

VOLTAGE CONTROLLED OSCILLATOR

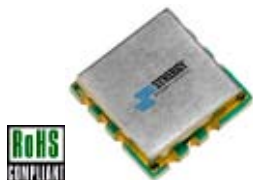
SURFACE MOUNT MODEL: DCO400800-5

WIDE BANDWIDTH

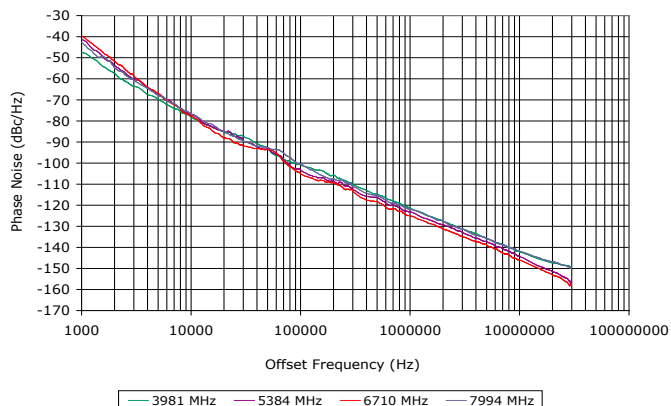
4000 - 8000 MHz

FEATURES:

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



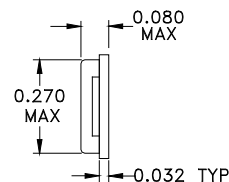
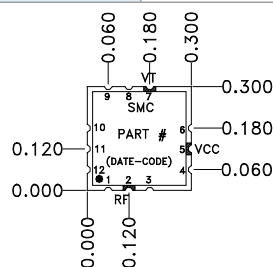
Phase Noise



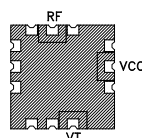
SPECIFICATIONS

Frequency	4000 - 8000 MHz						
Tuning Voltage	See table below.						
Bias Voltage	+5 VDC @ 20 mA (Max.)						
Output Power	-3 dBm (Min.)						
Tuning Sensitivity	120 - 620 MHz/V (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	12 dB (Typ.)						
Frequency Pulling	30 MHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	10 MHz/V (Typ.)						
Tuning Port Capacitance	15 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>-78</td> </tr> <tr> <td>100 kHz</td> <td>-103</td> </tr> </tbody> </table>	Offset	dBc/Hz	10 kHz	-78	100 kHz	-103
	Offset	dBc/Hz					
10 kHz	-78						
100 kHz	-103						
Operating Temperature Range	-40 to +85 °C						

Package # 343

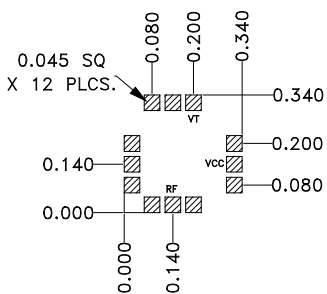


TOP VIEW



BOTTOM VIEW

RECOMMENDED PCB LAYOUT



DIMENSIONS ARE IN INCHES.

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

ALL UNLABELED PINS TO BE GROUNDED.

Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.3	4000 (Max.)
5	5200 (Min.)
8	6200 (Min.)
12	7000 (Min.)
16	8000 (Min.)

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+20 V
DC Voltage Applied to RF Out	± 25 V

This product is manufactured under one or more of the following patents: Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381 | Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823; 60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693

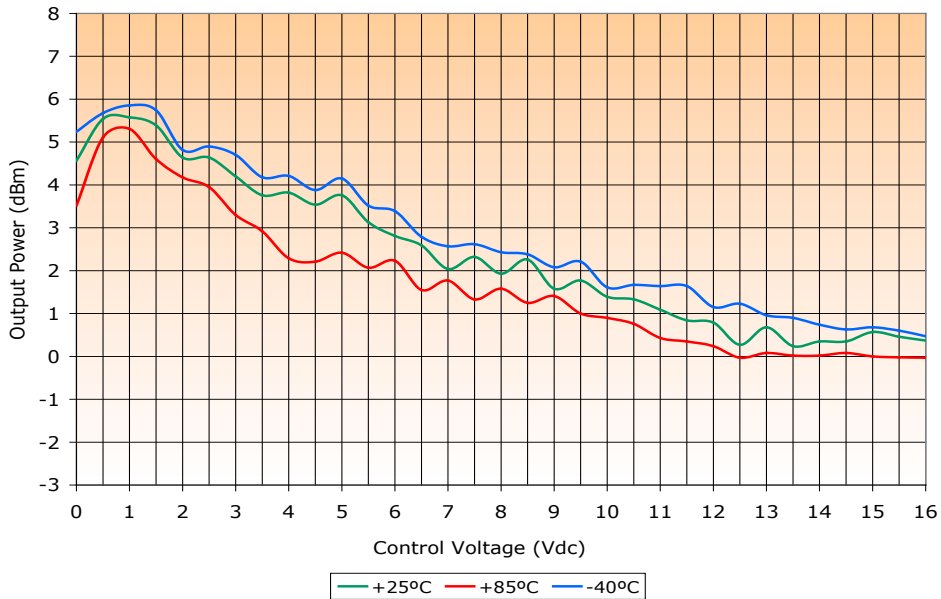
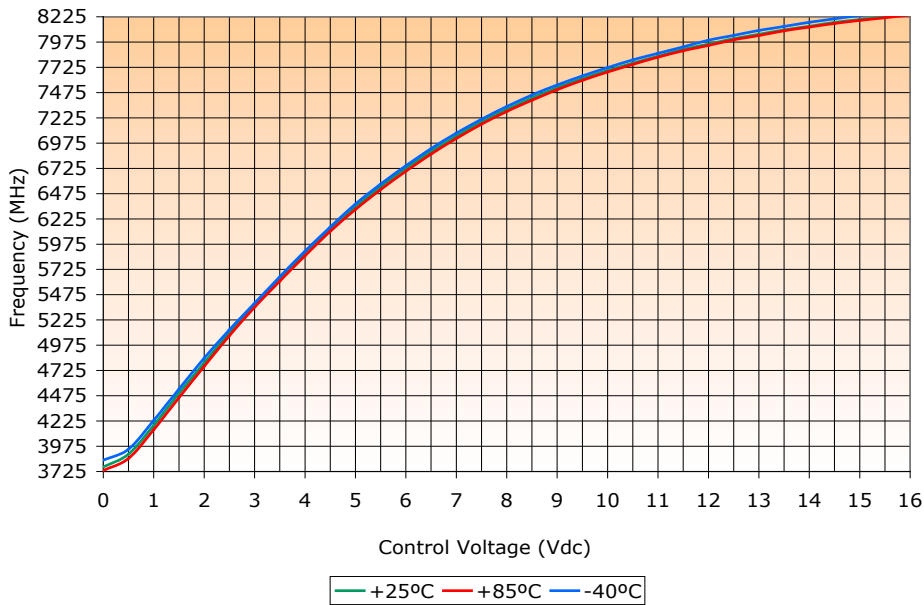
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WIDE BANDWIDTH

4000 - 8000 MHz

PERFORMANCE PLOTS



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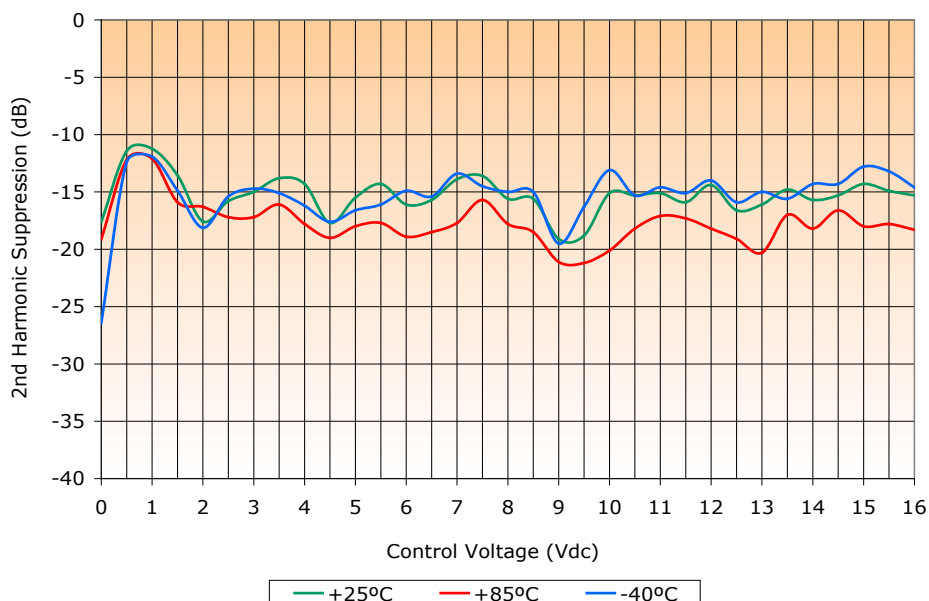
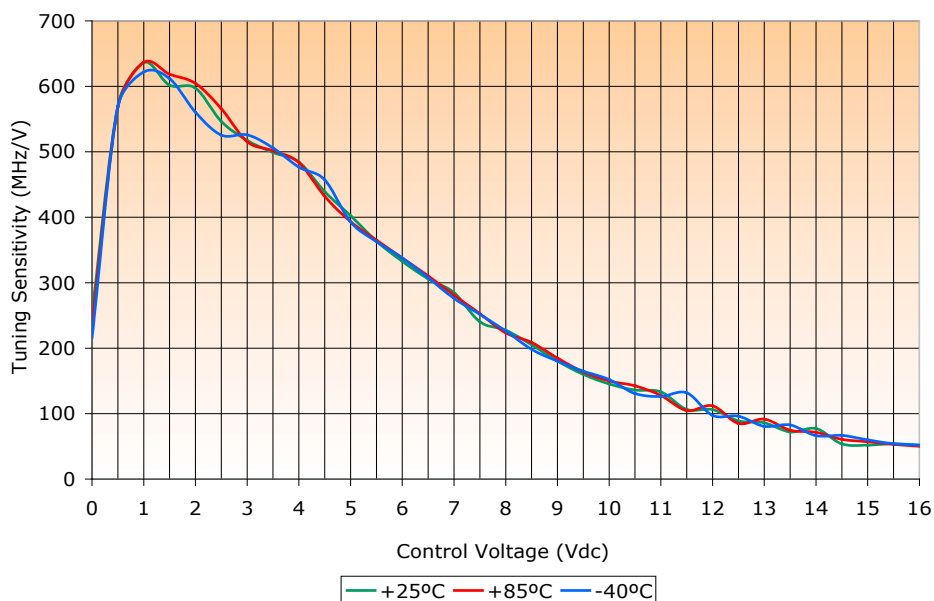
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