

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO100230-12

**WIDE BANDWIDTH**

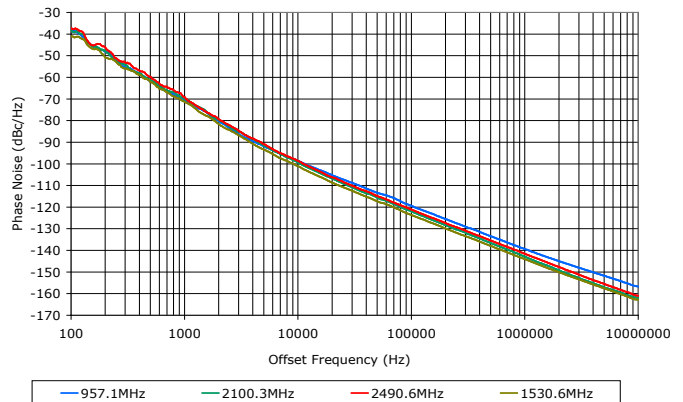
**1000 - 2300 MHz**

**FEATURES:**

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



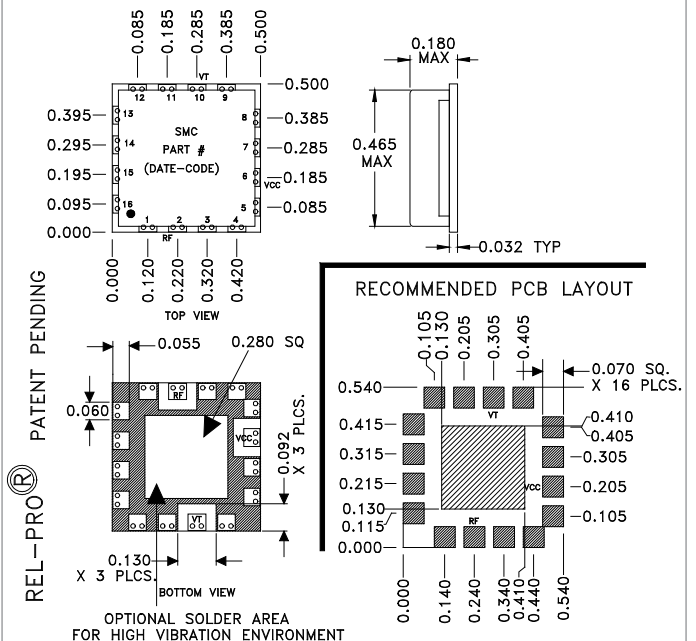
**Phase Noise**



**SPECIFICATIONS (Rev. E 10/20/08)**

Frequency	1000-2300 MHz
Tuning Voltage	See table below.
Bias Voltage	+12 VDC @ 35 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	50 - 100 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	10 dB (Typ.)
Frequency Pulling	3 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	2 MHz/V (Typ.)
Tuning Port Capacitance	115 pF (Typ.)
Phase Noise @ 10 kHz	-101 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

**Package #** 278LF



**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	1000 (Max.)
5	1250 (Min.)
8	1450 (Min.)
12	1650 (Min.)
15	1800 (Min.)
18	2000 (Min.)
24	2300 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 V
Tuning Voltage	+26 V
DC Voltage Applied to RF Out	± 25 V

DIMENSIONS ARE IN INCHES.  
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015  
 ALL UNLABELED PINS TO BE GROUNDED.  
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787

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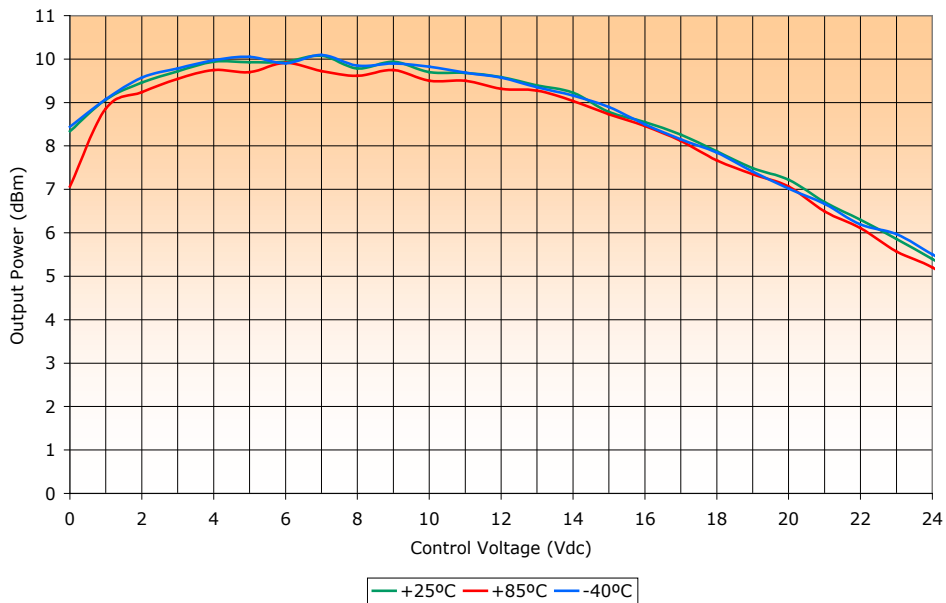
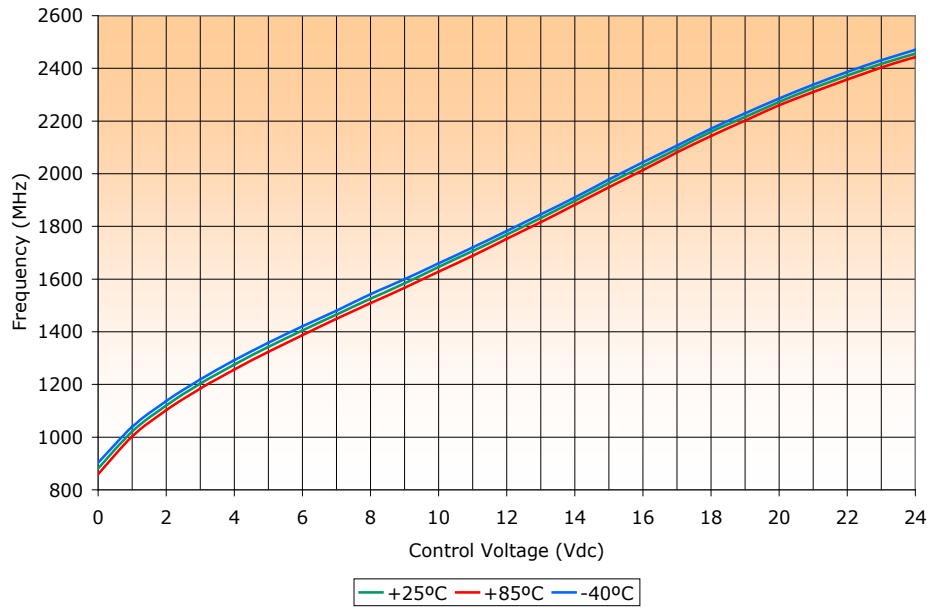
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PERFORMANCE PLOTS



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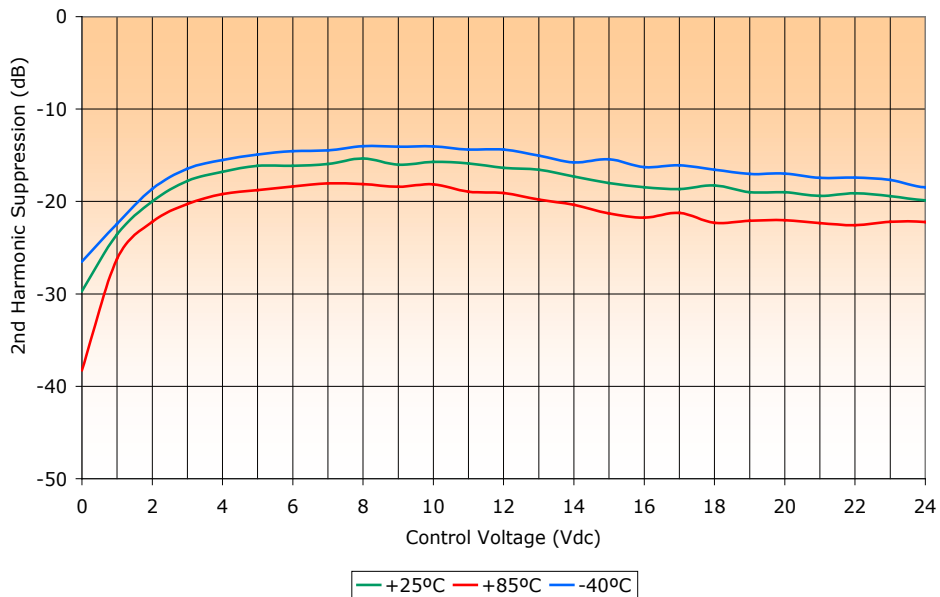
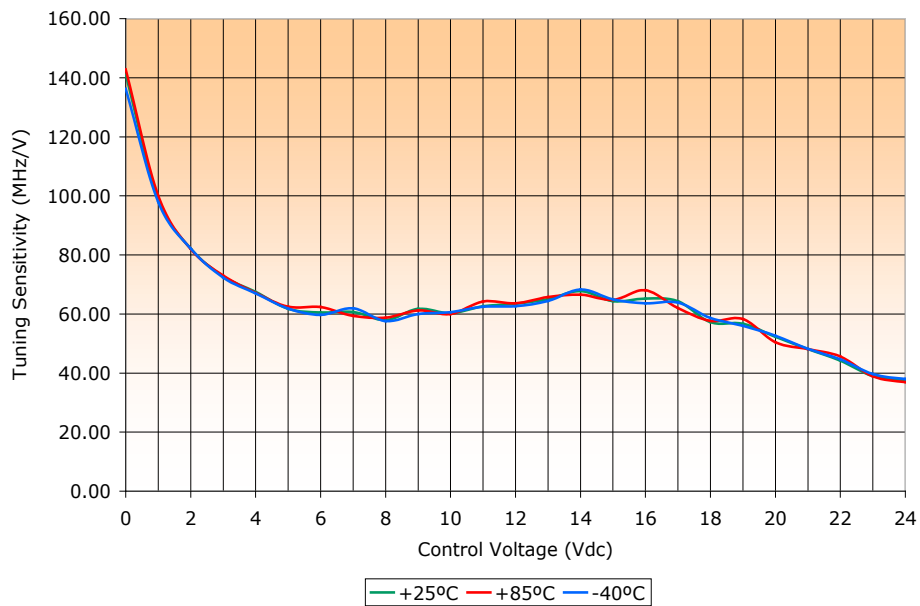
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