

VOLTAGE CONTROLLED OSCILLATOR

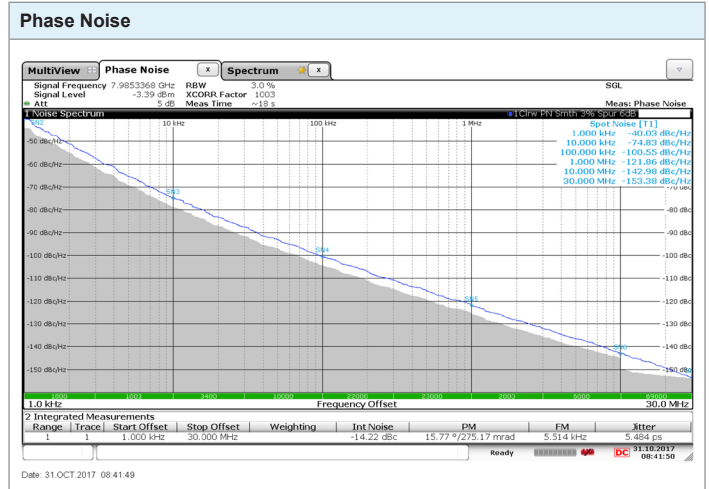
SURFACE MOUNT MODEL: DCO400800-5

WIDE BANDWIDTH

4000 - 8000 MHz

FEATURES:

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



SPECIFICATIONS (Rev. D 11/07/17)

Frequency	4000 - 8000 MHz						
Tuning Voltage	See table below.						
Bias Voltage	+5 VDC @ 20 mA (Max.)						
Output Power	-4 dBm (Min.)						
Tuning Sensitivity	120 - 620 MHz/V (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	10 dB (Typ.)						
Frequency Pulling	60 MHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	15 MHz/V (Typ.)						
Tuning Port Capacitance	30 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>-73</td> </tr> <tr> <td>100 kHz</td> <td>-98</td> </tr> </tbody> </table>	Offset	dBc/Hz	10 kHz	-73	100 kHz	-98
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	10 kHz	-73					
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Operating Temperature Range	-40 to +85 °C						

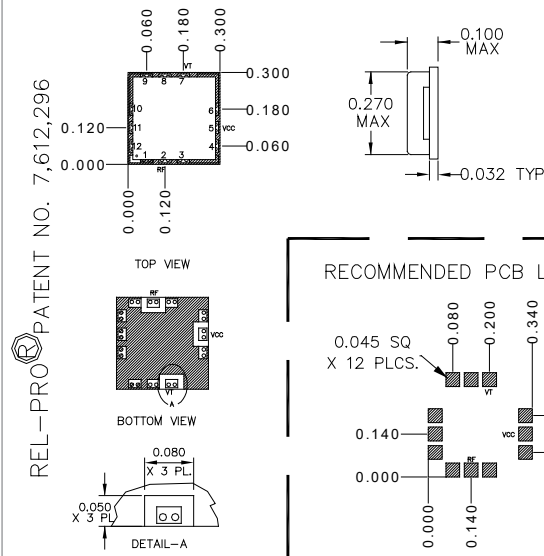
Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.3	4000 (Max.)
5	5200 (Min.)
8	6200 (Min.)
12	7000 (Min.)
15	8000 (Min.)

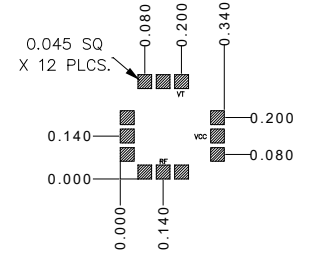
Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+16 V
DC Voltage Applied to RF Out	± 25 V

Package # 343LF



RECOMMENDED PCB LAYOUT



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 AND AN7302
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
 DIMENSIONS ARE IN INCHES.
 ALL UNLABELED PINS TO BE GROUNDED.

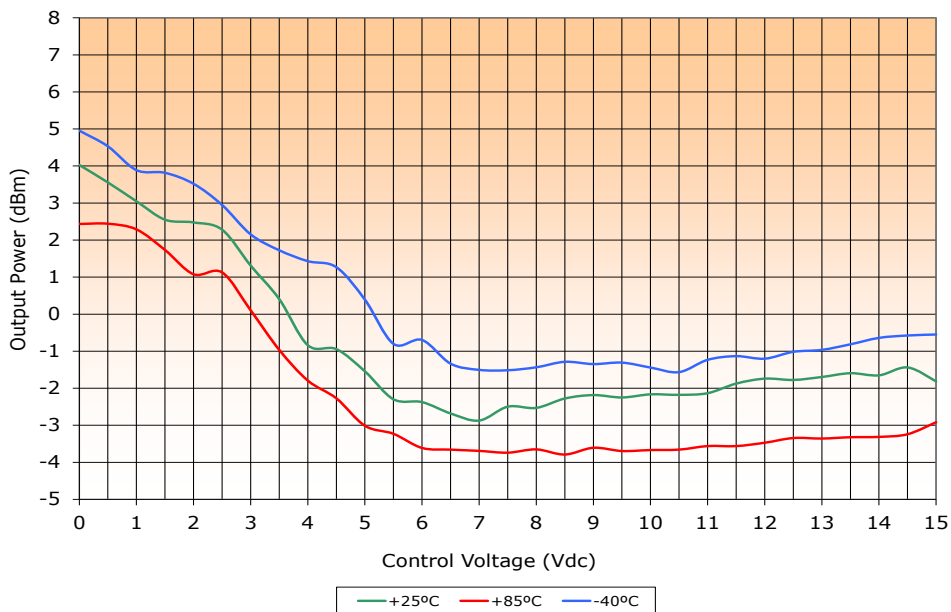
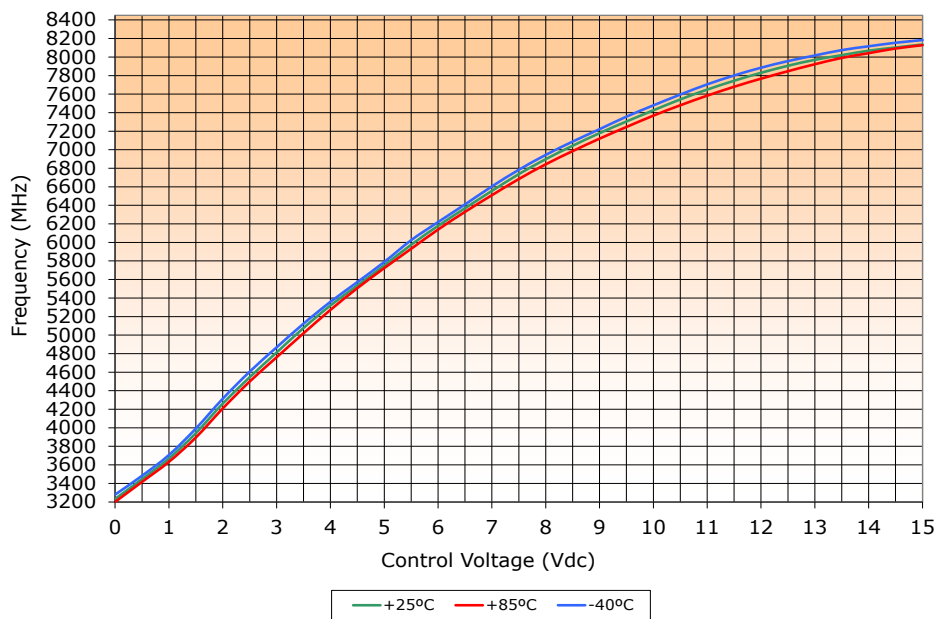
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