

VOLTAGE CONTROLLED OSCILLATOR

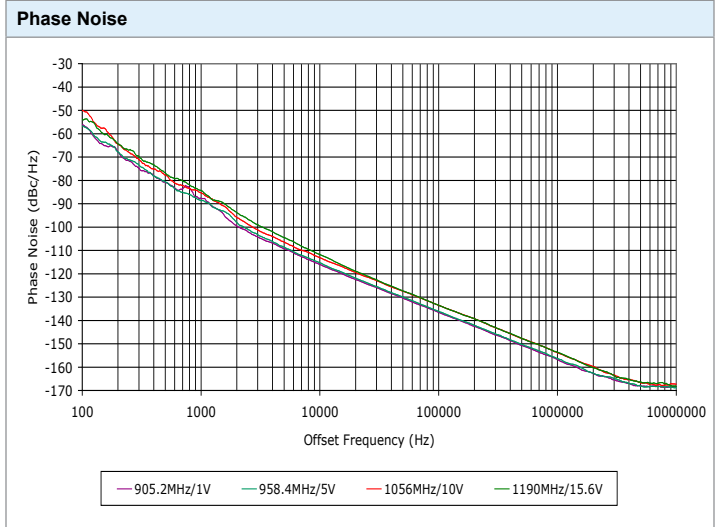
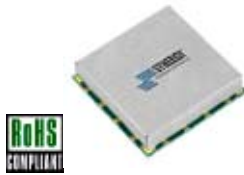
SURFACE MOUNT MODEL: MFC91119-10

OPTIMIZED BANDWIDTH

910 - 1190 MHz

FEATURES:

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



SPECIFICATIONS (Rev. C 11/19/08)

Frequency	910 - 1190 MHz
Tuning Voltage	See table below.
Bias Voltage	+10 VDC @ 27 mA (Max.)
Output Power	+2 dBm (Min.)
Tuning Sensitivity	13 - 26 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	13 dB (Typ.)
Frequency Pulling	4 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing	3 MHz/V (Typ.)
Tuning Port Capacitance	60 pF (Typ.)
Phase Noise @ 10 kHz	-114 dBc/Hz (Typ.)
Operating Temperature Range	-40 to 85 °C

Package # 278LF

RECOMMENDED PCB LAYOUT

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 GROUNDED.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	910 (Max.)
5	940 (Min.)
8	970 (Min.)
12	1060 (Min.)
15	1120 (Min.)
18	1180 (Min.)
20	1190 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+10.5 V
Tuning Voltage	+28 V
DC Voltage Applied to RF Out	± 25 V

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

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

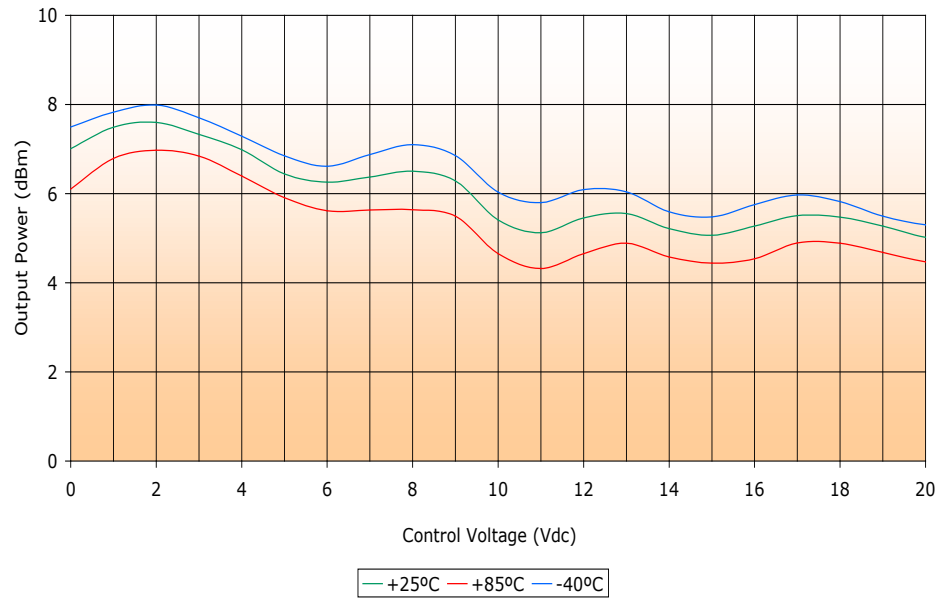
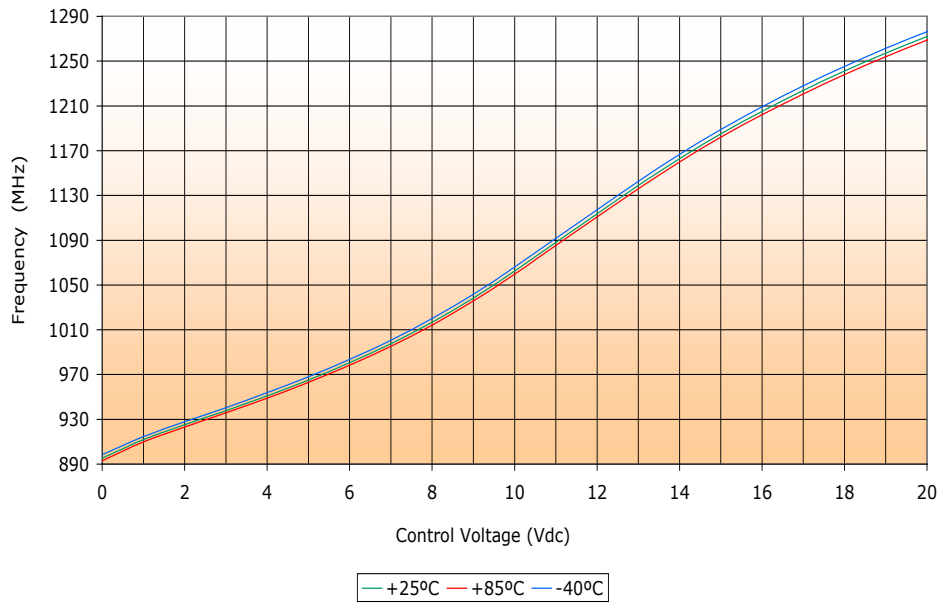


VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC91119-10

OPTIMIZED BANDWIDTH

910 - 1190 MHz

PERFORMANCE PLOTS



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

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

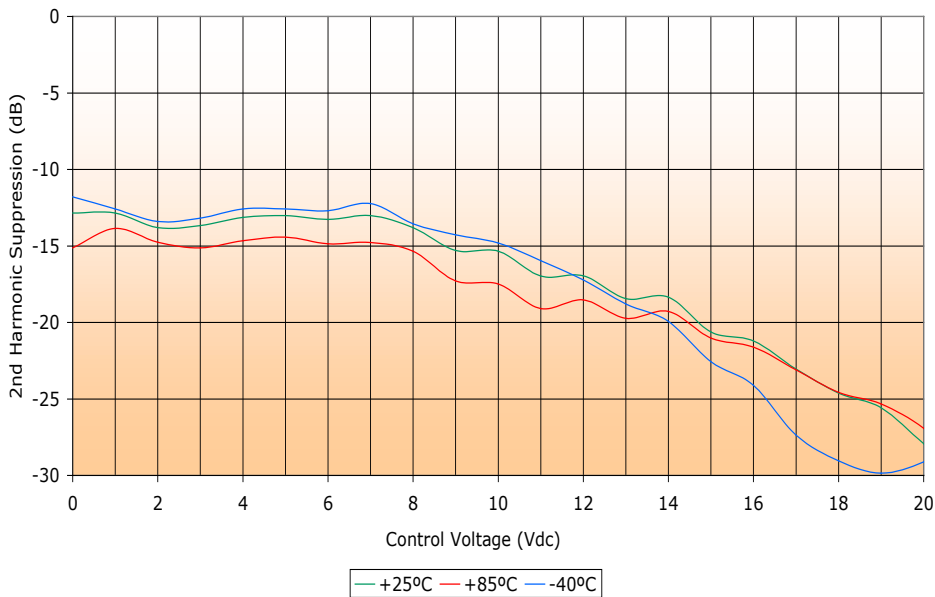
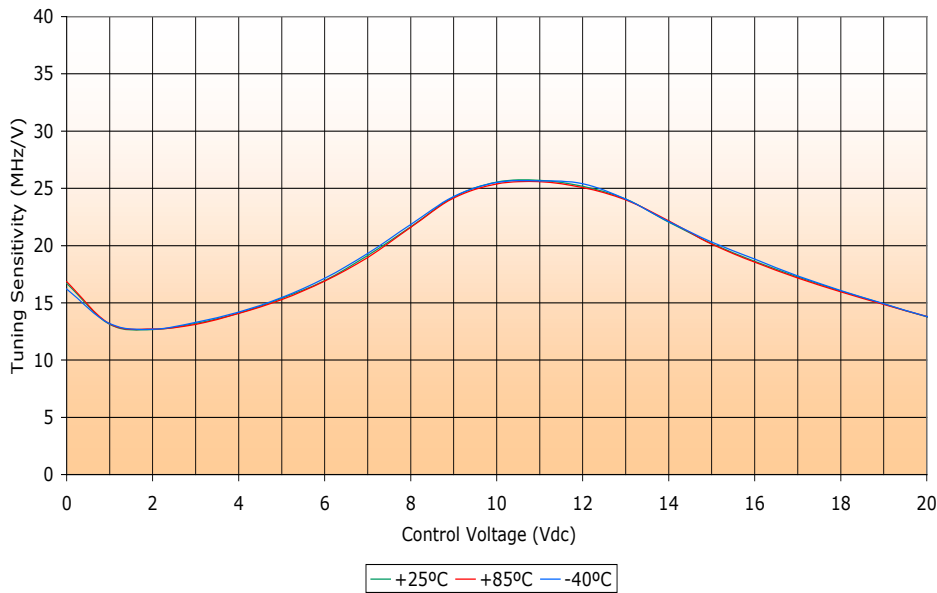


VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC91119-10

OPTIMIZED BANDWIDTH

910 - 1190 MHz

PERFORMANCE PLOTS



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

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

