

VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO2000-5

OPTIMIZED BANDWIDTH

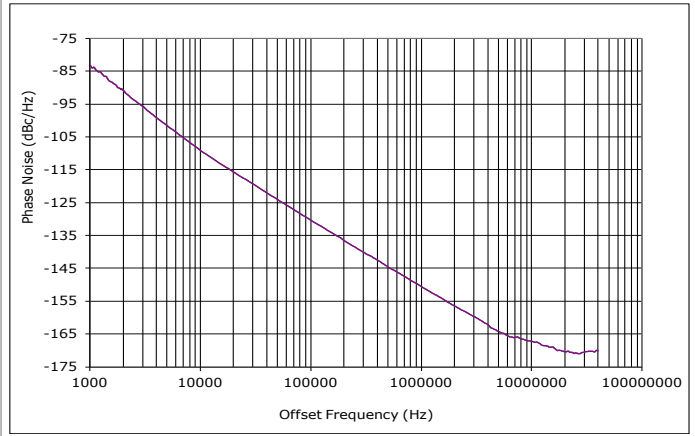
2000 MHz

FEATURES:

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



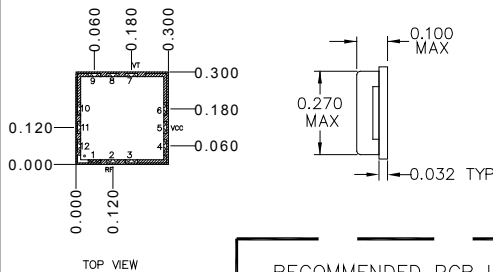
Phase Noise



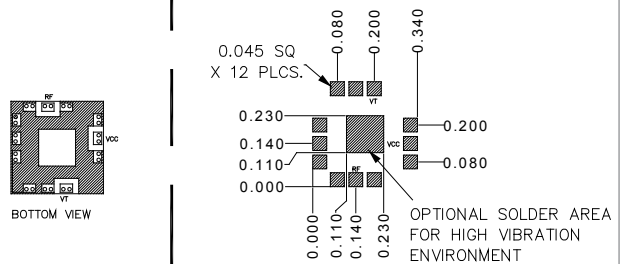
SPECIFICATIONS (Rev. A 08/14/14)

Frequency	2000 MHz						
Tuning Voltage	0.5 - 4.5 V						
Bias Voltage	+4.5 VDC @ 32 mA (Max.)						
Output Power	+5 dBm (Min.)						
Tuning Sensitivity	15 - 20 MHz/V (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	17 dB (Typ.)						
Frequency Pulling	1 MHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	1 MHz/V (Typ.)						
Tuning Port Capacitance	47 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>-110</td> </tr> <tr> <td>100 kHz</td> <td>-130</td> </tr> </tbody> </table>	Offset	dBc/Hz	10 kHz	-110	100 kHz	-130
	Offset	dBc/Hz					
	10 kHz	-110					
100 kHz	-130						
Operating Temperature Range	-40 to +85 °C						

Package # 343LF



RECOMMENDED PCB LAYOUT



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7302
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
 DIMENSIONS ARE IN INCHES.
 ALL UNLABELED PINS TO BE GROUNDDED.

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+15 V
DC Voltage Applied to RF Out	± 25 V

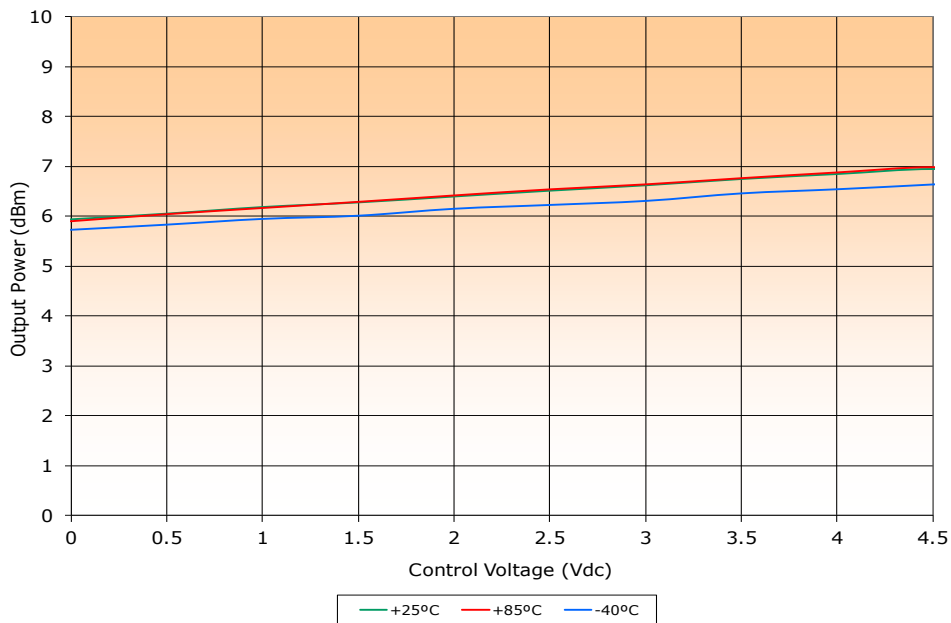
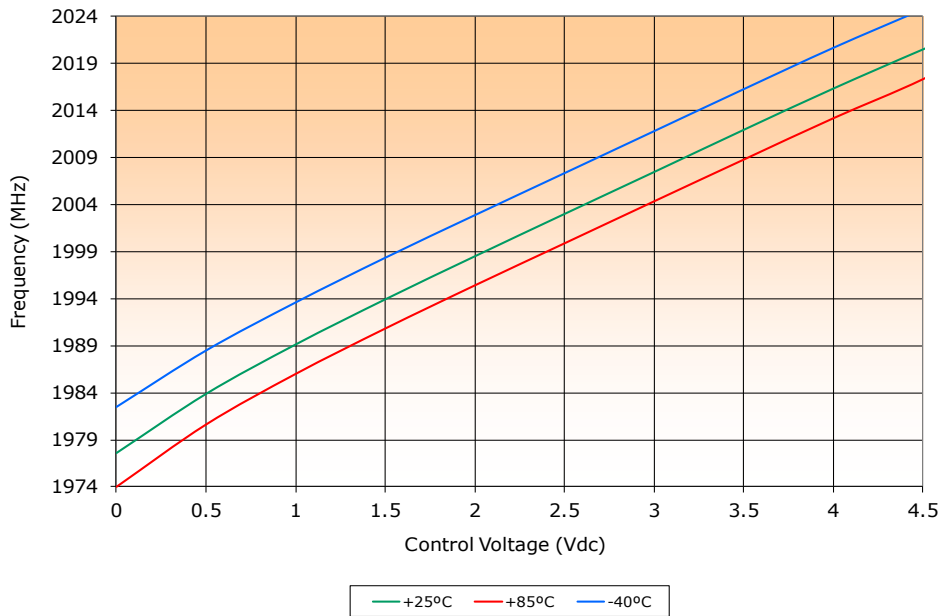
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SURFACE MOUNT MODEL: DCO2000-5

OPTIMIZED BANDWIDTH

2000 MHz

PERFORMANCE PLOTS



VOLTAGE CONTROLLED OSCILLATOR SURFACE MOUNT MODEL: DCO2000-5

OPTIMIZED BANDWIDTH

2000 MHz

PERFORMANCE PLOTS

