

VOLTAGE CONTROLLED OSCILLATOR

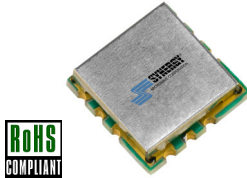
SURFACE MOUNT MODEL: DCO170340-5

OPTIMIZED BANDWIDTH

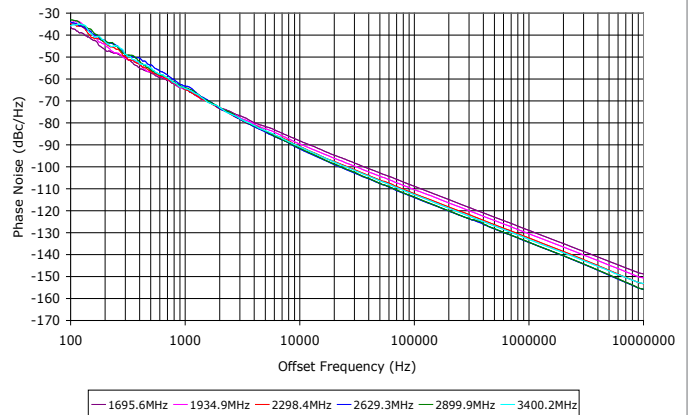
1700 - 3400 MHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Fast Tuning
- ▶ Small Size, Surface Mount



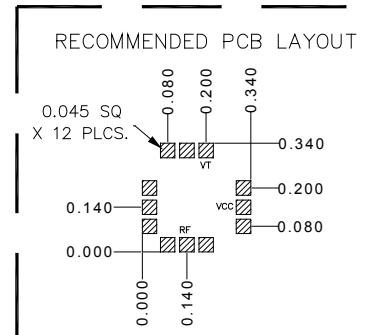
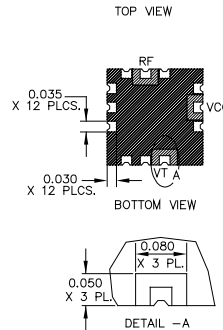
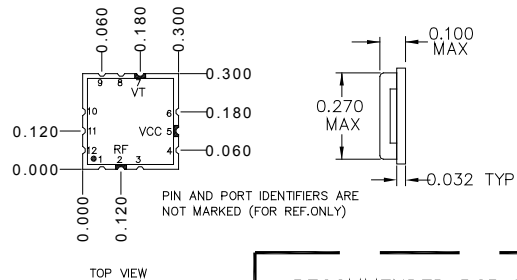
Phase Noise



SPECIFICATIONS (Rev C 04/10/14)

Frequency	1700 - 3400 MHz						
Tuning Voltage	See table below.						
Bias Voltage	+5 VDC @ 35 mA (Max.)						
Output Power	3.5 dBm (Min.)						
Tuning Sensitivity	45 - 130 MHz/V (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	15 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	<table border="1"> <thead> <tr> <th>Offset</th> <th>dBc/Hz</th> </tr> </thead> <tbody> <tr> <td>10 kHz</td> <td>-90</td> </tr> <tr> <td>100 kHz</td> <td>-112</td> </tr> </tbody> </table>	Offset	dBc/Hz	10 kHz	-90	100 kHz	-112
	Offset	dBc/Hz					
	10 kHz	-90					
100 kHz	-112						
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 GROUNDING.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	1700 (Max.)
5	1880 (Min.)
8	2230 (Min.)
12	2660 (Min.)
15	2940 (Min.)
18	3150 (Min.)
24	3400 (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

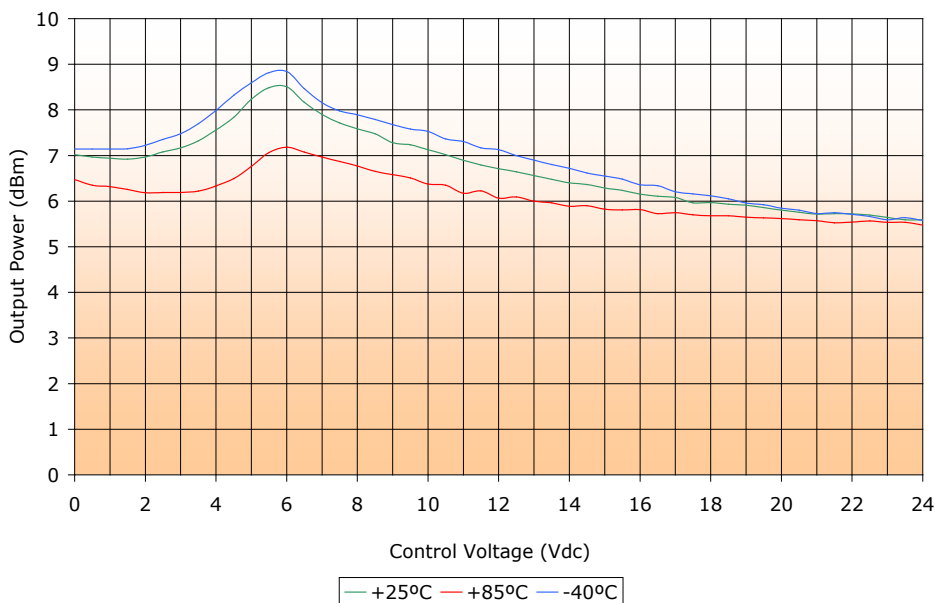
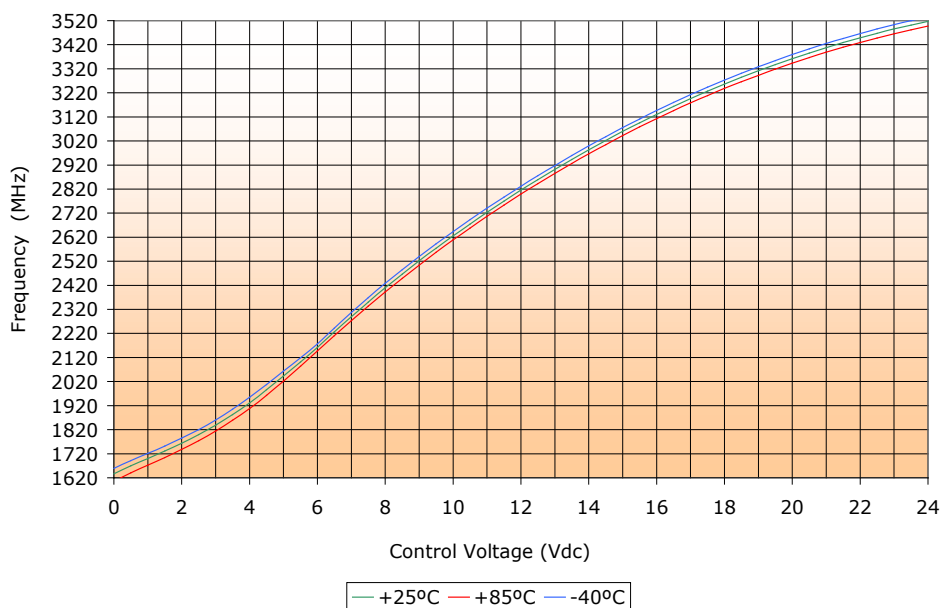
VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO170340-5

OPTIMIZED BANDWIDTH

1700 - 3400 MHz

PERFORMANCE PLOTS



VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO170340-5

OPTIMIZED BANDWIDTH

1700 - 3400 MHz

PERFORMANCE PLOTS

