

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO60170-12

WIDE BANDWIDTH

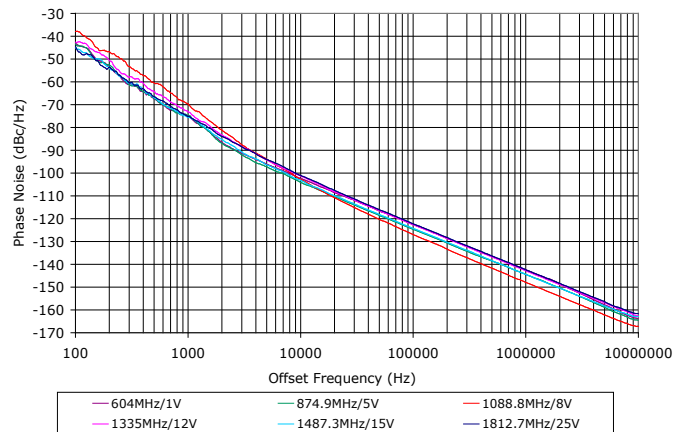
600 - 1700 MHz

### FEATURES:

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



### Phase Noise



### SPECIFICATIONS (Rev. A 11/20/07)

Frequency	600 - 1700 MHz
Tuning Voltage (Full Band)	See table below.
Bias Voltage	+12 VDC @ 35 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	30 - 85 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	10 dB (Typ.)
Frequency Pulling	5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	5 MHz/V (Typ.)
Tuning Port Capacitance	194 pF (Typ.)
Phase Noise @ 10 kHz	-100 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

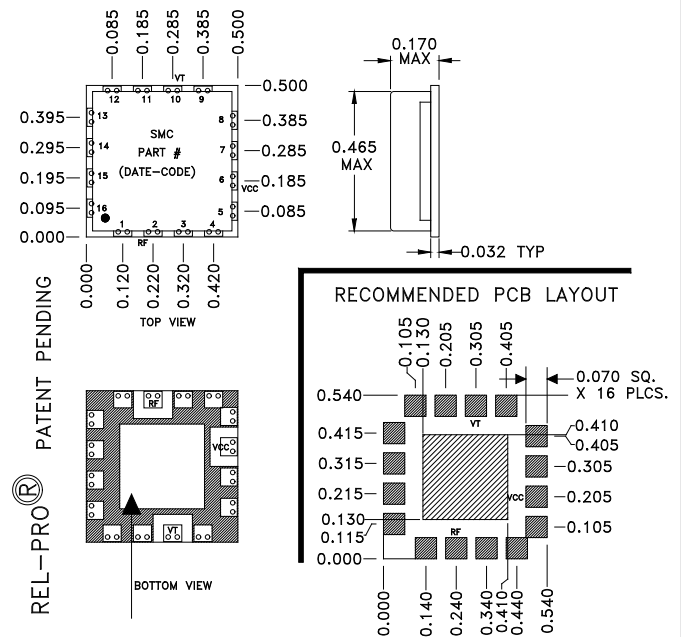
### Guaranteed Tuning Specifications

Tuning Voltage ( V )	Frequency ( MHz )
0.5	600 (Max.)
5	780 (Min.)
8	1025 (Min.)
12	1270 (Min.)
15	1430 (Min.)
18	1530 (Min.)
25	1700 (Min.)

### Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12 V
Tuning Voltage	+25 V
DC Voltage Applied to RF Out	± 25 V

Package # 278LF



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

This product is manufactured under one or more of the following patents: Approved: 5,180,810; 5,122,621; 5,390,346; 5,416,446; 5,630,754; 5,805,431; 6,325,623; 6,806,573; 7,088,189; 7,180,381; 7,185,591; 7,262,670; 7,265,642; 7,292,113  
 Pending: 65/48,307; 60/501,371 & 65/581,796; 60/527,957 & 65/526,675; 60/263,481; 60/564,173; 60/580,083; 60/607,822; 60/605,579; EV31268034;  
 11/258,768; 60/622,485 & 65/710,112; 10/607,325/607,369/1; 60/732,787

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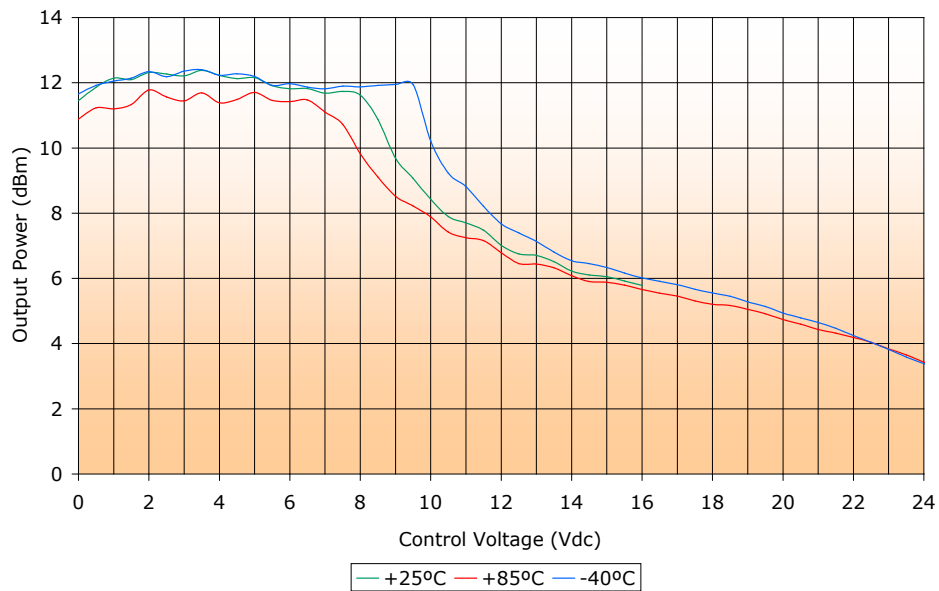
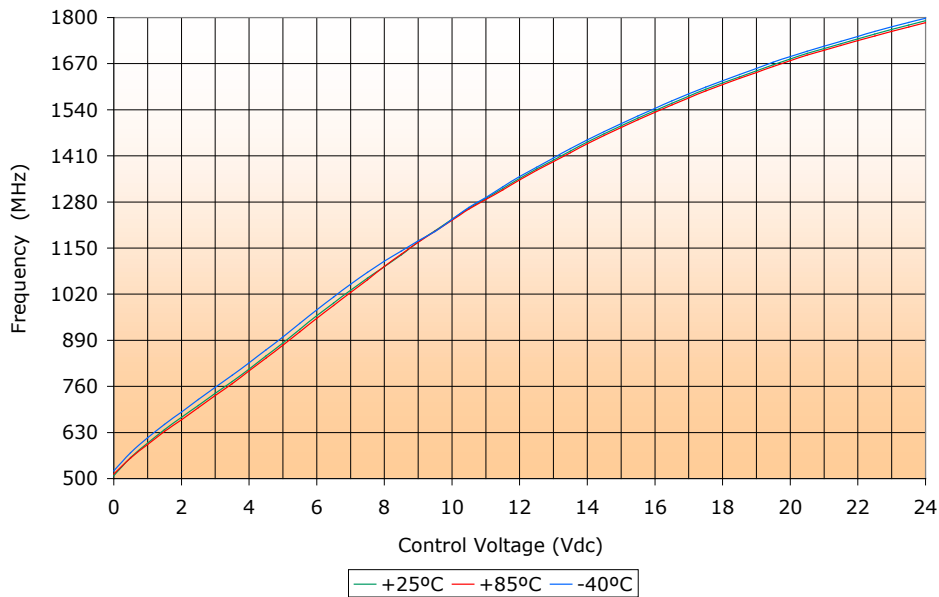
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PERFORMANCE PLOTS



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 Pending: 6649,3075; 60501371 & 66561796; 60507957 & 66532675; 60263481; 60564173; 60580083; 60661822; 60605791; EV31268034; R1258768; 60622485 & 66710219; R660732560736901; 60732737

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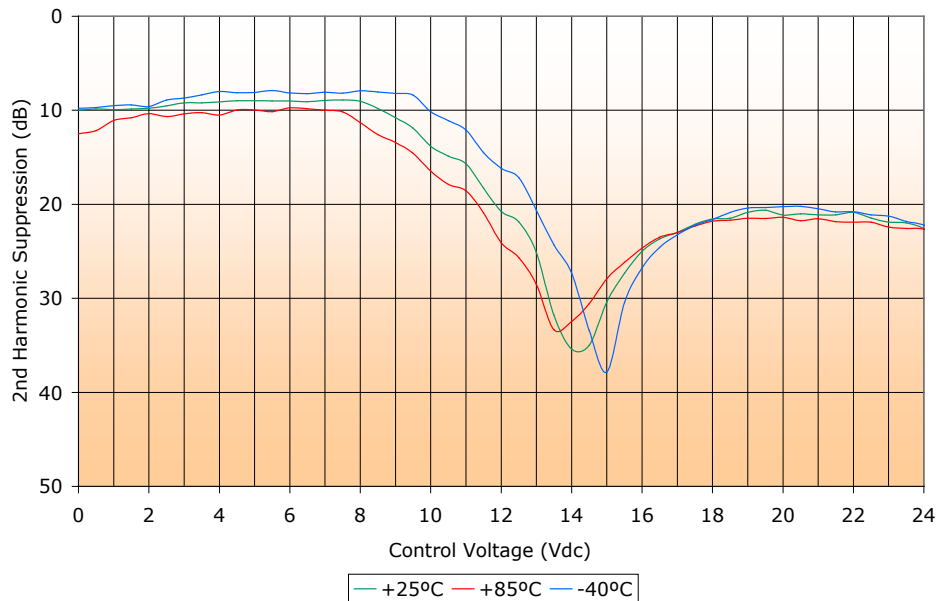
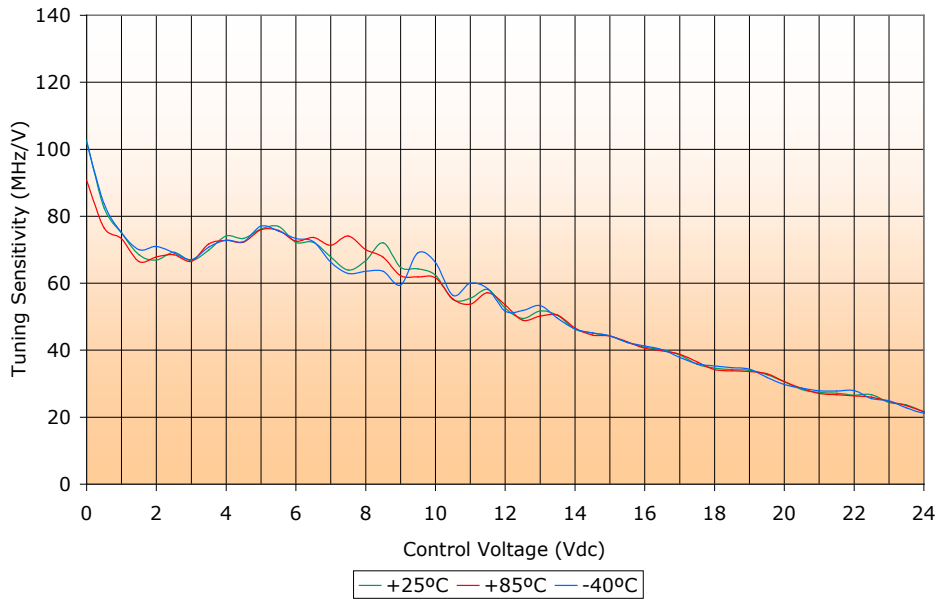
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