

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO2476

**WIDE BANDWIDTH**

**240 - 760 MHz**

**FEATURES:**

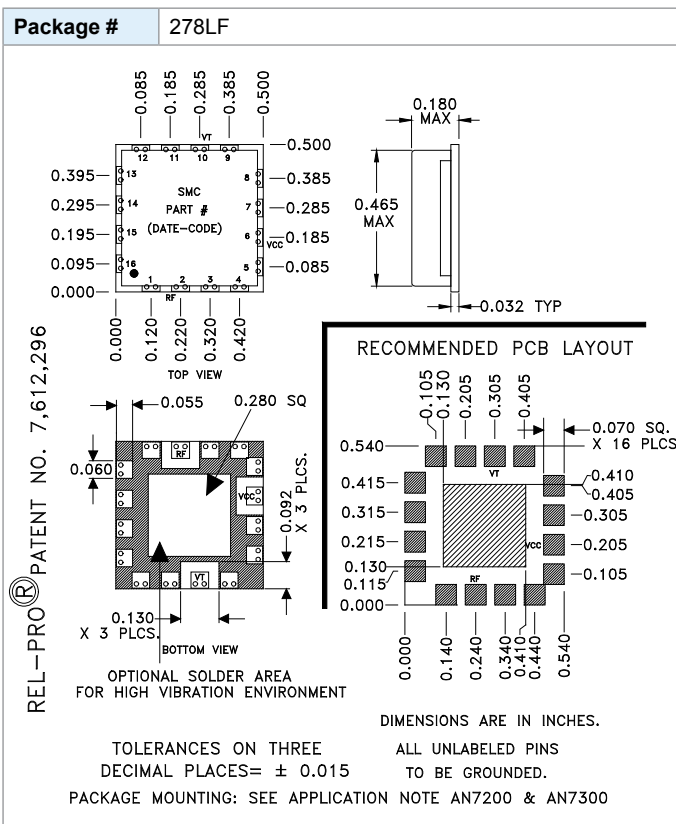
- ▶ Exceptional Phase Noise Performance
- ▶ Self Regulated Power Supply Voltage
- ▶ Small Size, Surface Mount
- ▶ Lead Free Patented REL-PRO® Technology



**SPECIFICATIONS (Rev. G 08/11/09)**

Frequency	240 - 760 MHz
Tuning Voltage	See table below.
Bias Voltage *	+5 to +12 VDC @ 27 mA (Max.)
Output Power	+4 dBm (Min.)
Tuning Sensitivity	12 - 34 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	10 dB (Typ.)
Frequency Pulling	3 MHz (Max. @ 1.75:1 VSWR)
Frequency Pushing	1 MHz/V (Max.)
Tuning Port Capacitance	270 pF (Typ.)
Phase Noise @ 10 kHz	-108 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

\* Internally regulated



**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	240 (Max.)
5	295 (Min.)
8	380 (Min.)
12	515 (Min.)
15	595 (Min.)
18	655 (Min.)
24	760 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 V
Tuning Voltage	+26 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; 5,660,754; 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; 60/601623; 60/605791; EV31369634; 11/29766; 60/622485 & 60/710310; 10/937625/60/736901; 60/732787; 7,496,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

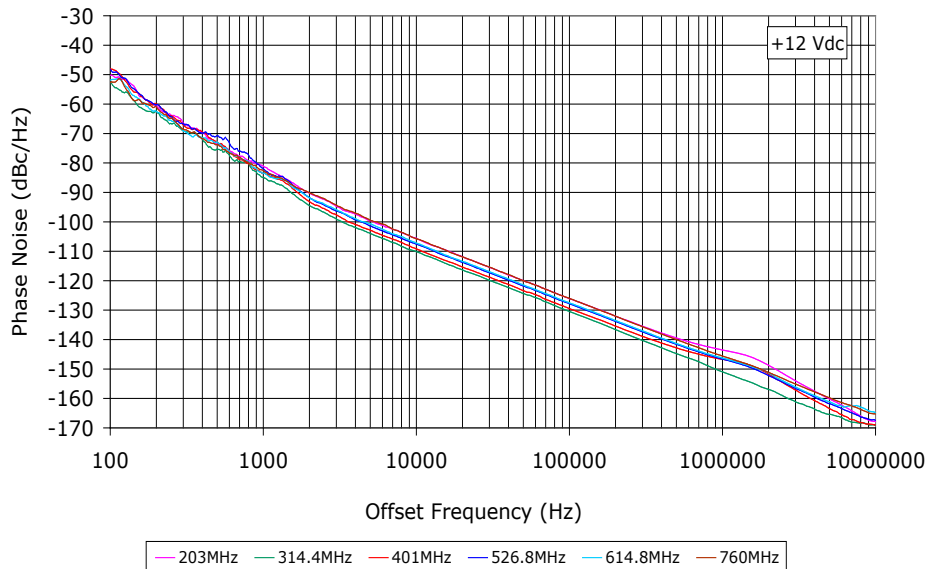
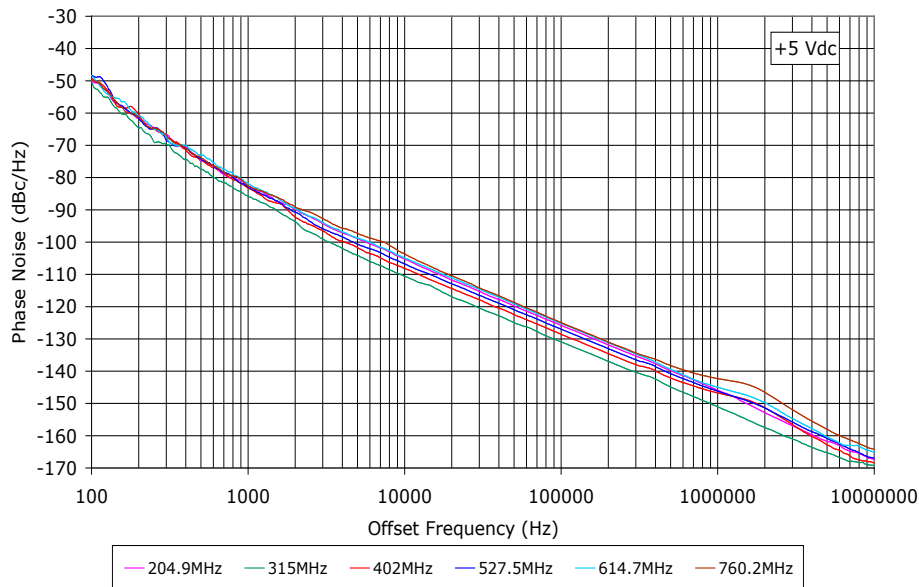


# VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCMO2476

WIDE BANDWIDTH

240 - 760 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; 5,660,754; 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 & 60/528670; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601623; 60/605791; EV31369634; 11/29766; 60/622485 & 60/710310; 10/337625/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,363,174; 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@synergymw.com • World Wide Web: <http://www.synergymw.com>



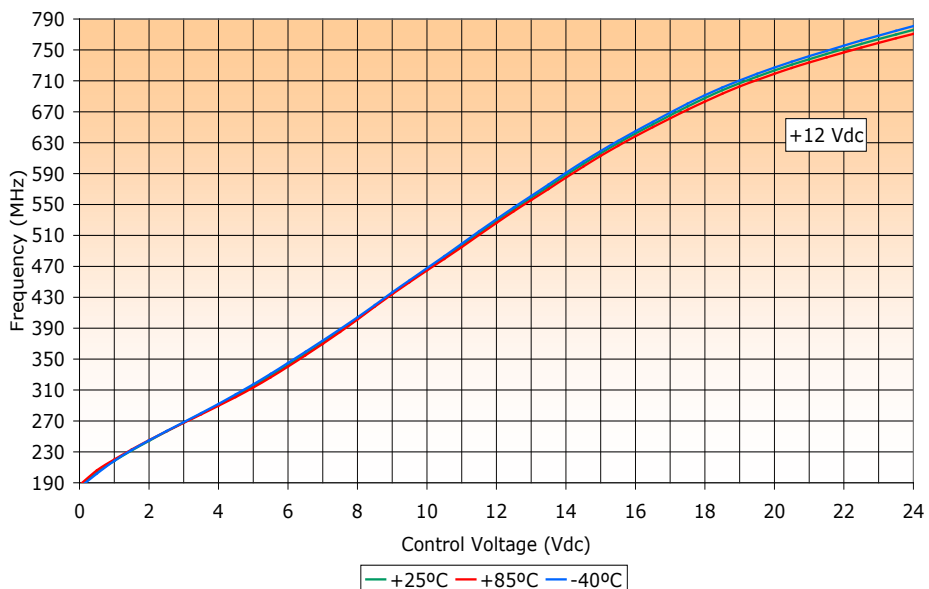
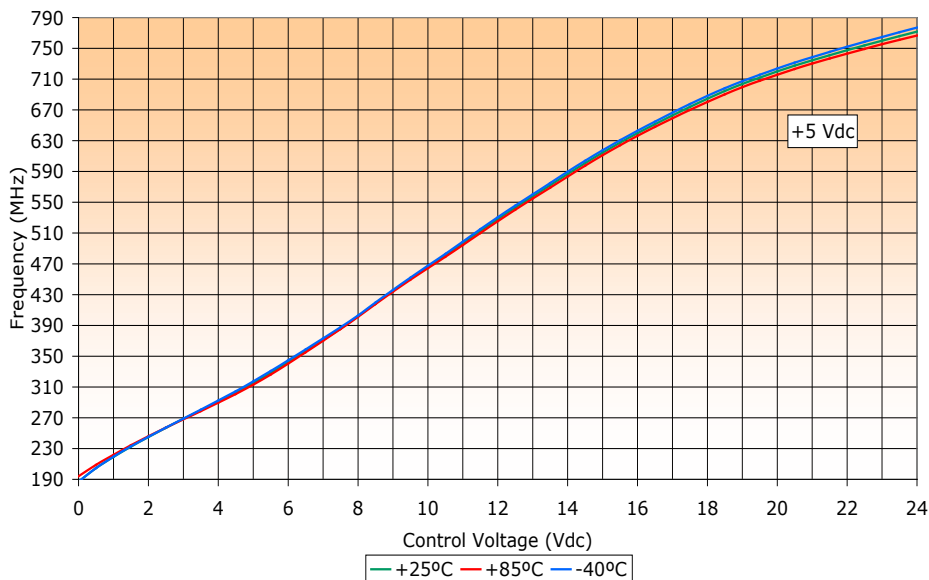
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO2476

WIDE BANDWIDTH

240 - 760 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; 5,660,754; 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; 60/601623; 60/605791; EV31369634; 11/259766; 60/622485 & 60/710310; 10/337525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,363,174; 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>



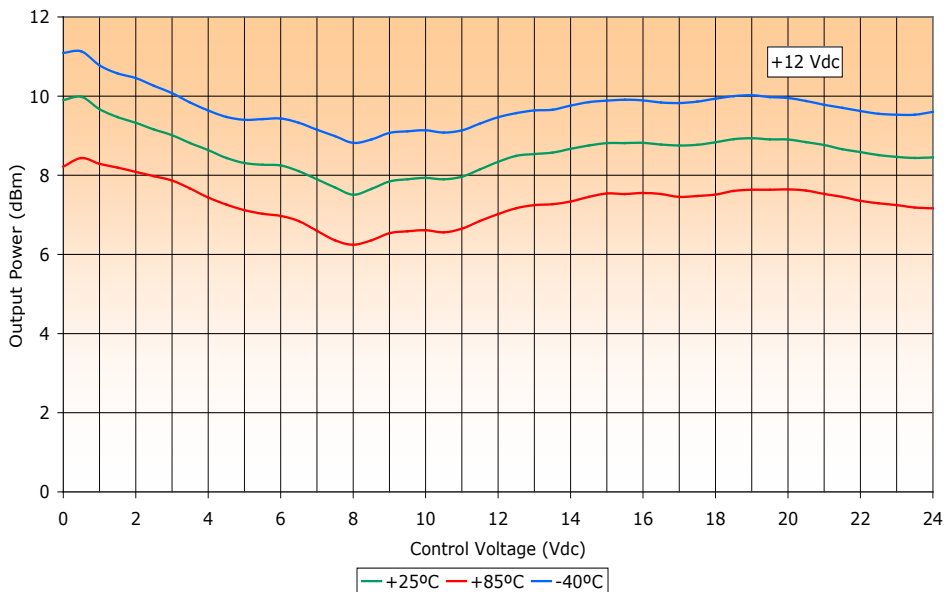
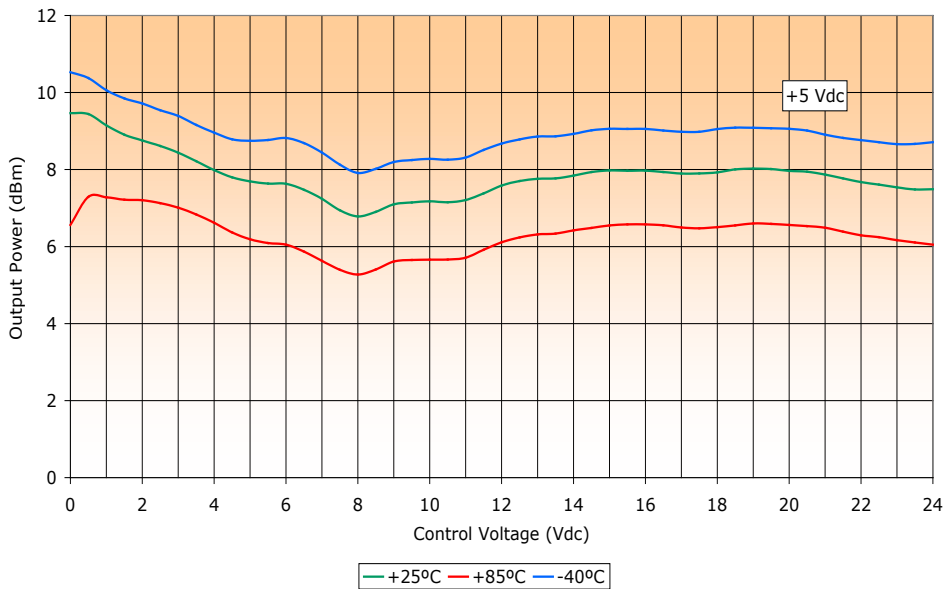
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO2476

WIDE BANDWIDTH

240 - 760 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; 5,660,754; 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; 60/601623; 60/605791; EV31369634; 11/29766; 60/622485 & 60/710310; 10/3752560/738901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,363,174; 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



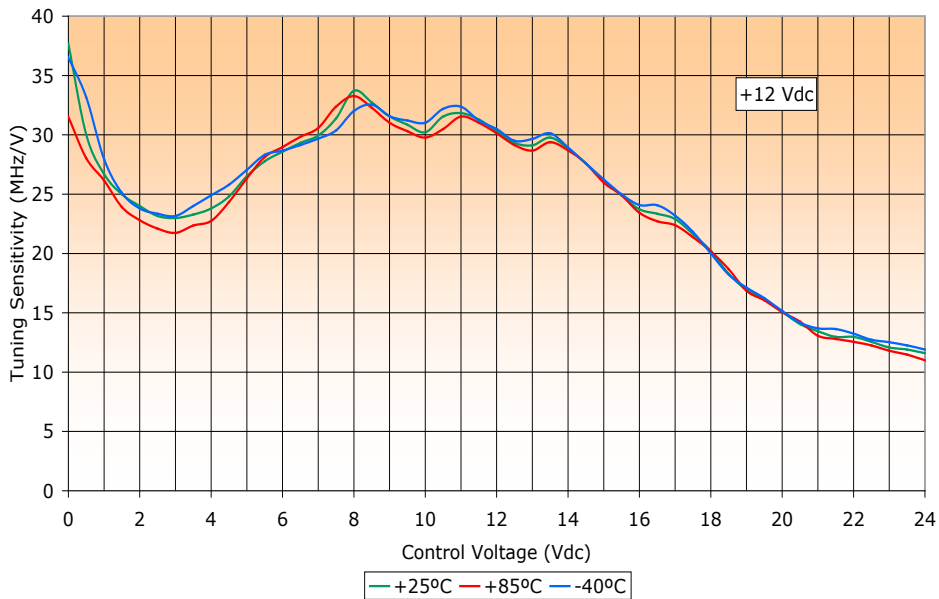
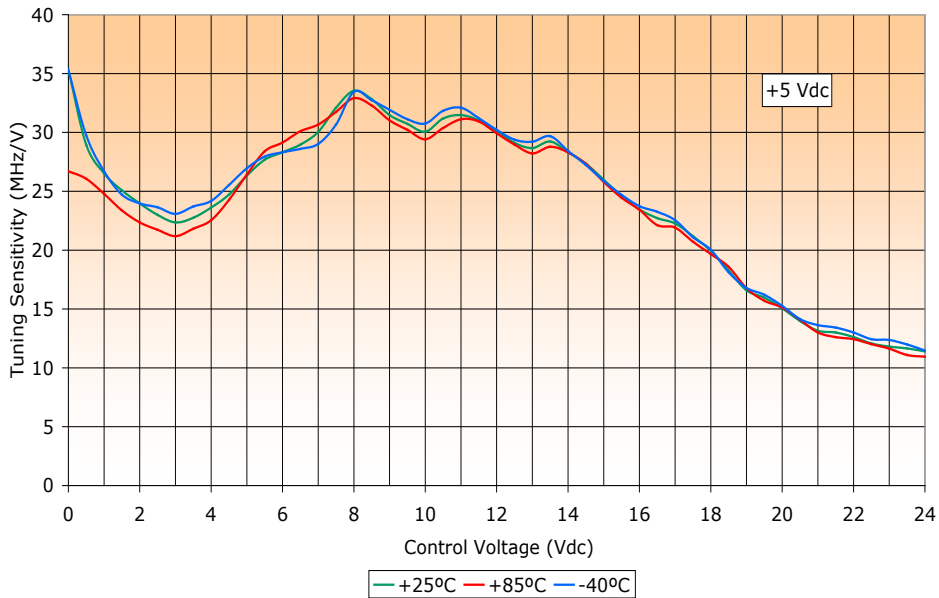
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO2476

WIDE BANDWIDTH

240 - 760 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; 5,660,754; 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; 60/601623; 60/605791; EV3136934; 11/29766; 60/622485 & 60/710310; 10/3752560/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,363,174; 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



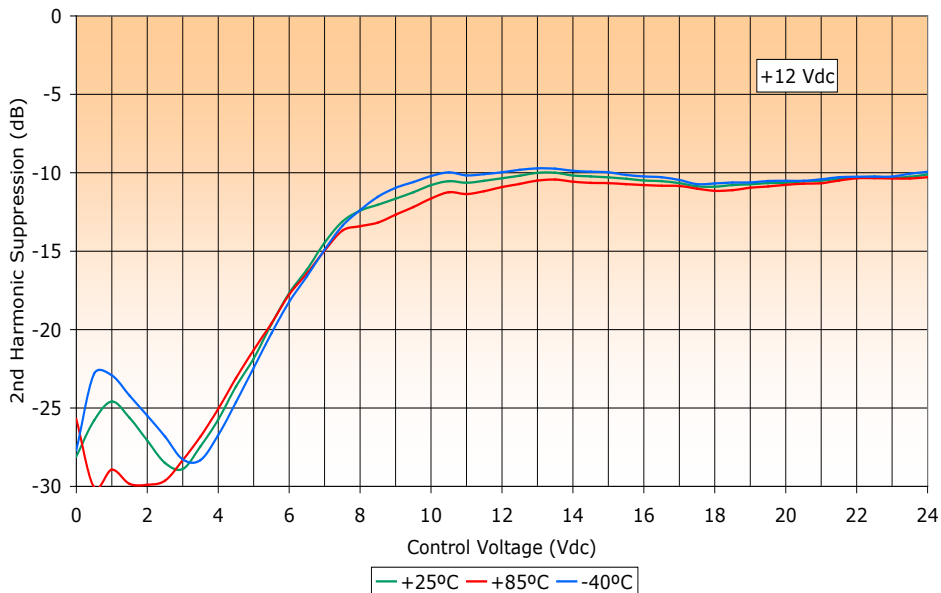
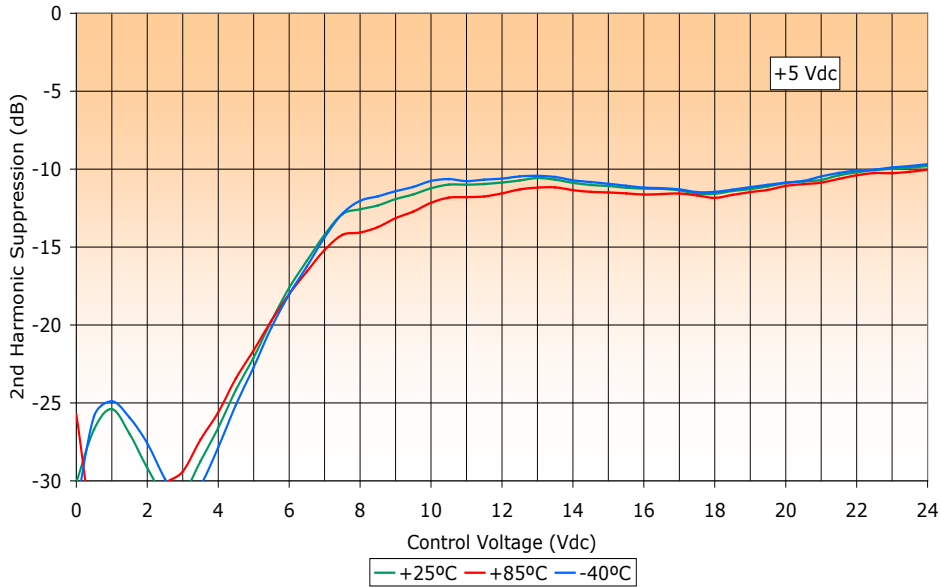
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCMO2476

WIDE BANDWIDTH

240 - 760 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; 5,660,754; 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; 60/601623; 60/605791; EV31369634; 11/259766; 60/622485 & 60/710310; 10/3752560/738901; 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

