

VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC138165-5

OPTIMIZED BANDWIDTH

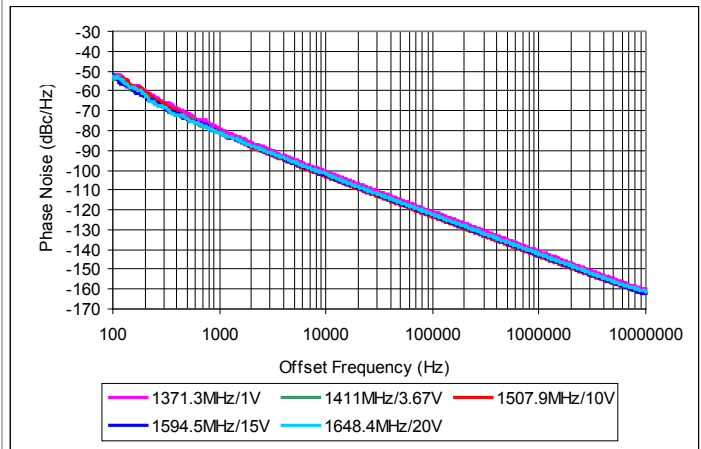
1380 - 1650 MHz

FEATURES:

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



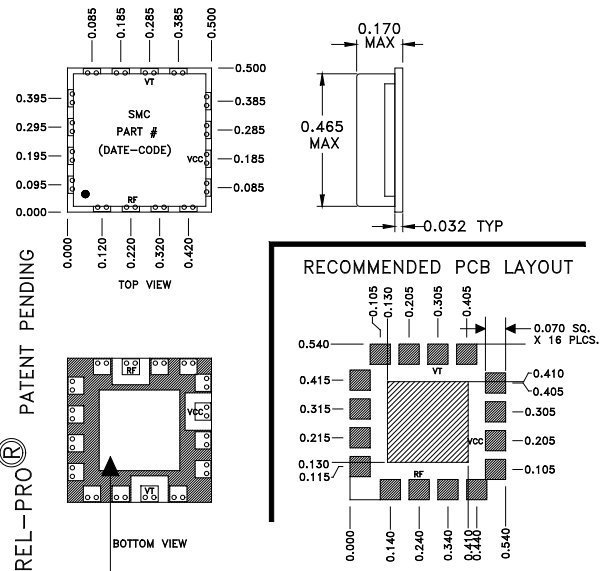
Phase Noise



SPECIFICATIONS (Rev. B 07/03/07)

Frequency	1380 - 1650 MHz
Tuning Voltage (Full Band)	0.5 - 24 VDC
Bias Voltage	+5 VDC @ <35 mA
Output Power	+3.5 dBm (Min)
Tuning Sensitivity	7 - 20 MHz/V (Typ)
Output Impedance	50 Ohms (Nom)
Harmonic Suppression	10 dBc (Min)
Frequency Pulling	5 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing	2 MHz/V (Typ)
Phase Noise @ 10 kHz	-102 dBc/Hz (Typ)
Operating Temperature Range	-40 to 85 °C

Package # 278LF



Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	1380 (Max)
5	1410 (Min)
8	1450 (Min)
12	1515 (Min)
15	1570 (Min)
18	1600 (Min)
24	1650 (Min)

OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT
TOLERANCES ON THREE DECIMAL PLACES = ± 0.015
PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

ALL UNLABELED PINS TO BE GROUNDING.

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 | 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 © 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



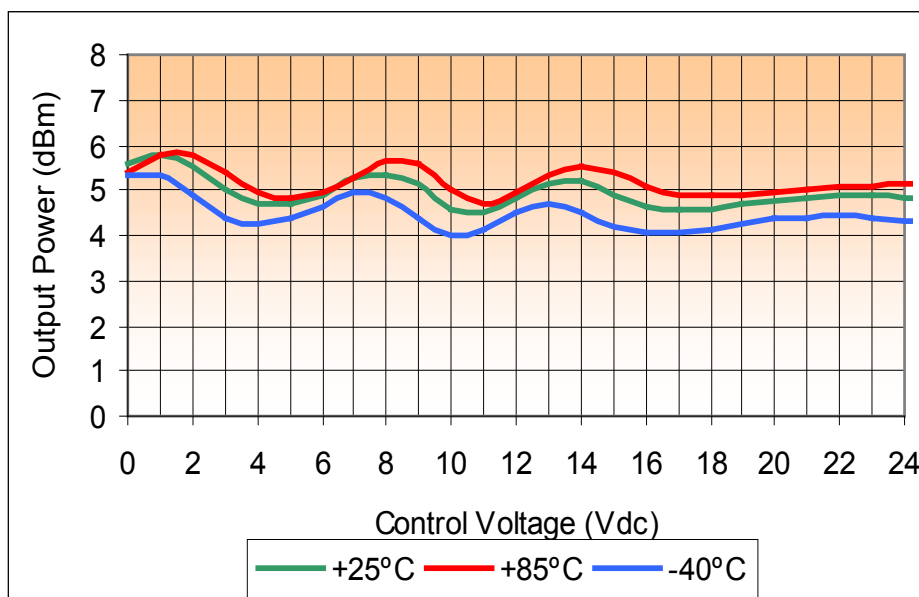
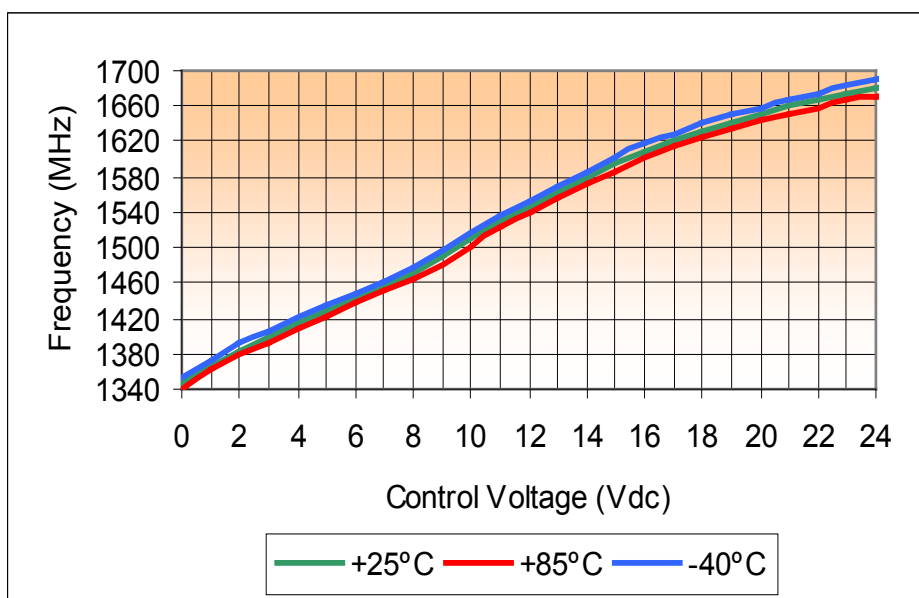
VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: MFC138165-5

OPTIMIZED BANDWIDTH

1380 - 1650 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 | 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 © 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>

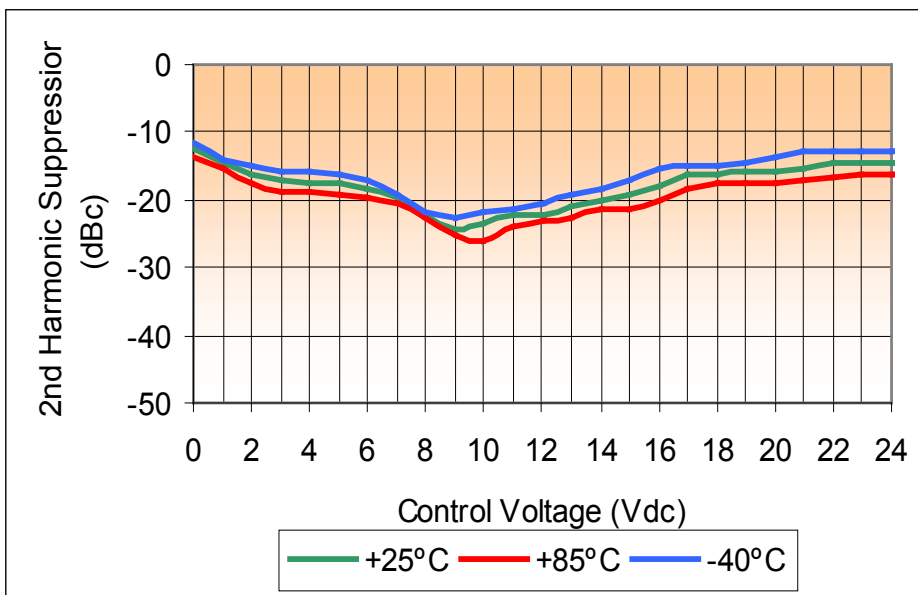
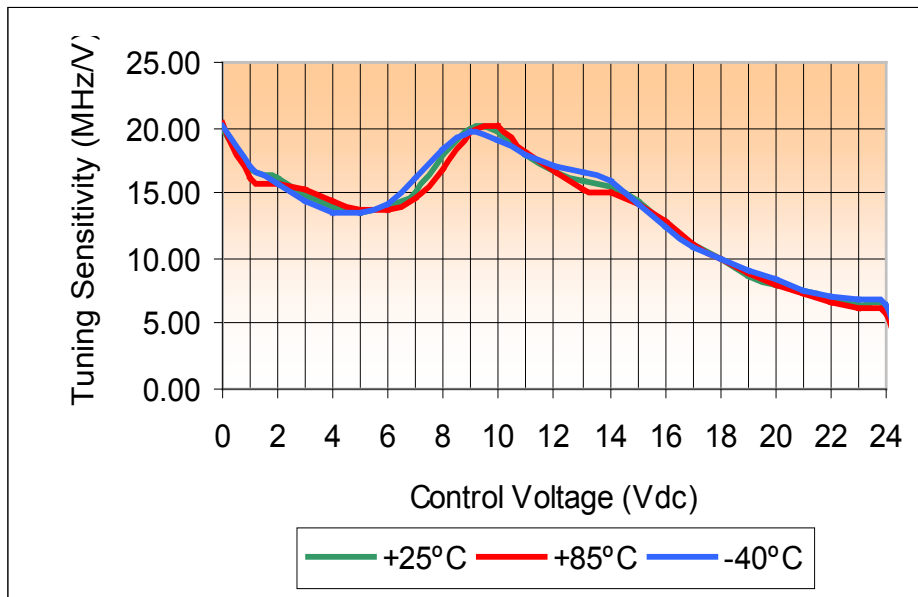


VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: MFC138165-5

OPTIMIZED BANDWIDTH

1380 - 1650 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 | 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 © 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>

