)         |
| Operating Temperature Range | -40 to +85 °C              |

Package # 278LF



### Guaranteed Tuning Specifications

| Tuning Voltage ( V ) | Frequency ( MHz ) |
|----------------------|-------------------|
| 0.5                  | 1270 (Max.)       |
| 5                    | 1320 (Min.)       |
| 8                    | 1410 (Min.)       |
| 12                   | 1560 (Min.)       |
| 15                   | 1650 (Min.)       |
| 18                   | 1750 (Min.)       |

### Absolute Maximum Ratings

|                              |                |
|------------------------------|----------------|
| Storage Temp. Range          | -55 to +125 °C |
| Bias Voltage                 | +5.5 V         |
| Tuning Voltage               | +28 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  
 Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31399834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787

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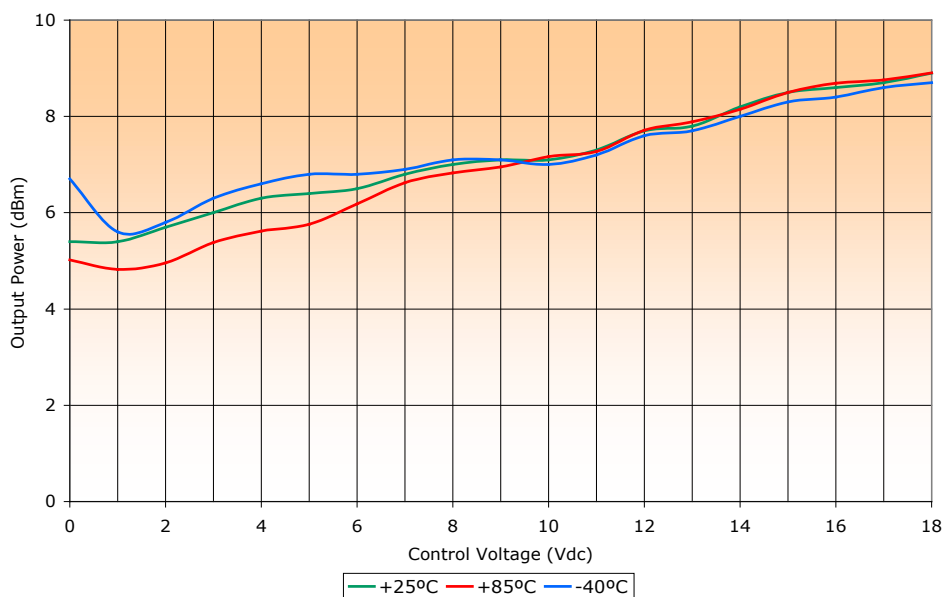
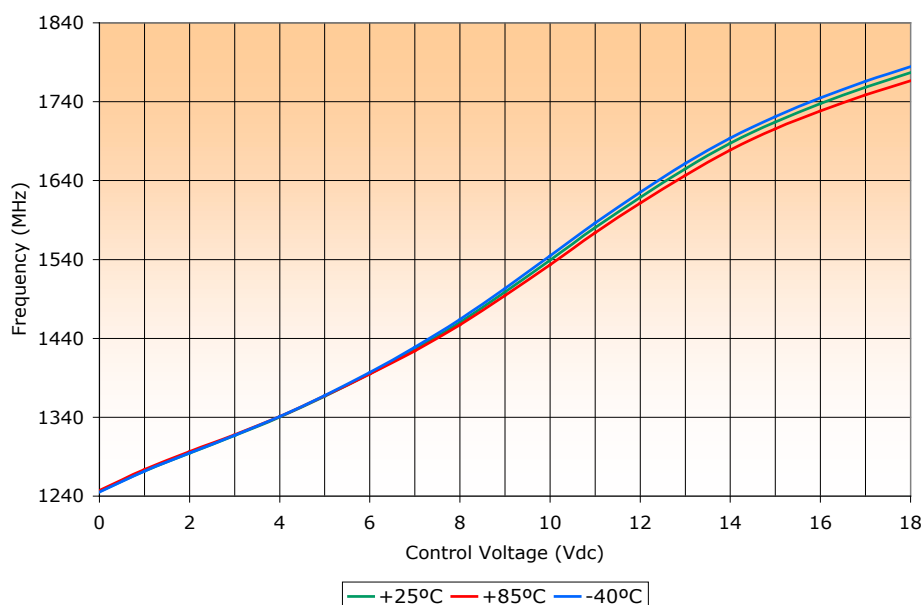
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PERFORMANCE PLOTS



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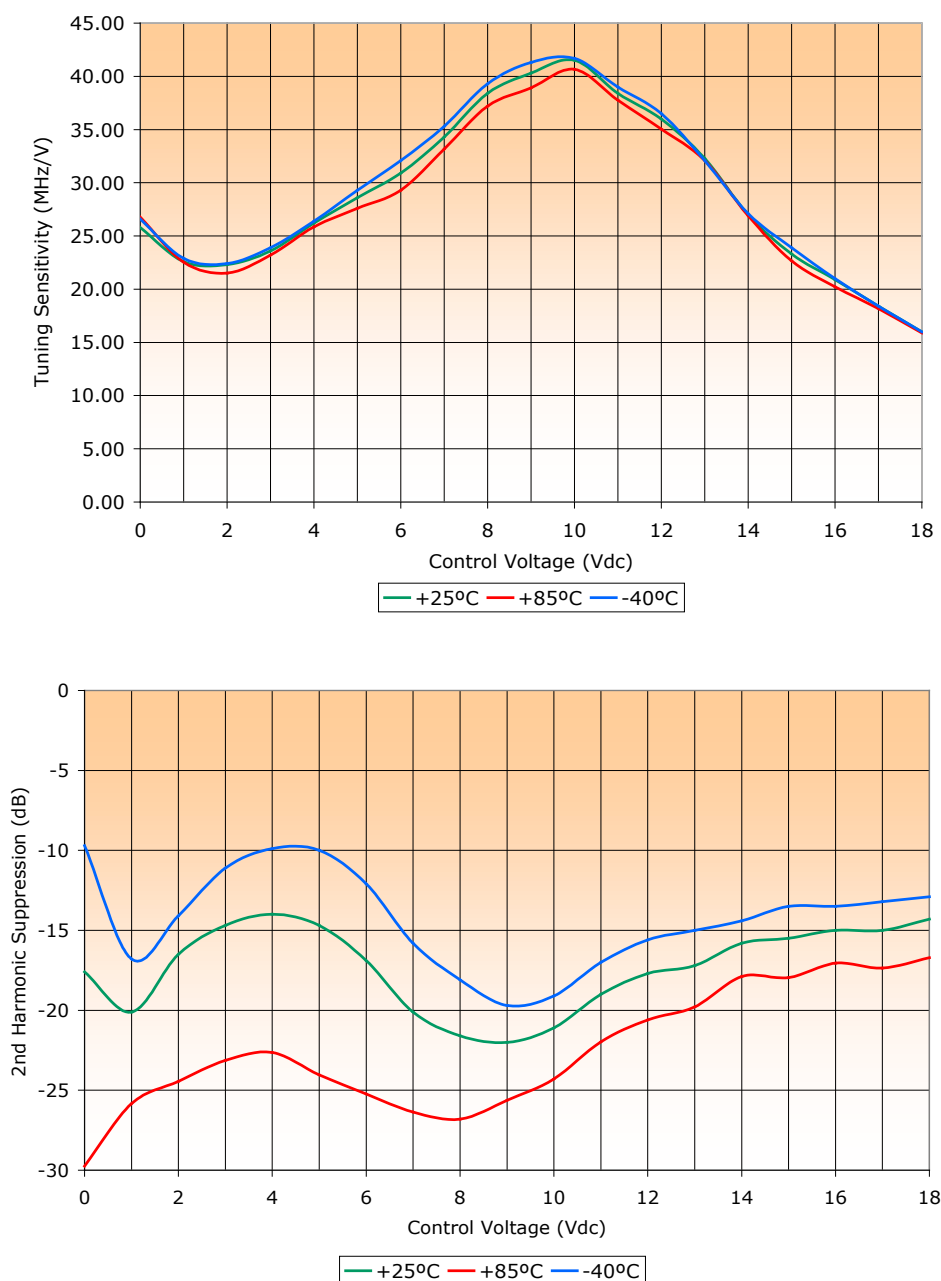
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