

VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: MFC2941-12

OPTIMIZED BANDWIDTH

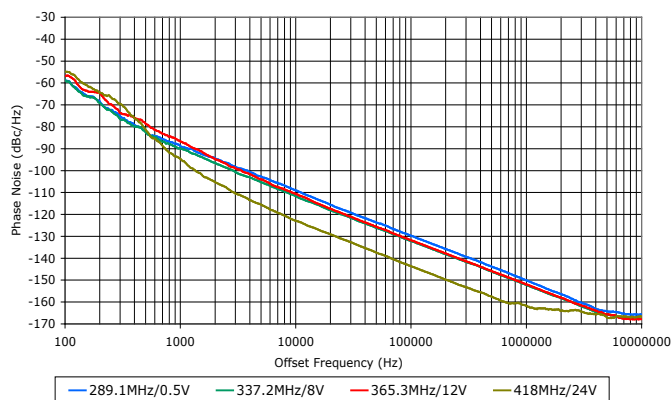
290 - 410 MHz

FEATURES:

- ▶ Low Phase Noise Performance
- ▶ Fast Tuning
- ▶ Ideal for PLL Applications
- ▶ Small Size, Surface Mount
- ▶ Lead Free REL-PRO® Technology



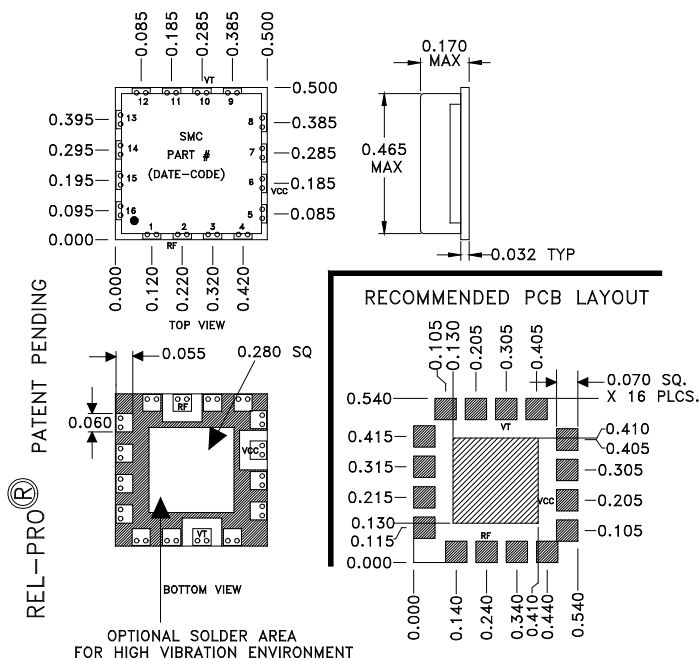
Phase Noise



SPECIFICATIONS (Rev. C 11/03/08)

Frequency	290 - 410 MHz
Tuning Voltage	See table below.
Bias Voltage	+12 VDC @ 35 mA (Max.)
Output Power	+1 dBm (Min.)
Tuning Sensitivity	3 - 7 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	10 dB (Typ.)
Frequency Pulling	2 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	2 MHz/V (Typ.)
Tuning Port Capacitance	33 pF (Typ.)
Phase Noise @ 10 kHz	-110 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Package # 278LF



REL-PRO® PATENT PENDING

OPTIONAL SOLDER AREA
FOR HIGH VIBRATION ENVIRONMENT

TOLERANCES ON THREE
DECIMAL PLACES= ± 0.015
PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

DIMENSIONS ARE IN INCHES.

ALL UNLABELED PINS
TO BE GROUNDING.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	290 (Max.)
5	308 (Min.)
8	328 (Min.)
12	355 (Min.)
15	370 (Min.)
18	385 (Min.)
24	410 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 V
Tuning Voltage	+30 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; EV31369834;
11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787

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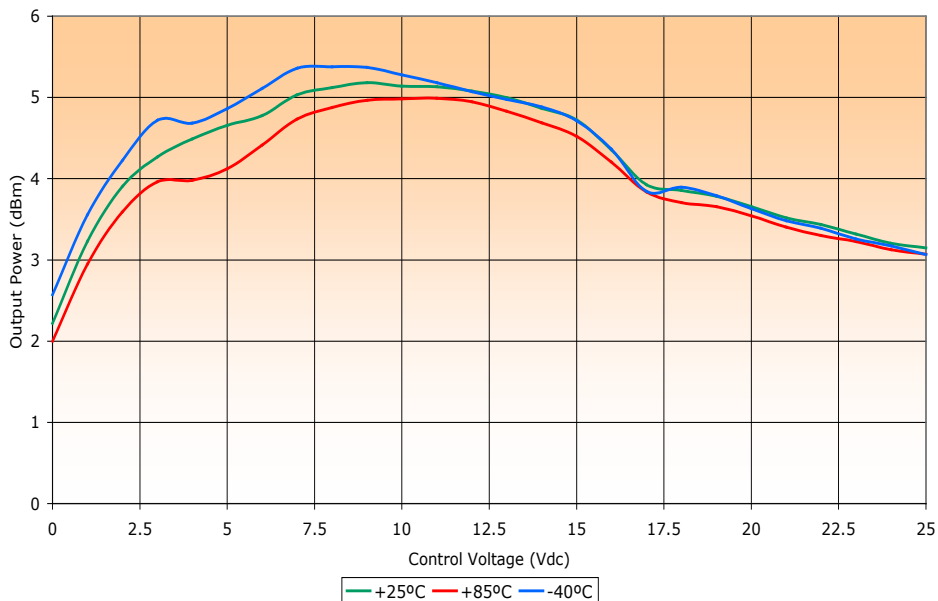
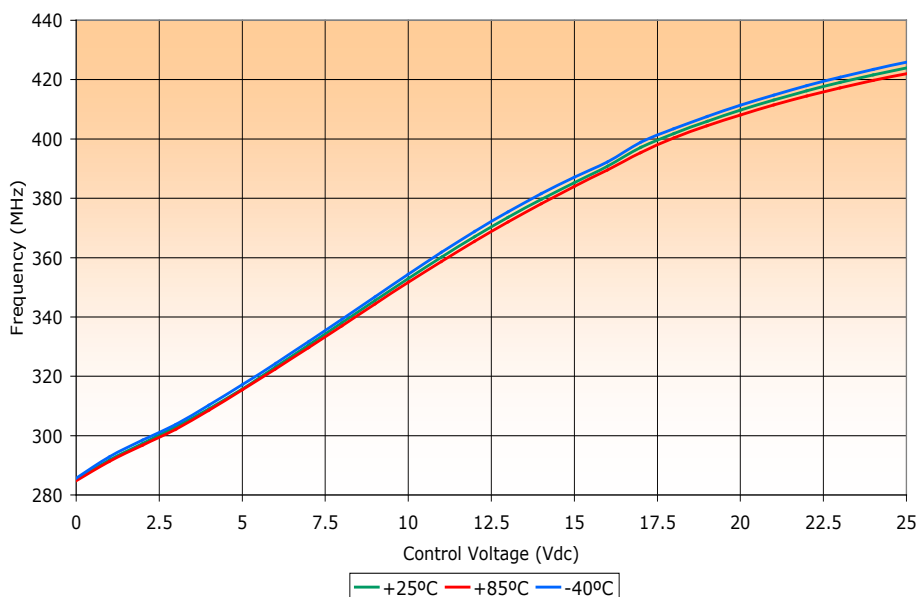
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PERFORMANCE PLOTS



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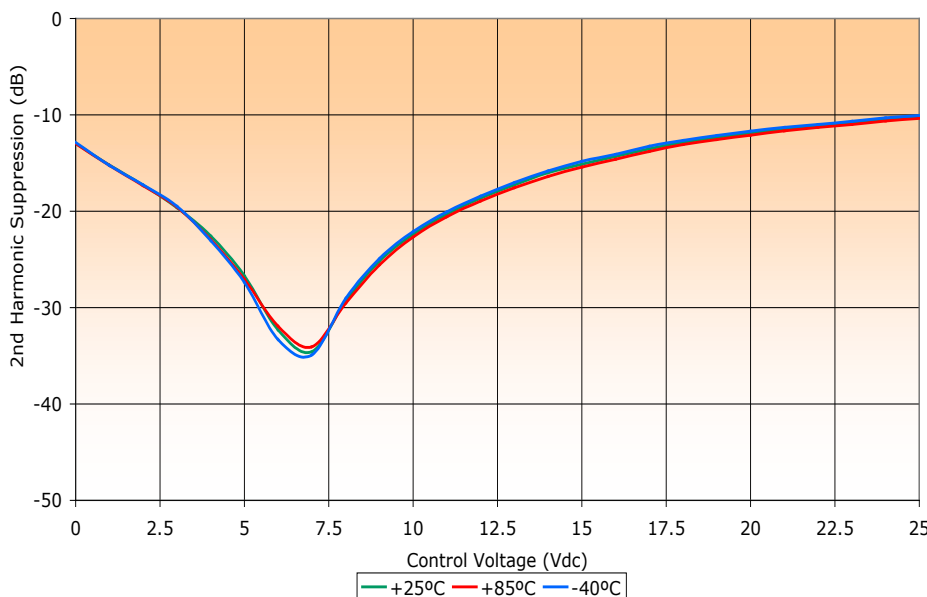
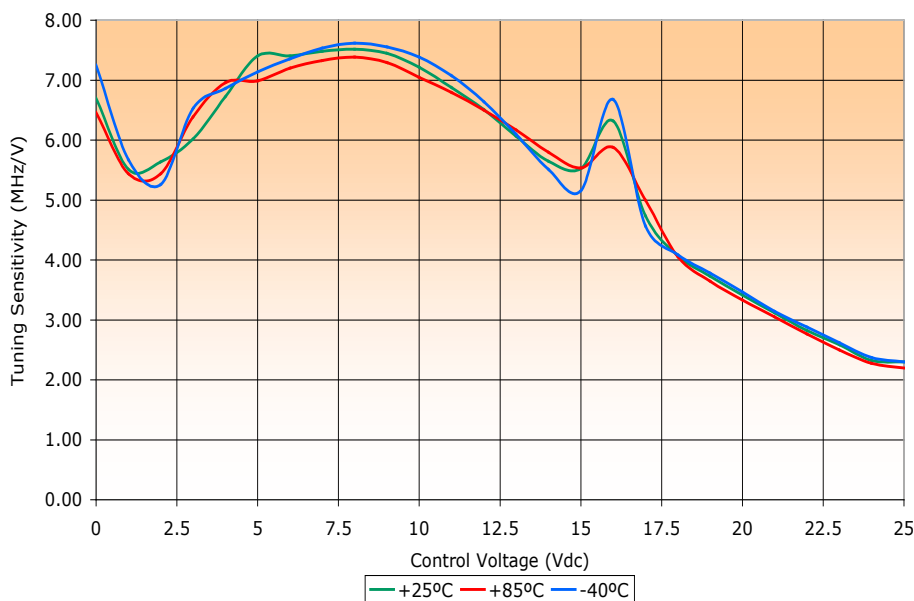
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