

VOLTAGE CONTROLLED OSCILLATOR

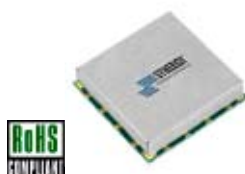
SURFACE MOUNT MODEL: MFC4248-8

OPTIMIZED BANDWIDTH

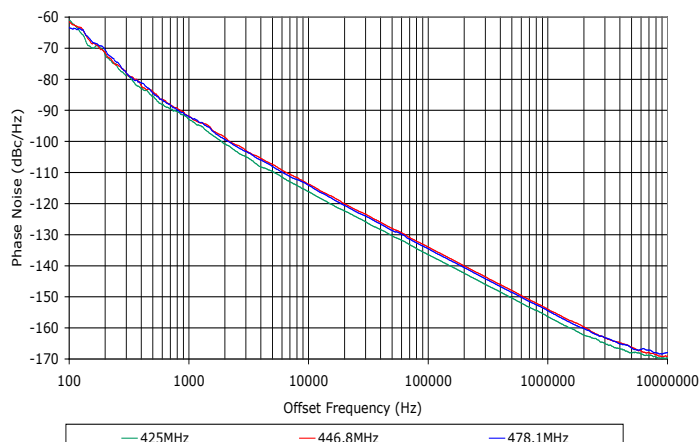
425 - 480 MHz

FEATURES:

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



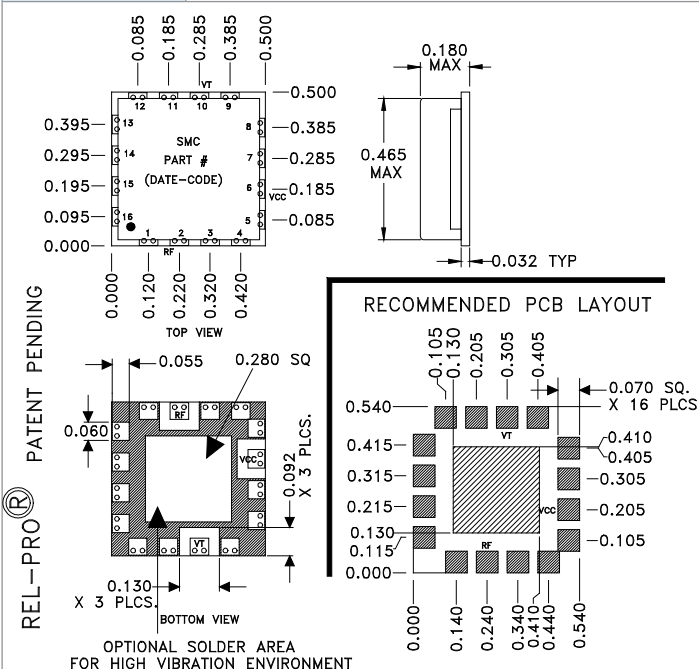
Phase Noise



SPECIFICATIONS (Rev. B 11/04/08)

Frequency	425 - 480 MHz
Tuning Voltage (Full Band)	See table below.
Bias Voltage	+8 VDC @ 20 mA (Max.)
Output Power	+5 dBm (Min.)
Tuning Sensitivity	6 - 8 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	18 dB (Typ.)
Frequency Pulling	5 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing	5 MHz/V (Typ.)
Tuning Port Capacitance	65 pF (Typ.)
Phase Noise @ 10 kHz	-115 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.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	425 (Max)
5	440 (Min)
10	470 (Min)
12	480 (Min)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+8.5 V
Tuning Voltage	+15 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

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

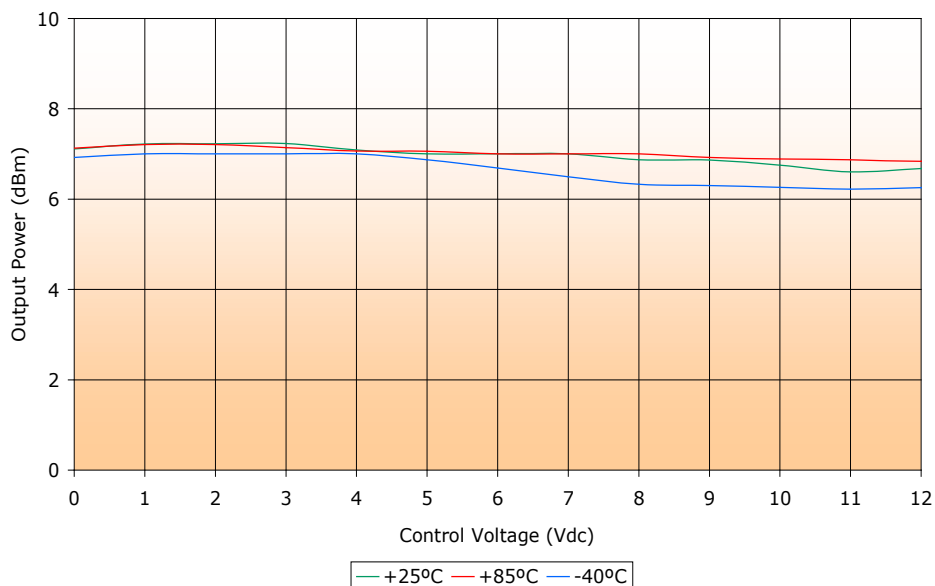
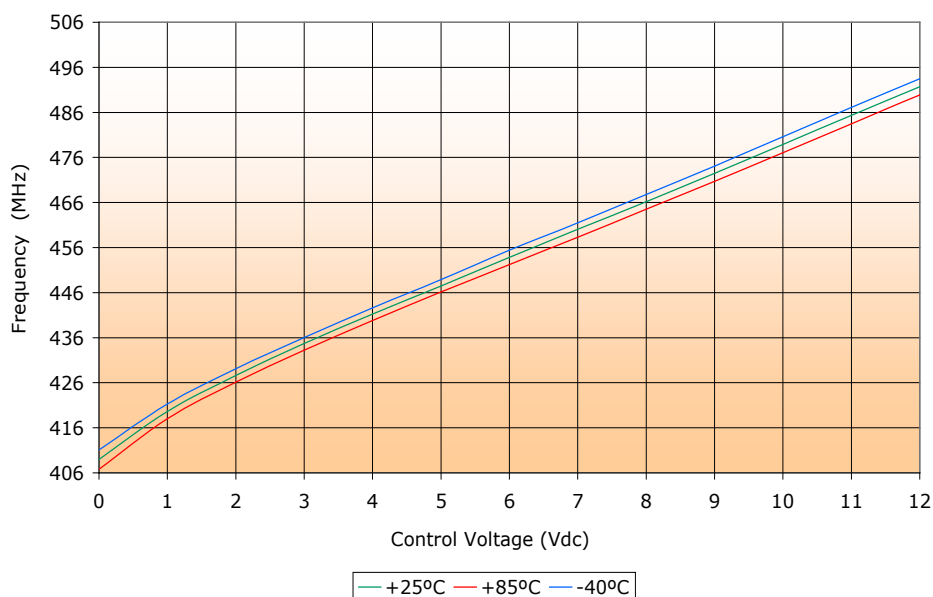


VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC4248-8

OPTIMIZED BANDWIDTH

425 - 480 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>

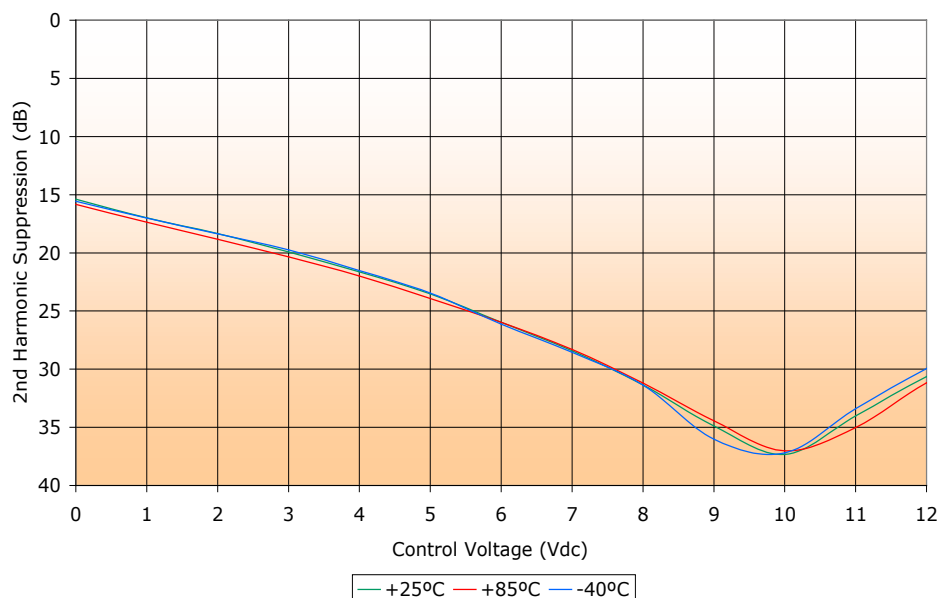
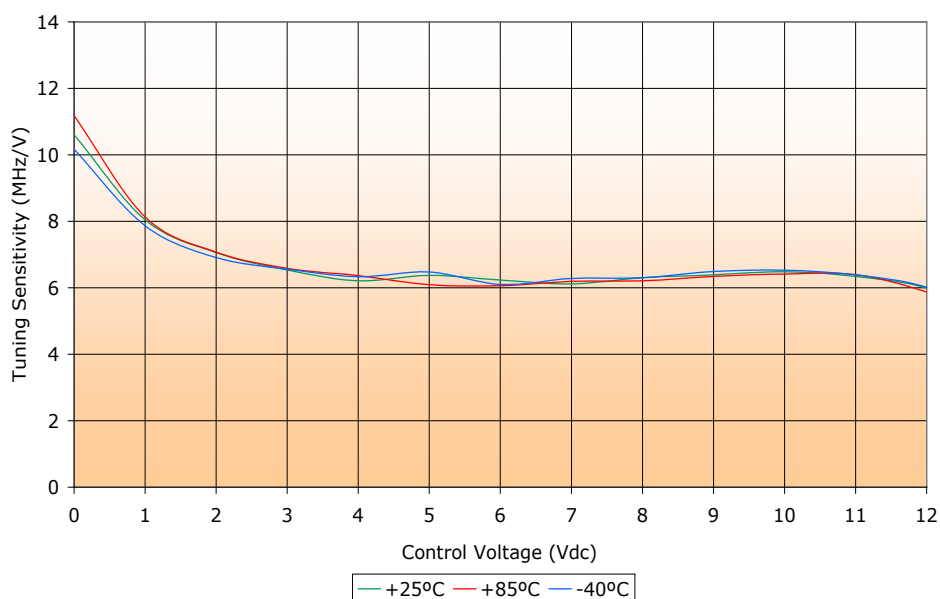


VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC4248-8

OPTIMIZED BANDWIDTH

425 - 480 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>

