

# VOLTAGE CONTROLLED OSCILLATOR

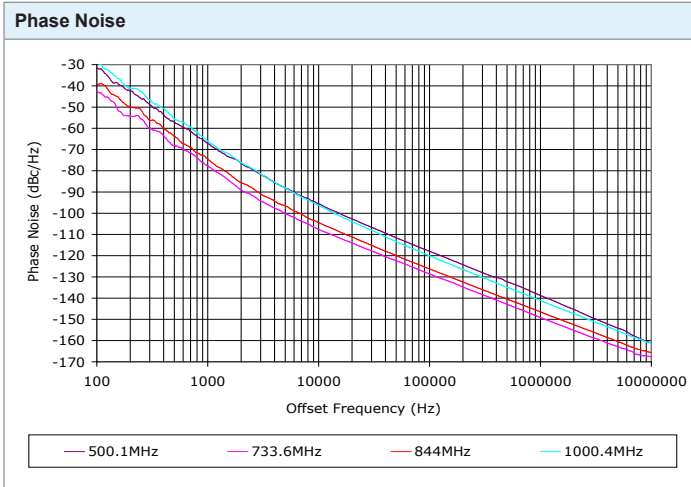
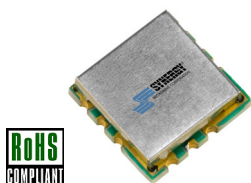
## SURFACE MOUNT MODEL: DCO50100-5

**WIDE BANDWIDTH**

**500 - 1000 MHz**

**FEATURES:**

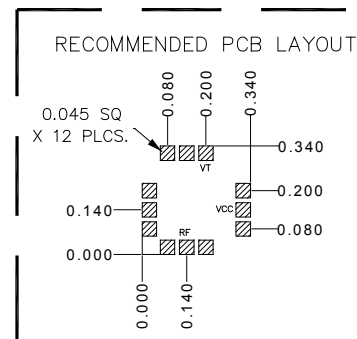
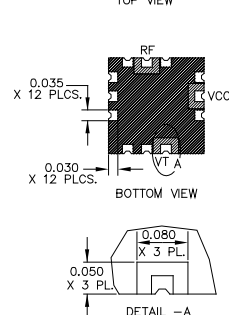
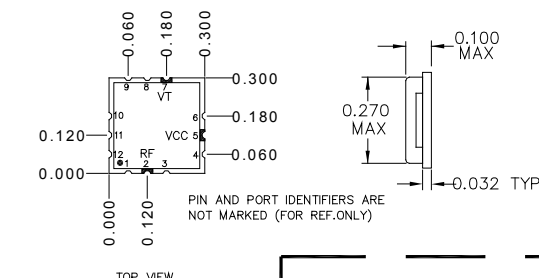
- ▶ Miniature Size, Surface Mount (0.3" x 0.3")
- ▶ Exceptional Phase Noise Performance
- ▶ Fast Tuning
- ▶ Planar Resonator Construction



**SPECIFICATIONS (Rev. A 01/09/14)**

Frequency	500 - 1000 MHz	
Tuning Voltage	See table below.	
Bias Voltage	+5 VDC @ 34 mA (Max.)	
Output Power	+4 dBm (Min.)	
Tuning Sensitivity	28 - 58 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	10 dB (Typ.)	
Frequency Pulling	8 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	4 MHz/V (Typ.)	
Tuning Port Capacitance	100 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-100
	100 kHz	-123
Operating Temperature Range	-40 to +85 °C	

Package # 343



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300 & AN7302

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

DIMENSIONS ARE IN INCHES. ALL UNLABELED PINS TO BE GROUND.

**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	500 (Max.)
5	580 (Min.)
8	700 (Min.)
12	880 (Min.)
15	1000 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+18 V
DC Voltage Applied to RF Out	± 25 V

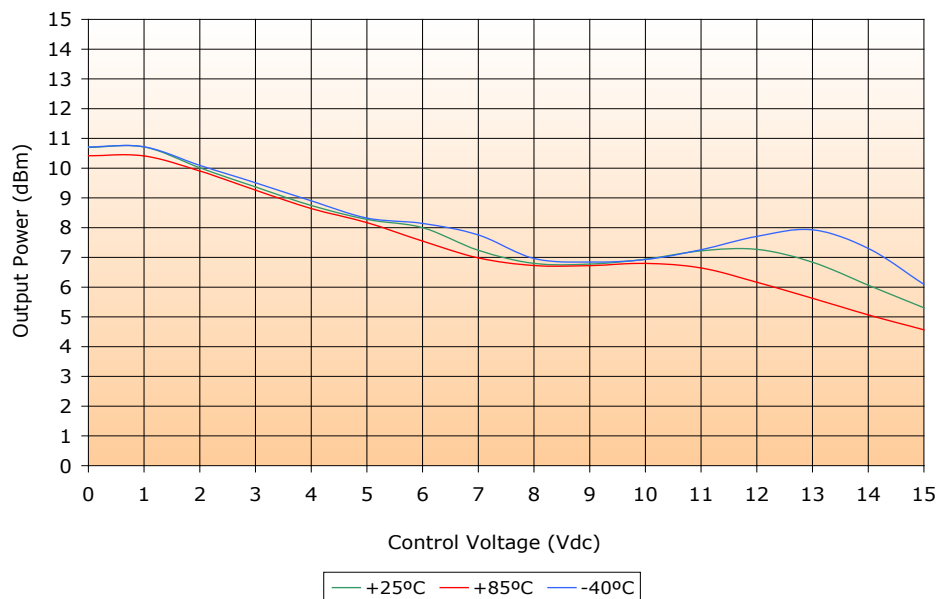
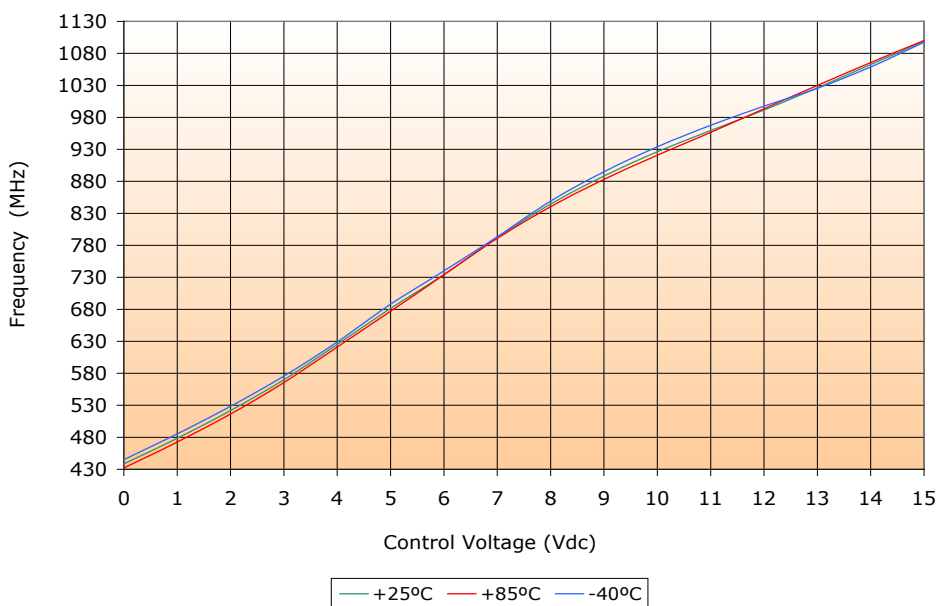
# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCO50100-5

WIDE BANDWIDTH

500 - 1000 MHz

PERFORMANCE PLOTS



# VOLTAGE CONTROLLED OSCILLATOR

## SURFACE MOUNT MODEL: DCO50100-5

WIDE BANDWIDTH

500 - 1000 MHz

PERFORMANCE PLOTS

