

VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO200400-5

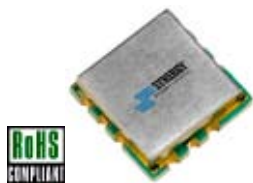
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OPTIMIZED BANDWIDTH

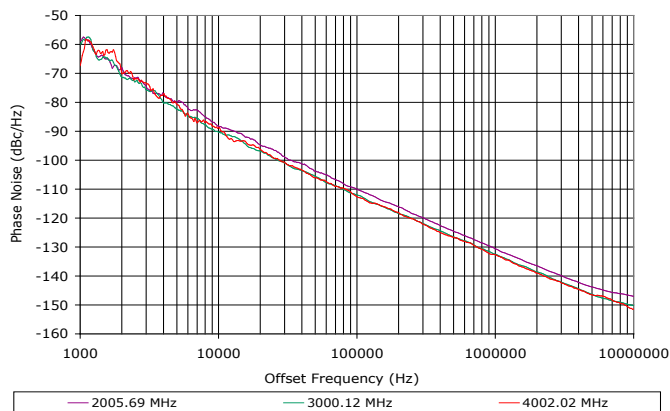
2000 - 4000 MHz

FEATURES:

- ▶ Miniature Size, Surface Mount (0.3" x 0.3")
- ▶ Exceptional Phase Noise Performance
- ▶ Fast Tuning



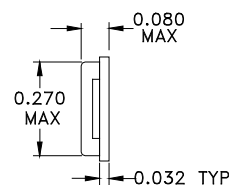
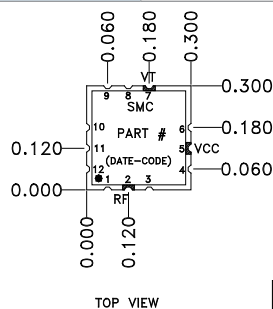
Phase Noise



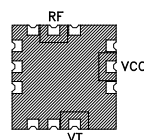
SPECIFICATIONS (Rev. A 07/20/09 - Preliminary)

Frequency	2000 - 4000 MHz	
Tuning Voltage	0.5 - 18 V	
Bias Voltage	+5 VDC @ 40 mA (Max.)	
Output Power	+3 dBm (Min.)	
Tuning Sensitivity	100 - 270 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	12 dB (Typ.)	
Frequency Pulling	15 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	8 MHz/V (Typ.)	
Tuning Port Capacitance	72 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-90
	100 kHz	-110
Operating Temperature Range	-40 to +85 °C	

Package # 343

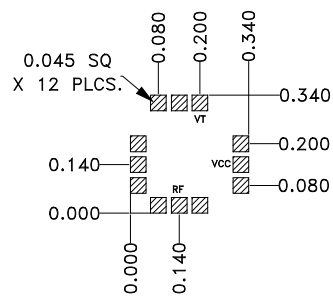


TOP VIEW



BOTTOM VIEW

RECOMMENDED PCB LAYOUT



DIMENSIONS ARE IN INCHES.

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

ALL UNLABELED PINS TO BE GROUNDED.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	2000 (Max.)
5	2500 (Min.)
8	2850 (Min.)
12	3250 (Min.)
18	4000 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+19 V
DC Voltage Applied to RF Out	± 25 V

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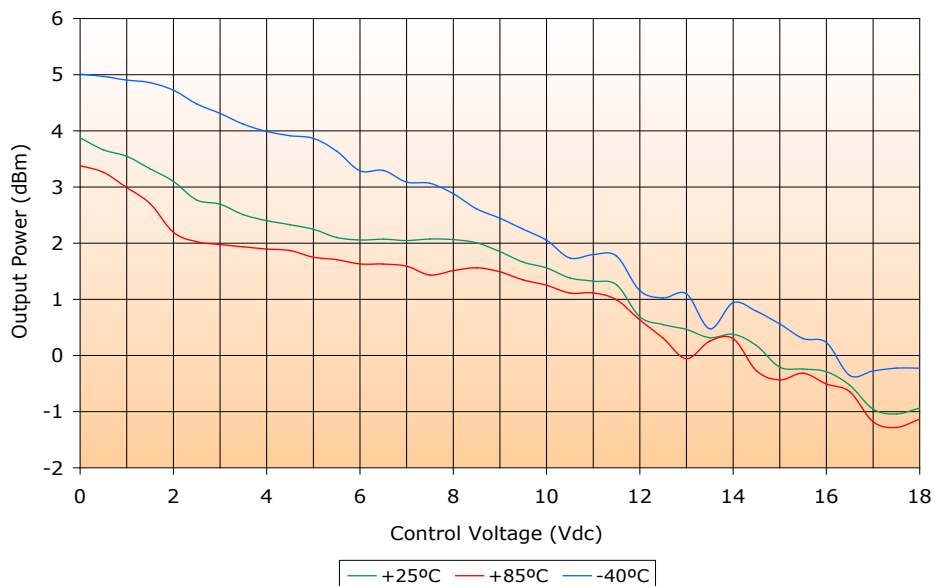
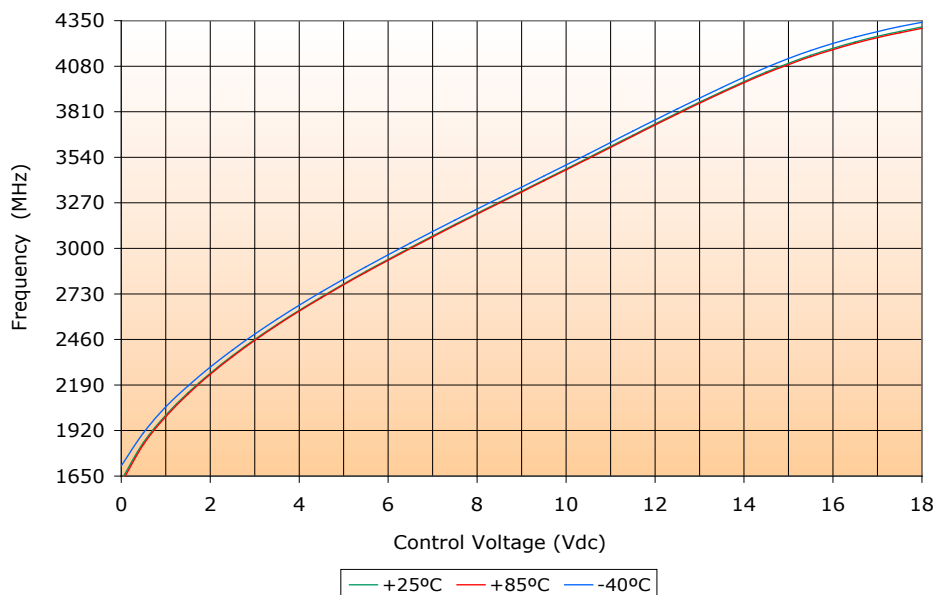
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PERFORMANCE PLOTS



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 | 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

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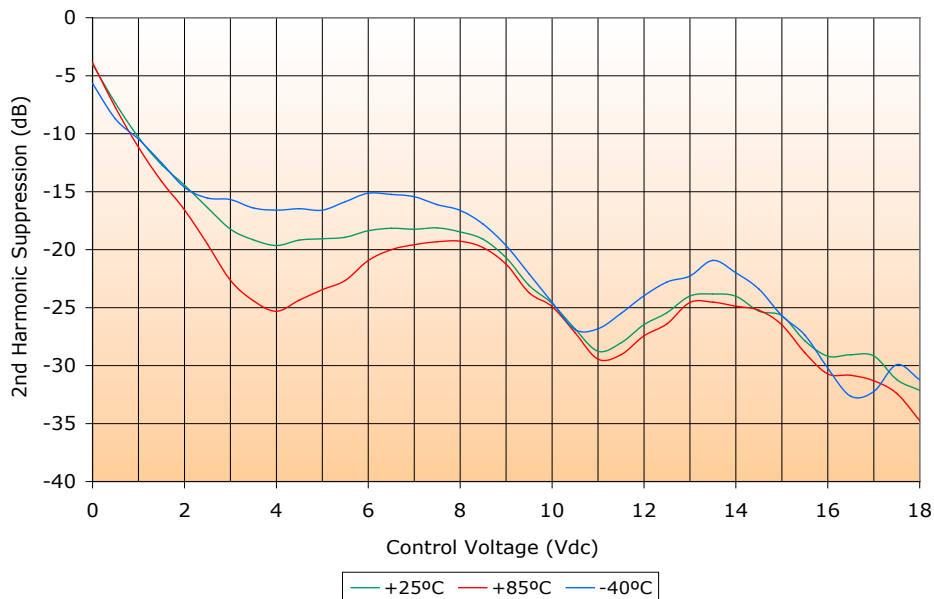
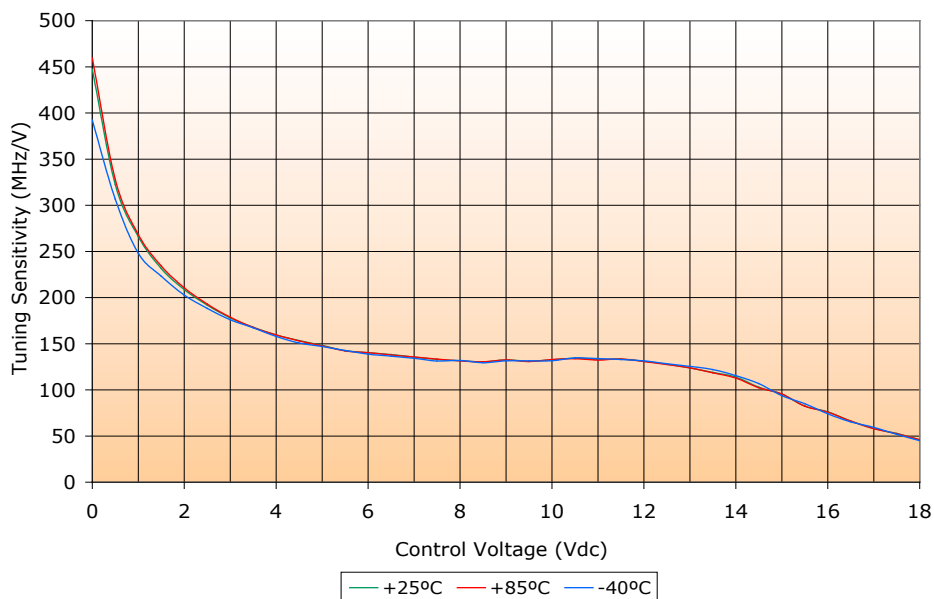
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