

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCRO250300-10

**OPTIMIZED BANDWIDTH**

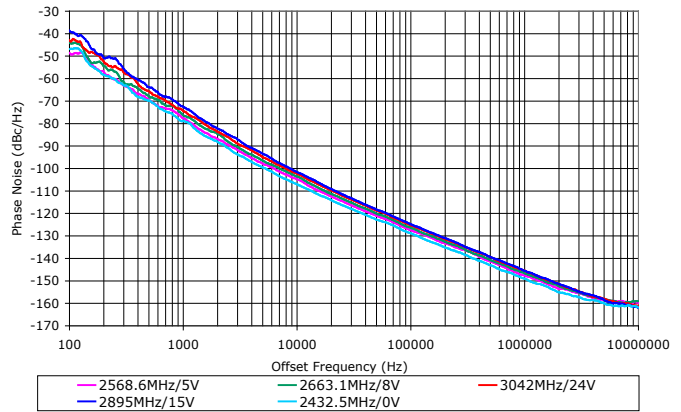
**2500 - 3000 MHz**

**FEATURES:**

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



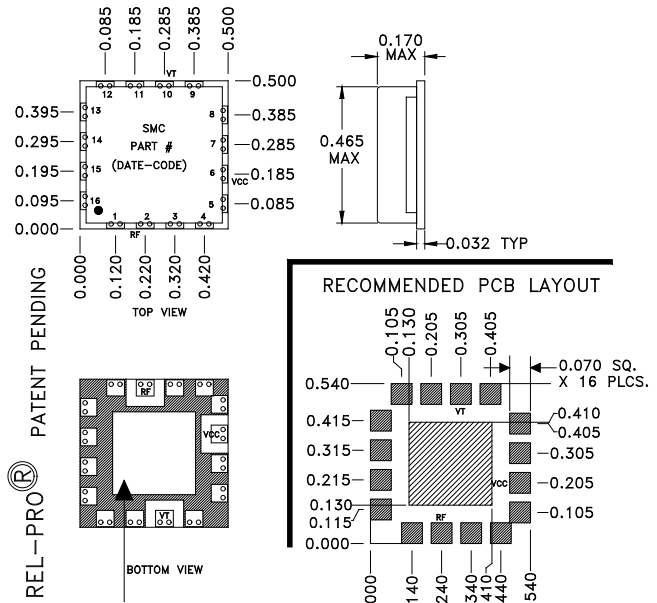
**Phase Noise**



**SPECIFICATIONS (Rev. F 11/03/08)**

Frequency	2500 - 3000 MHz
Tuning Voltage	See table below.
Bias Voltage	10 to 12 VDC @ 35 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	10 - 37 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	20 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	-107 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Package # 278LF



REL-PRO® PATENT PENDING

OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT  
 DIMENSIONS ARE IN INCHES.  
 TOLERANCES ON THREE DECIMAL PLACES = ± 0.015  
 ALL UNLABELED PINS TO BE GROUNDED.  
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	2500 (Max)
5	2550 (Min)
8	2600 (Min)
12	2700 (Min)
15	2850 (Min)
18	2925 (Min)
24	3000 (Min)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 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; 5,605,431; 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; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787



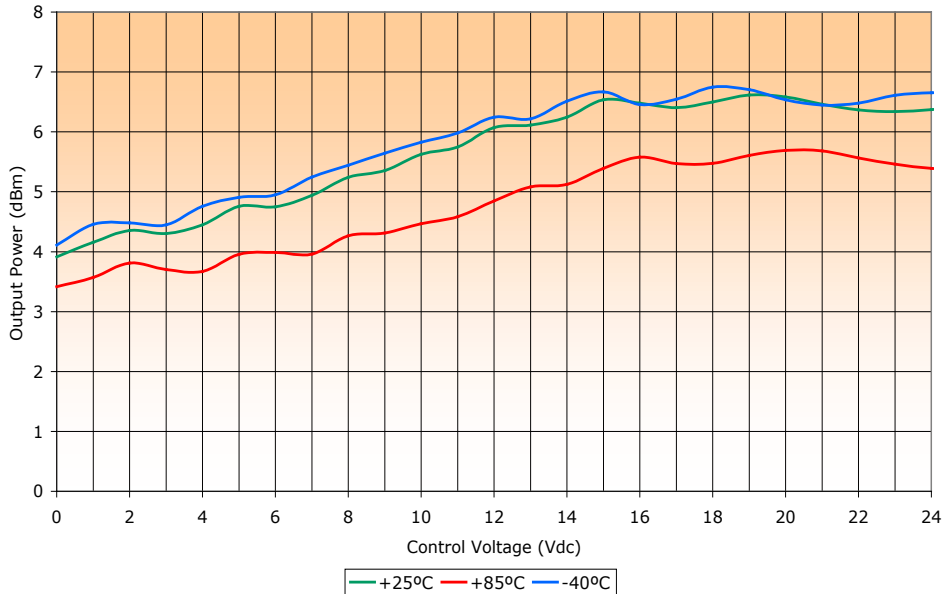
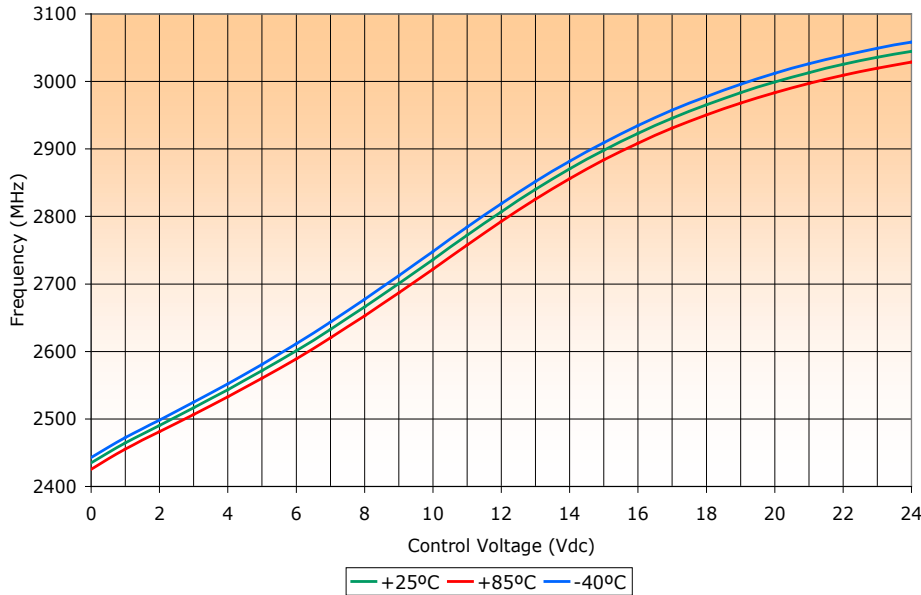
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PERFORMANCE PLOTS



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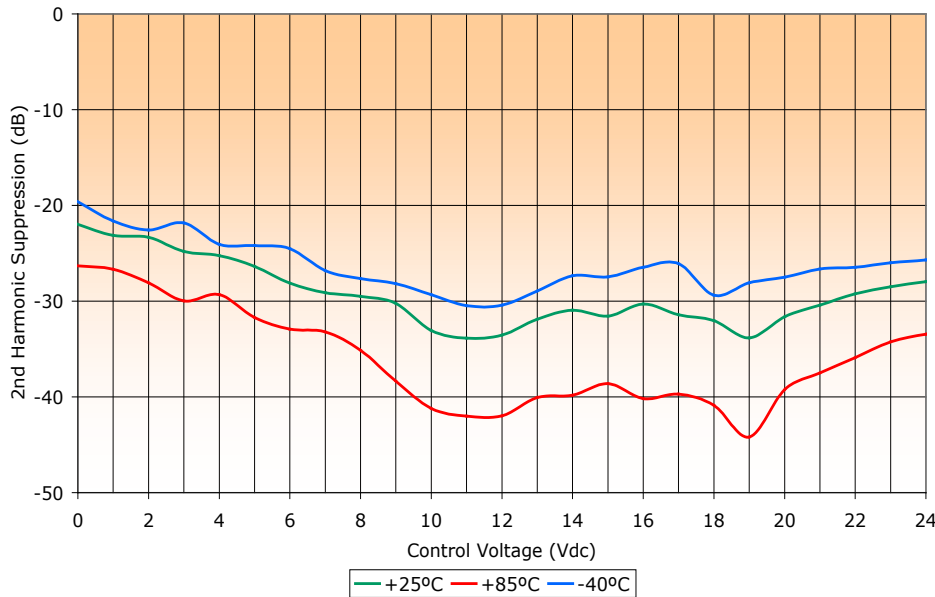
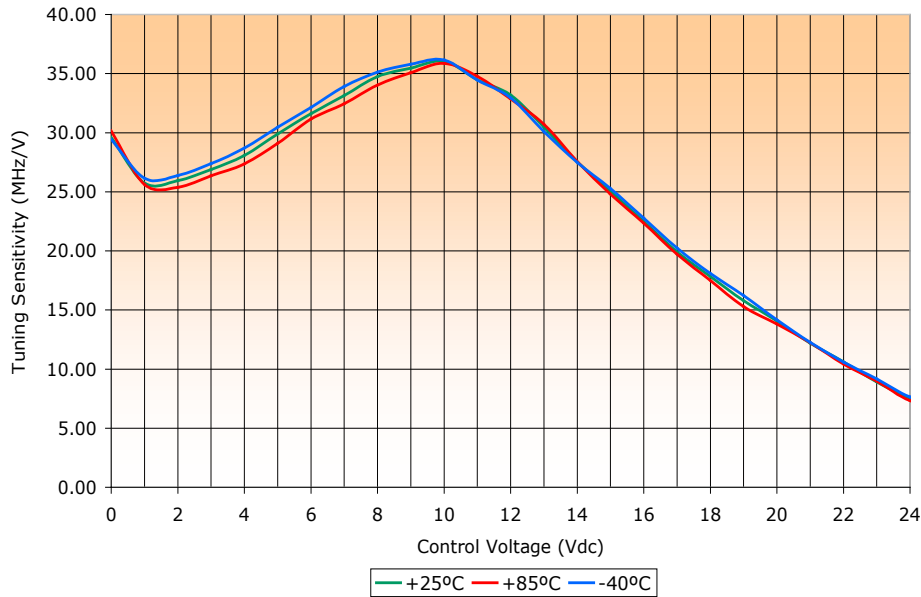
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