

# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCSO2688-12

OPTIMIZED CENTER FREQUENCY

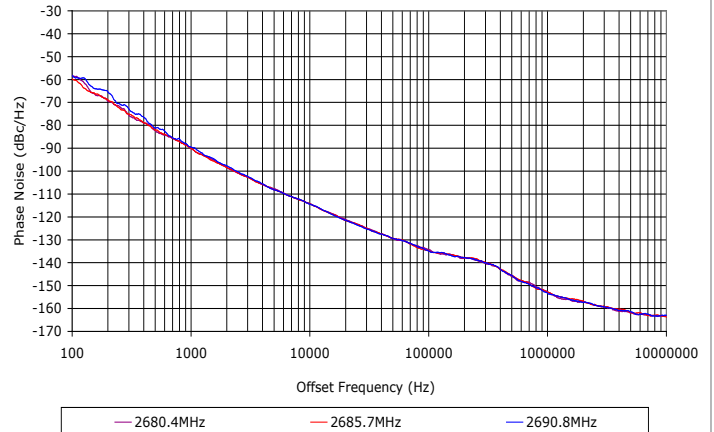
2688.651 MHz

**FEATURES:**

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



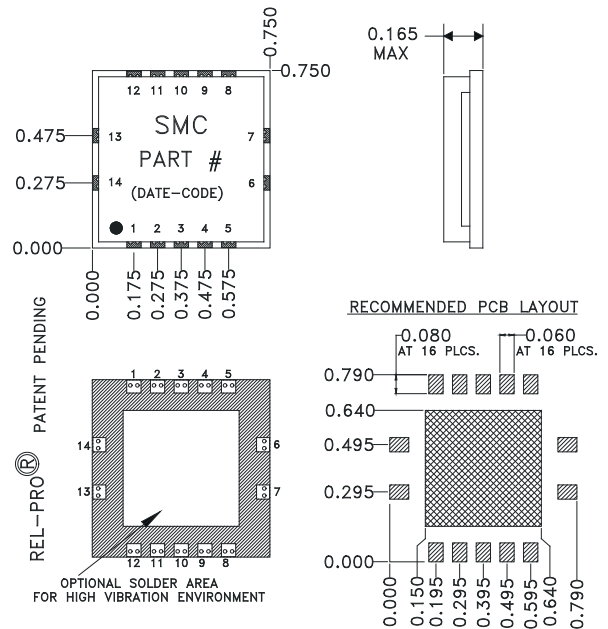
**Phase Noise**



**SPECIFICATIONS (Rev. E 11/10/08)**

Frequency	2688.651 MHz
Tuning Voltage	1 - 7 VDC
Bias Voltage	+12 VDC @ 45 mA (Max.)
Output Power	+4 dBm (Min.)
Tuning Sensitivity	1 - 2 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	27 dB (Typ.)
Frequency Pulling	0.25 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	0.20 MHz/V (Typ.)
Tuning Port Capacitance	50 pF (Max.)
Phase Noise @ 10 kHz	-115 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Package # 249LF



**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+12.5 V
Tuning Voltage	+10 V
DC Voltage Applied to RF Out	± 25 V

PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200

**PORT CONFIGURATION**

Tuning Voltage	RF Output	DC Supply Input	All Others
2	9	11	Ground

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

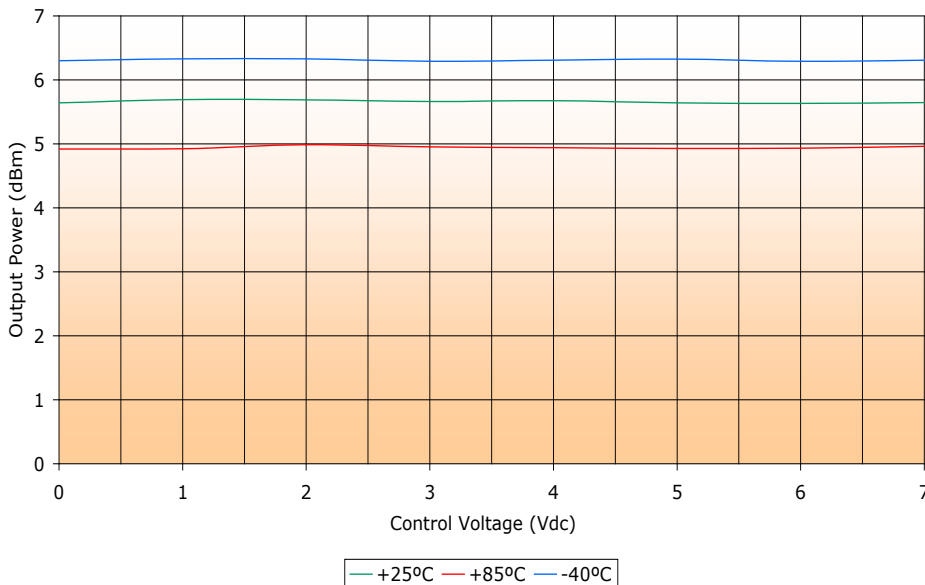
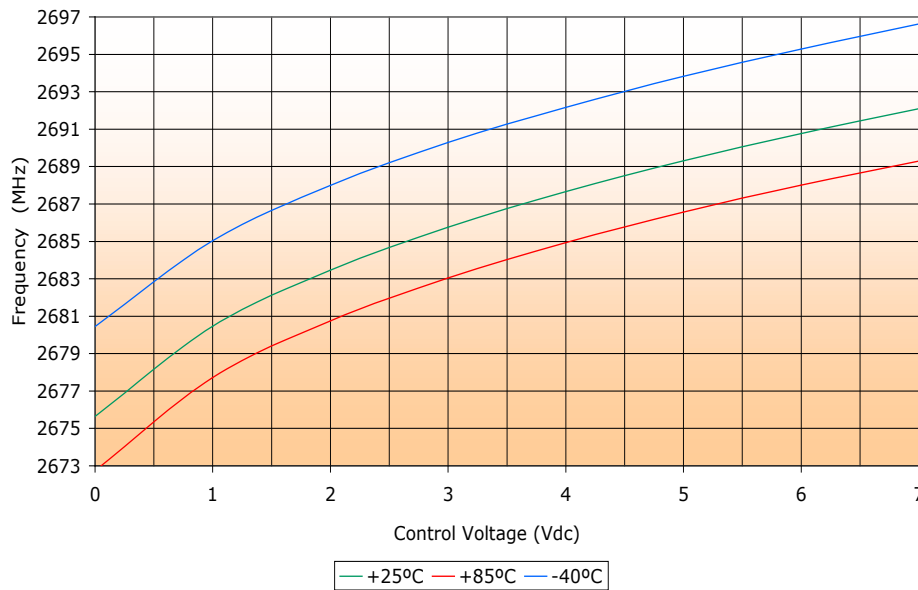


# VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCSO2688-12

OPTIMIZED CENTER FREQUENCY

2688.651 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@synergymwave.com](mailto:sales@synergymwave.com) • World Wide Web: <http://www.synergymwave.com>

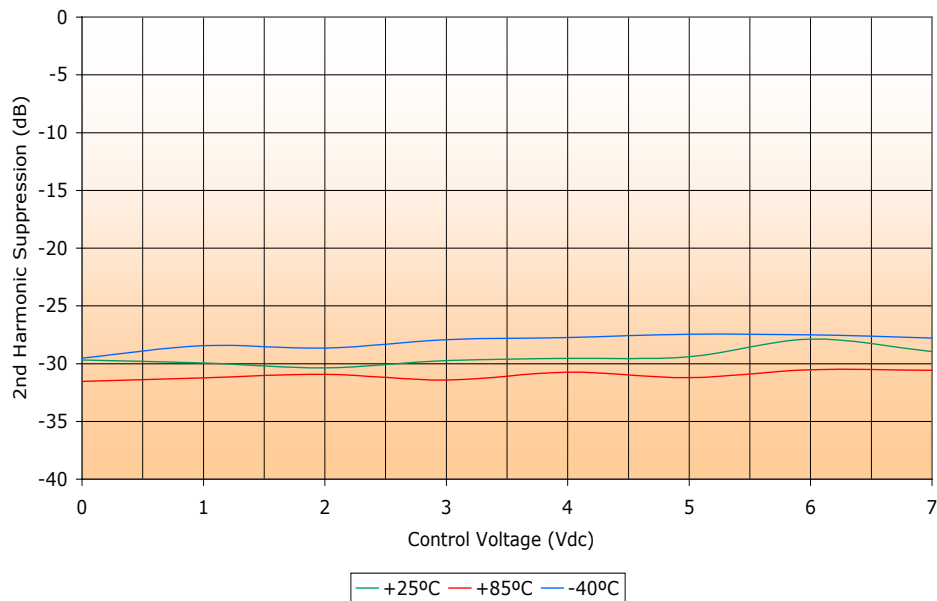
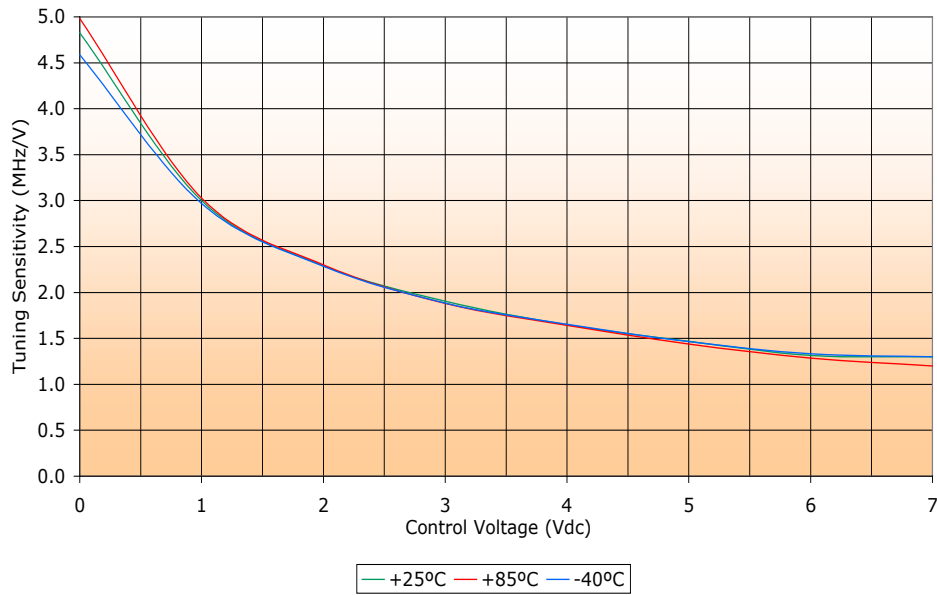


# VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCSO2688-12

OPTIMIZED CENTER FREQUENCY

2688.651 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@synergymwave.com • World Wide Web: http://www.synergymwave.com

