

# VOLTAGE CONTROLLED OSCILLATOR

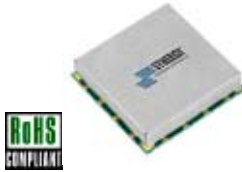
## SURFACE MOUNT MODEL: MFC102110-5

OPTIMIZED BANDWIDTH

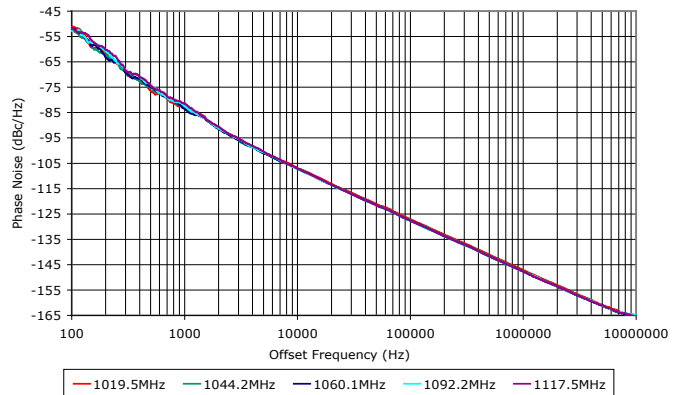
1020 - 1100 MHz

**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	1020 - 1100 MHz
Tuning Voltage	See table below.
Bias Voltage	+5 VDC @ 35 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	23 - 30 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom)
Harmonic Suppression	25 dB (Typ.)
Frequency Pulling	4 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing	5 MHz/V (Typ)
Tuning Port Capacitance	33 pF (Typ.)
Phase Noise @ 10 kHz	-106 dBc/Hz (Typ)
Operating Temperature Range	-40 to 85 °C

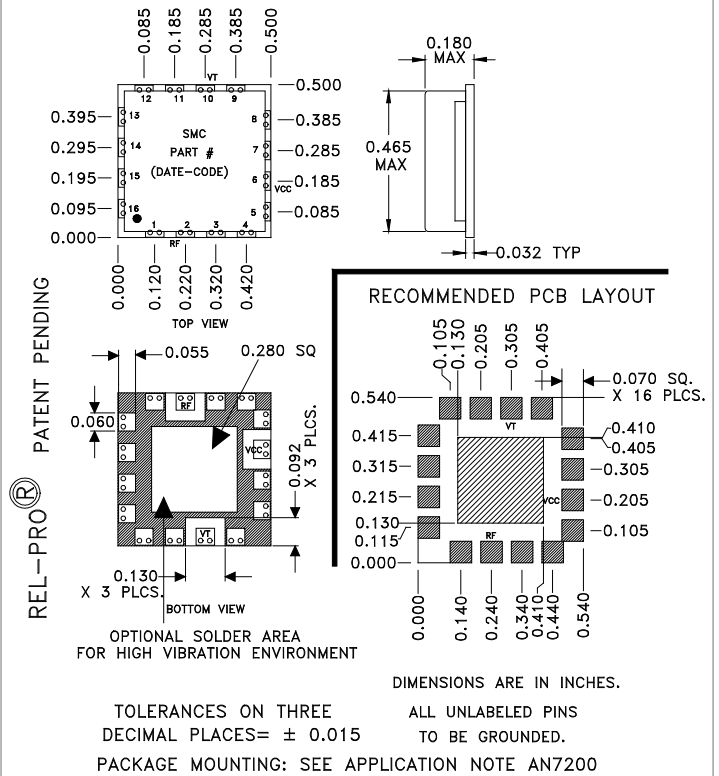
**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	1020 (Max)
5	1100 (Min)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+10 V
DC Voltage Applied to RF Out	± 25 V

Package # 278LF



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



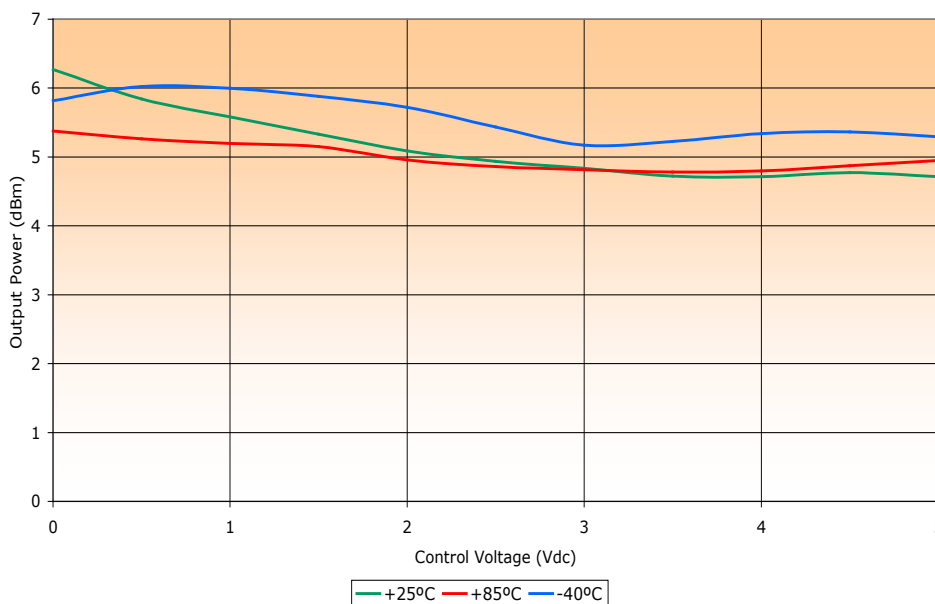
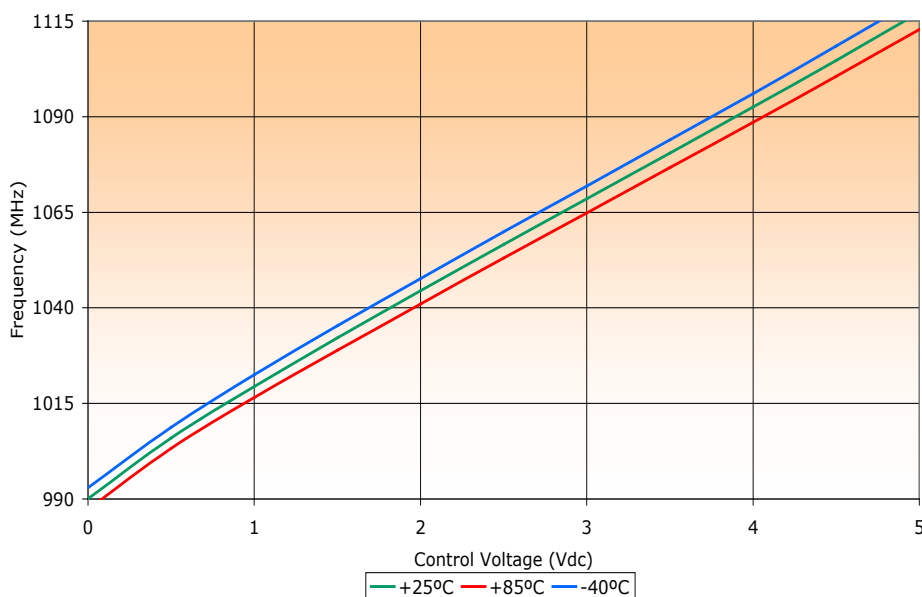
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: MFC102110-5

OPTIMIZED BANDWIDTH

1020 - 1100 MHz

PERFORMANCE PLOTS



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

Copyright © 2008 Synergy Microwave Corporation  
 201 McLean Boulevard • Paterson, New Jersey 07504 • Tel: (973) 881-8800 • Fax: (973) 881-8361  
 E-Mail: sales@synergymw.com • World Wide Web: <http://www.synergymw.com>



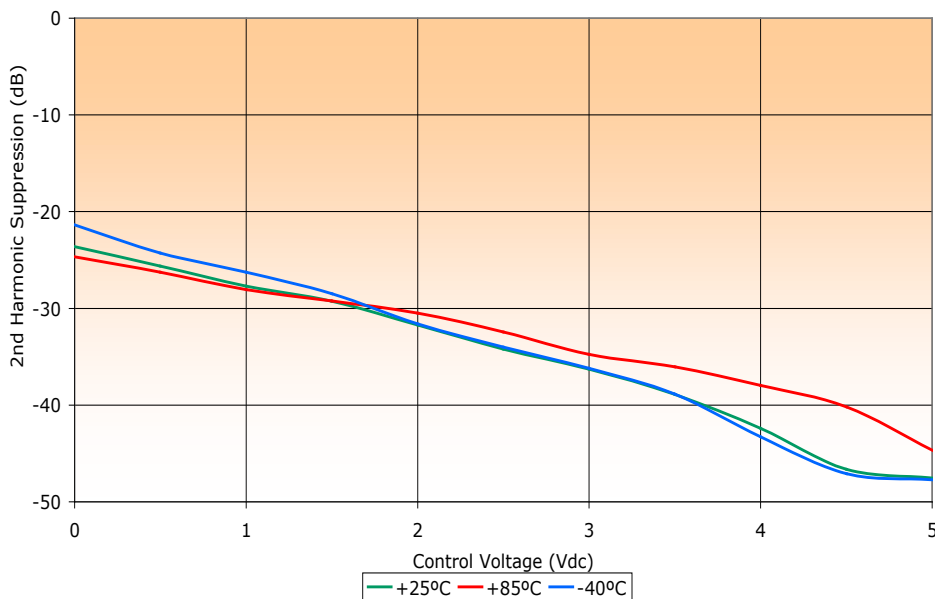
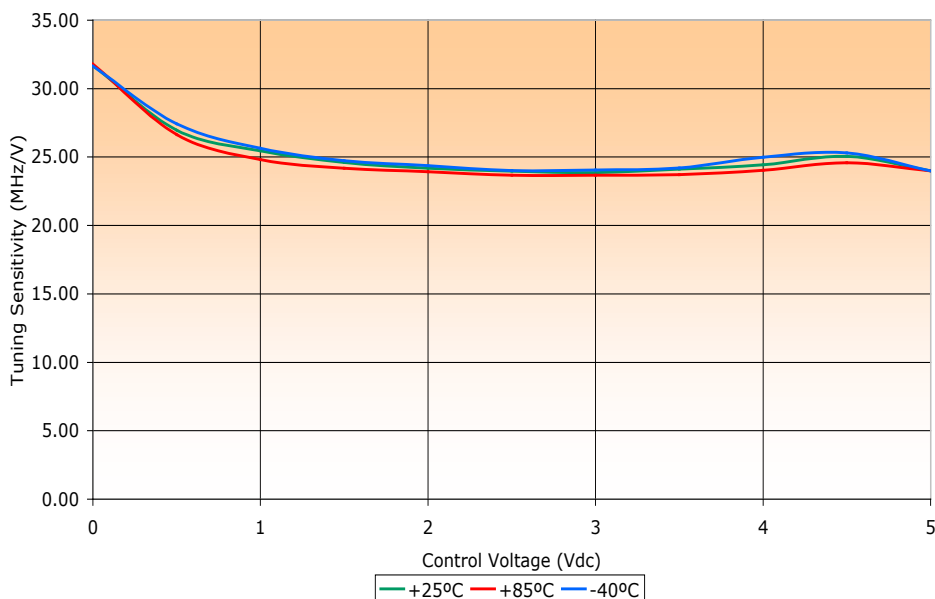
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: MFC102110-5

OPTIMIZED BANDWIDTH

1020 - 1100 MHz

PERFORMANCE PLOTS



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

Copyright © 2008 Synergy Microwave Corporation  
 201 McLean Boulevard • Paterson, New Jersey 07504 • Tel: (973) 881-8800 • Fax: (973) 881-8361  
 E-Mail: sales@synergymw.com • World Wide Web: http://www.synergymw.com

