

VOLTAGE CONTROLLED OSCILLATOR

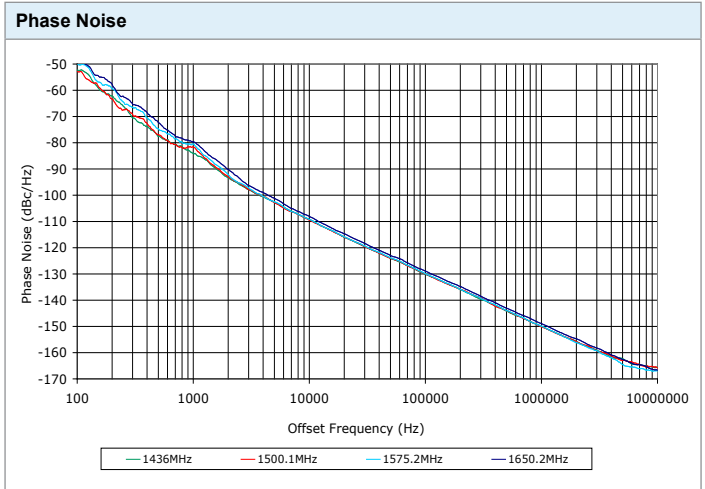
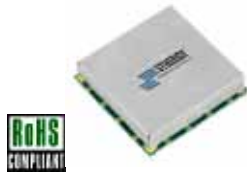
SURFACE MOUNT MODEL: DCRO150165-8

OPTIMIZED BANDWIDTH

1450 - 1650 MHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size, Surface Mount
- ▶ Lead Free Patented REL-PRO® Technology
- ▶ Planar Resonator Construction



SPECIFICATIONS (Rev. H 01/02/12)

Frequency	1450 - 1650 MHz
Tuning Voltage	See table below.
Bias Voltage	+8 VDC @ 46 mA (Max.)
Output Power	+2 dBm (Min.)
Tuning Sensitivity	20 - 44 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	20 dB (Typ.)
Frequency Pulling	5 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	5 MHz/V (Typ.)
Tuning Port Capacitance	70 pF (Typ.)
Phase Noise @ 10 kHz	-109 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Package # 278LF

REL-PRO® PATENT NO. 7,612,296

RECOMMENDED PCB LAYOUT

Dimensions are in inches. Tolerances on three decimal places = ± 0.015. All unlabeled pins to be grounded. Package mounting: see application note AN7200 & AN7300.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	1450 (Max.)
5	1490 (Min.)
10	1650 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+8.5 V
Tuning Voltage	+28 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; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623 | 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; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

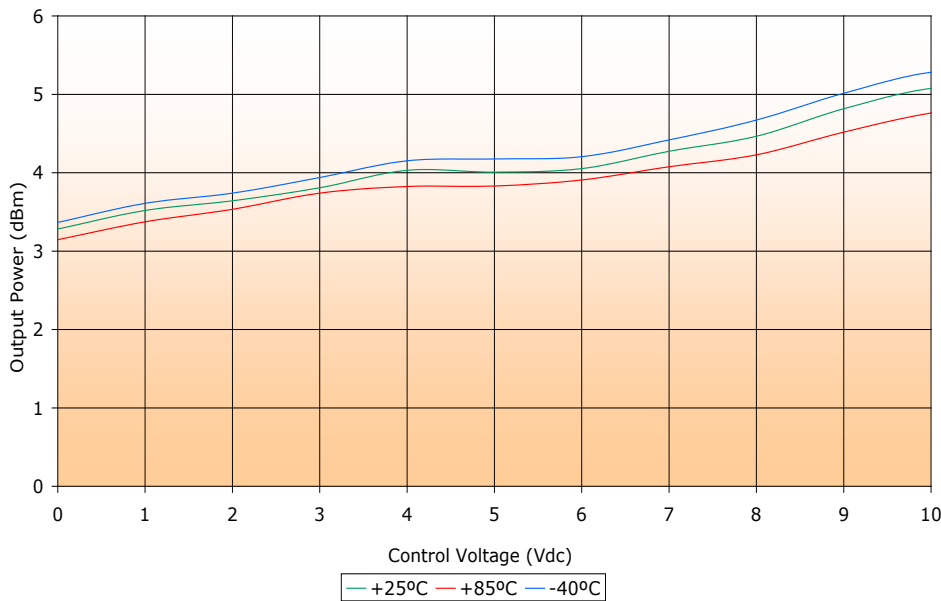
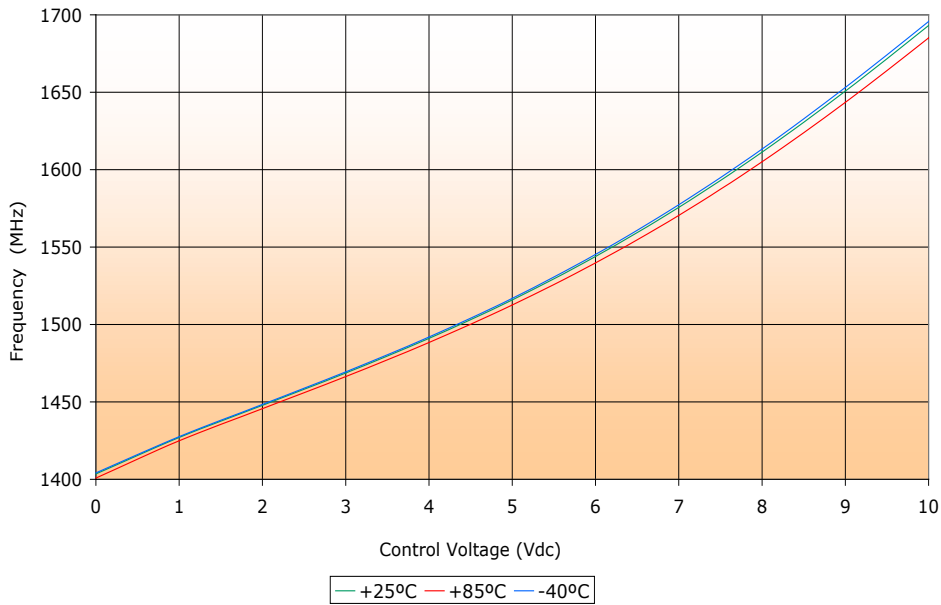
VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCRO150165-8

OPTIMIZED BANDWIDTH

1450 - 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; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623 | 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; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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



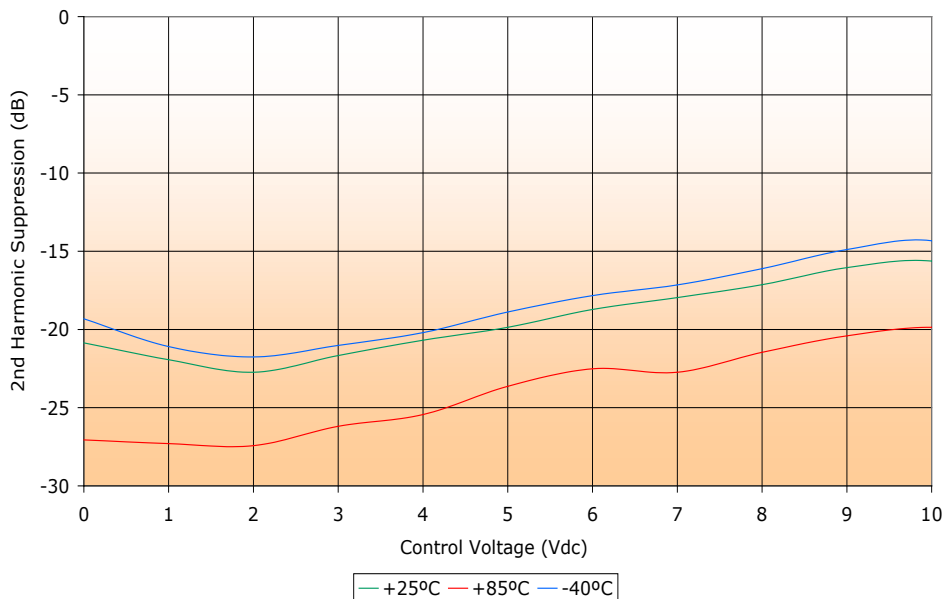
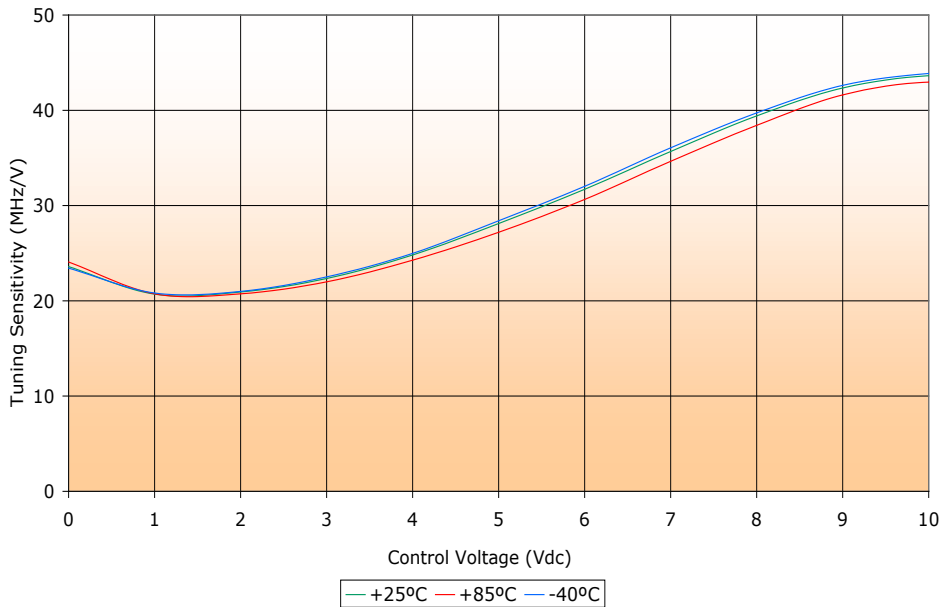
VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCRO150165-8

OPTIMIZED BANDWIDTH

1450 - 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; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623 | 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; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

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

