

# VOLTAGE CONTROLLED OSCILLATOR

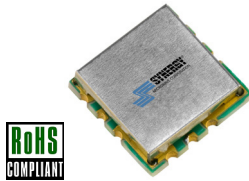
## SURFACE MOUNT MODEL: DCO100200-5

**WIDE BANDWIDTH**

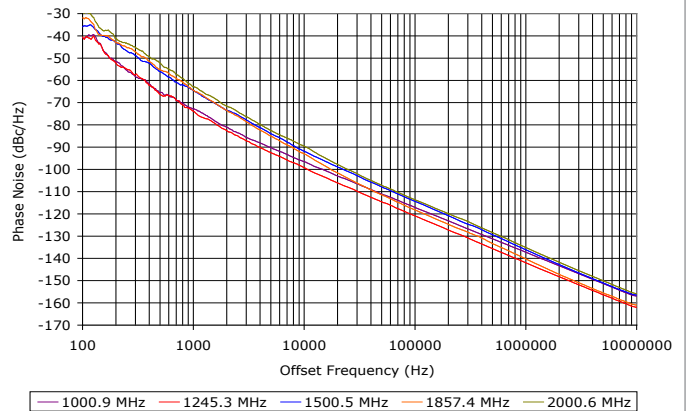
**1000 - 2000 MHz**

**FEATURES:**

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



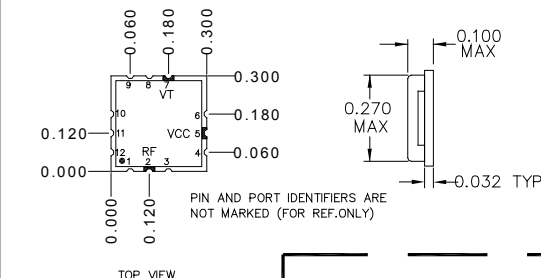
**Phase Noise**



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

Frequency	1000 - 2000 MHz						
Tuning Voltage	See table below.						
Bias Voltage	+5 VDC @ 36 mA (Max.)						
Output Power	+1 dBm (Min.)						
Tuning Sensitivity	30 - 70 MHz/V (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	12 dB (Typ.)						
Frequency Pulling	5 MHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	5 MHz/V (Typ.)						
Tuning Port Capacitance	82 pF (Typ.)						
Typical Phase Noise	<table border="1"> <tr> <th>Offset</th> <th>dBc/Hz</th> </tr> <tr> <td>10 kHz</td> <td>-95</td> </tr> <tr> <td>100 kHz</td> <td>-117</td> </tr> </table>	Offset	dBc/Hz	10 kHz	-95	100 kHz	-117
	Offset	dBc/Hz					
	10 kHz	-95					
100 kHz	-117						
Operating Temperature Range	-40 to +85 °C						

Package # 343

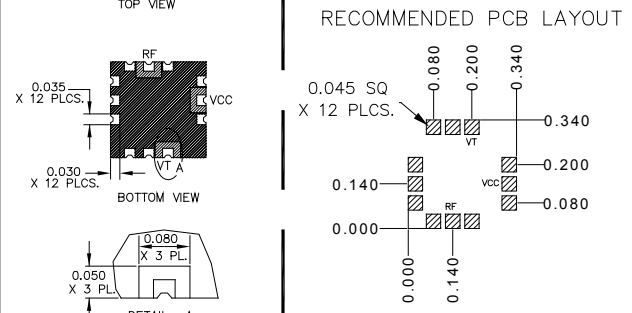


**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	1000 (Max.)
5	1050 (Min.)
8	1250 (Min.)
12	1475 (Min.)
15	1650 (Min.)
18	1800 (Min.)
24	2000 (Min.)

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+28 V
DC Voltage Applied to RF Out	± 25 V



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300 & AN7302

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

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

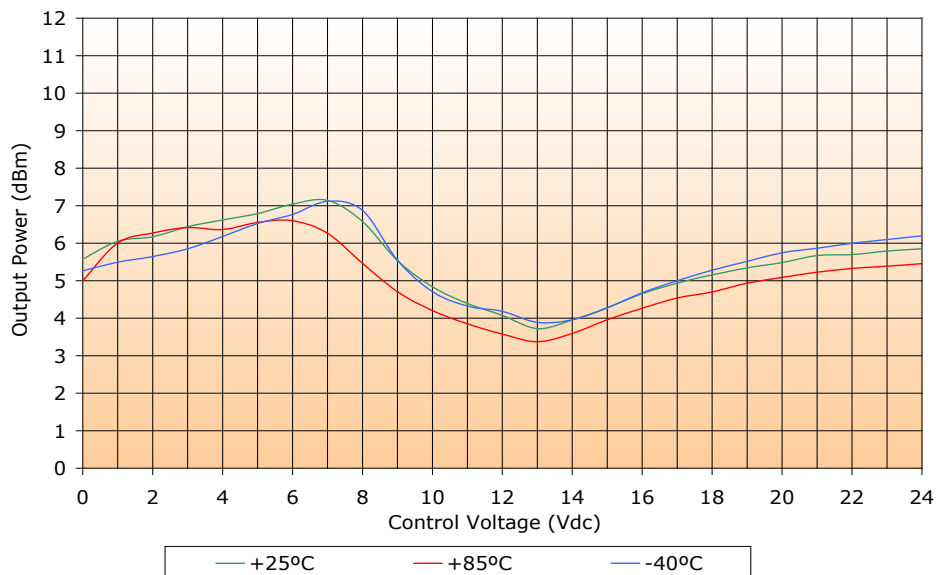
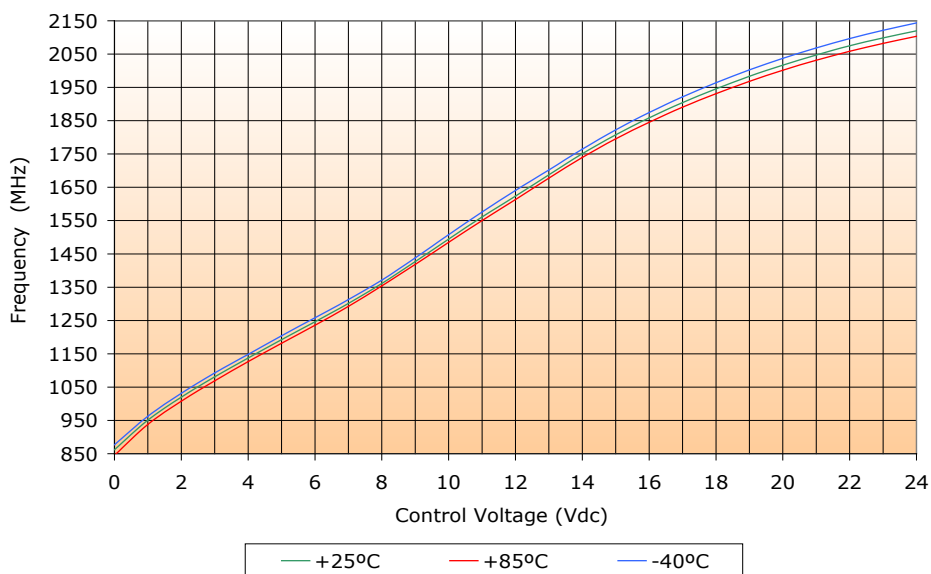
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PERFORMANCE PLOTS



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