

# VOLTAGE CONTROLLED OSCILLATOR

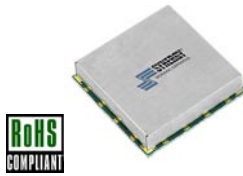
## SURFACE MOUNT MODEL: DCRO500630-5

OPTIMIZED BANDWIDTH

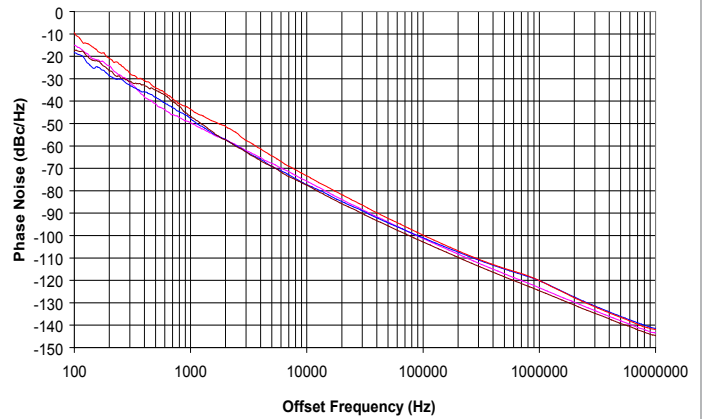
5000 - 6300 MHz

### FEATURES:

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



### Phase Noise



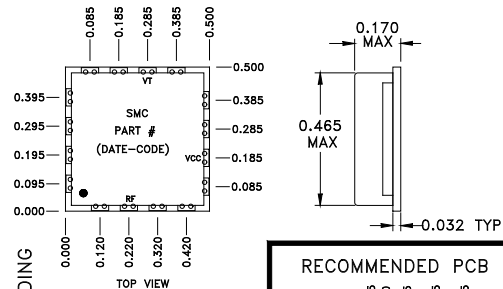
### SPECIFICATIONS (Rev. C 07/03/07)

Frequency	5000 - 6300 MHz
Tuning Voltage	See table below
Bias Voltage	+5 VDC @ 45 mA (Max)
Output Power	-2 dBm (Min)
Tuning Sensitivity	50 - 175 MHz/V (Typ)
Output Impedance	50 Ohms (Nom)
Harmonic Suppression	10 dB (Typ)
Frequency Pulling	15 MHz (Typ @ 1.75:1 VSWR)
Frequency Pushing	15 MHz/V (Typ)
Phase Noise @ 10 kHz	-77 dBc/Hz (Typ)
Operating Temperature Range	-20 to +70 °C

### Guaranteed Tuning Specifications

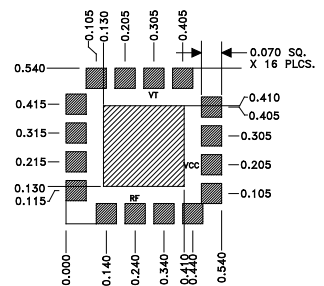
Tuning Voltage ( V )	Frequency ( MHz )
0.5	5000 (Max)
5	5400 (Min)
8	5650 (Min)
12	5950 (Min)
15	6150 (Min)
18	6300 (Min)

Package # 278LF



REL-PRO® PATENT PENDING

### RECOMMENDED PCB LAYOUT



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.

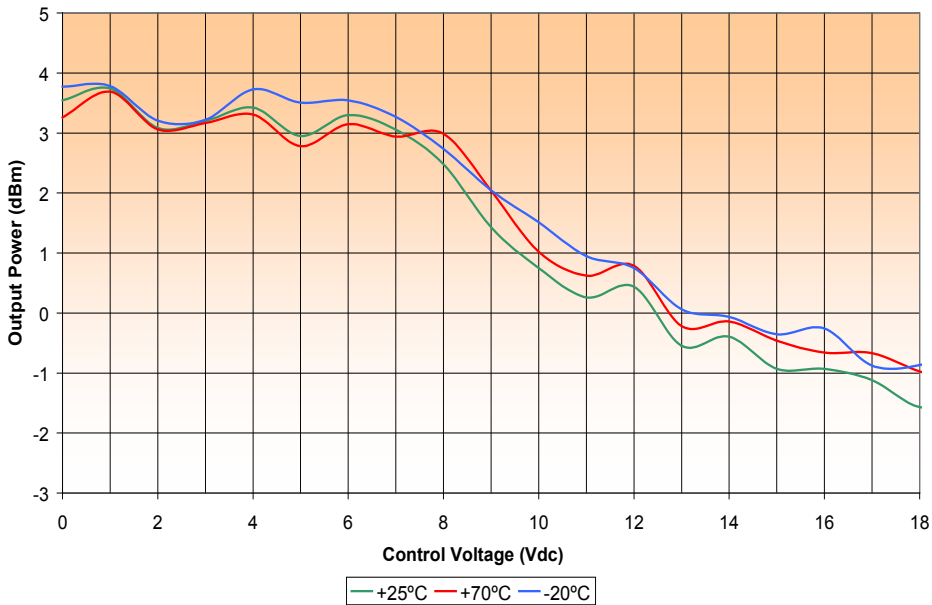
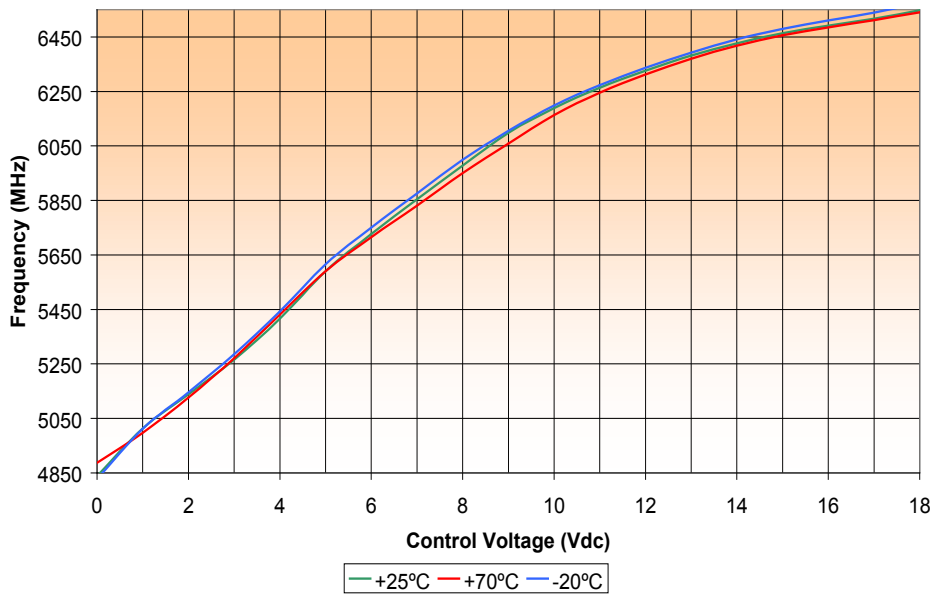
This product is manufactured under one or more of the following patents: Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591 | Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787

# VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCRO500630-5

OPTIMIZED BANDWIDTH

5000 - 6300 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

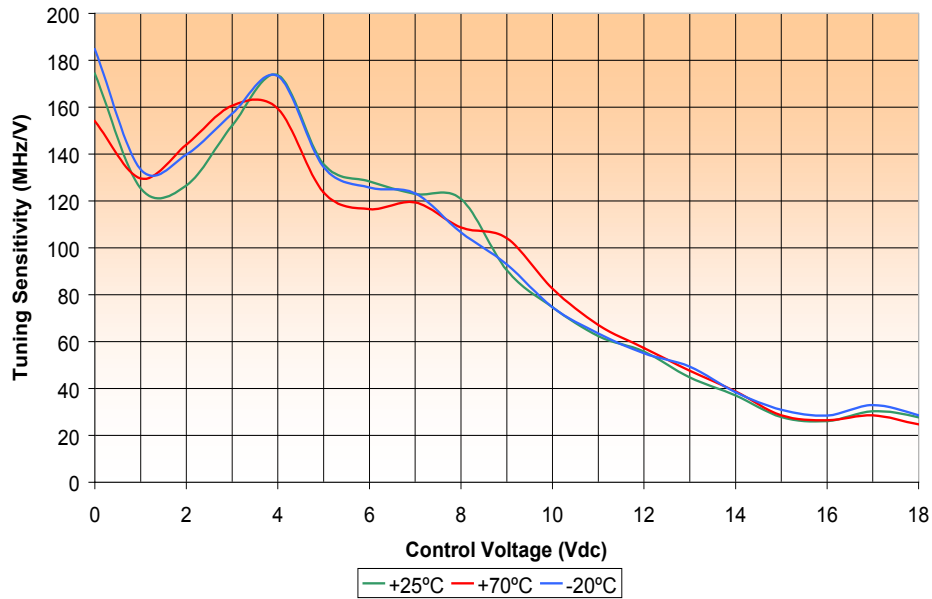
Copyright © Synergy Microwave Corporation  
201 McLean Boulevard • Paterson, New Jersey 07504 • Tel: (973) 881-8800 • Fax: (973) 881-8361  
E-Mail: sales@synergymw.com • World Wide Web: <http://www.synergymw.com>



# VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCRO500630-5

OPTIMIZED BANDWIDTH

5000 - 6300 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@synergymwave.com • World Wide Web: <http://www.synergymwave.com>

