

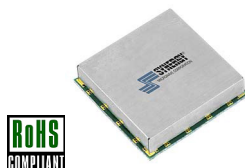
VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO1000-5L

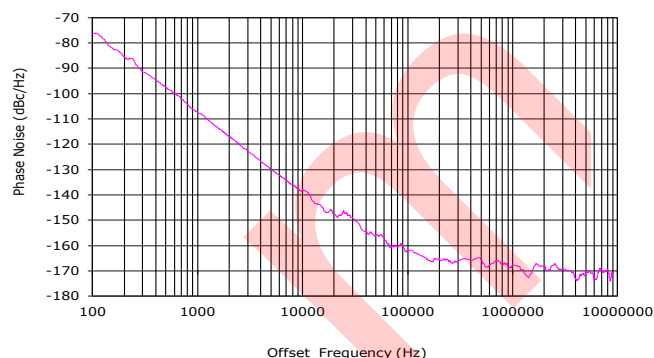
1000 MHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size, Surface Mount
- ▶ Lead Free REL-PRO® Technology



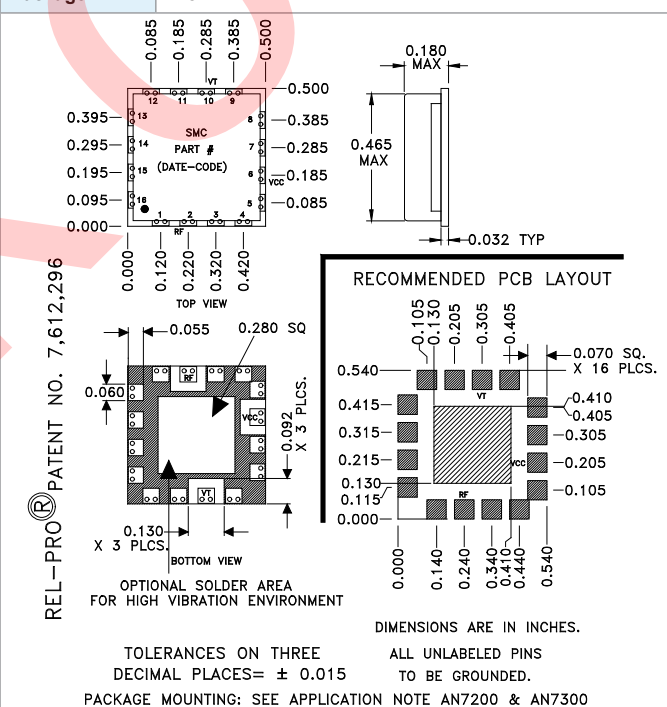
Phase Noise



SPECIFICATIONS (Rev. B 03/10/17)

Frequency	1000 MHz						
Tuning Voltage	0.5 - 12 VDC						
Bias Voltage	+5 VDC ($\pm 5\%$) @ 35 mA (Max.)						
Output Power	+2 dBm (Min.)						
Tuning Sensitivity	20 kHz/V (Typ.)						
Thermal Drift	110 kHz (Typ.)						
Output Impedance	50 Ohms (Nom.)						
Harmonic Suppression	<table border="1"> <thead> <tr> <th></th><th>dBc (Typ.)</th></tr> </thead> <tbody> <tr> <td>2nd</td><td>35</td></tr> <tr> <td>3rd</td><td>25</td></tr> </tbody> </table>		dBc (Typ.)	2nd	35	3rd	25
	dBc (Typ.)						
2nd	35						
3rd	25						
Frequency Pulling	10 kHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	20 kHz/V (Typ.) $V_{CC} \pm 5\%$						
Tuning Port Capacitance	130 pF (Typ.)						
Phase Noise @ 25 °C	<table border="1"> <thead> <tr> <th>Offset</th><th>dBc/Hz (Typ.)</th></tr> </thead> <tbody> <tr> <td>@ 10 kHz</td><td>-137</td></tr> <tr> <td>@ 100 kHz</td><td>-157</td></tr> </tbody> </table>	Offset	dBc/Hz (Typ.)	@ 10 kHz	-137	@ 100 kHz	-157
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@ 10 kHz	-137						
@ 100 kHz	-157						
Operating Temperature Range	-20 to +70 °C						

Package # 278LF



Absolute Maximum Ratings

Storage Temp. Range	-30 to +85 °C
Bias Voltage	+5.5 V
Tuning Voltage	+15 V
DC Voltage Applied to RF Out	± 25 V

Patent : <http://www.synergymwave.com/patents>

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 Patents : <http://www.synergymwave.com/patents>

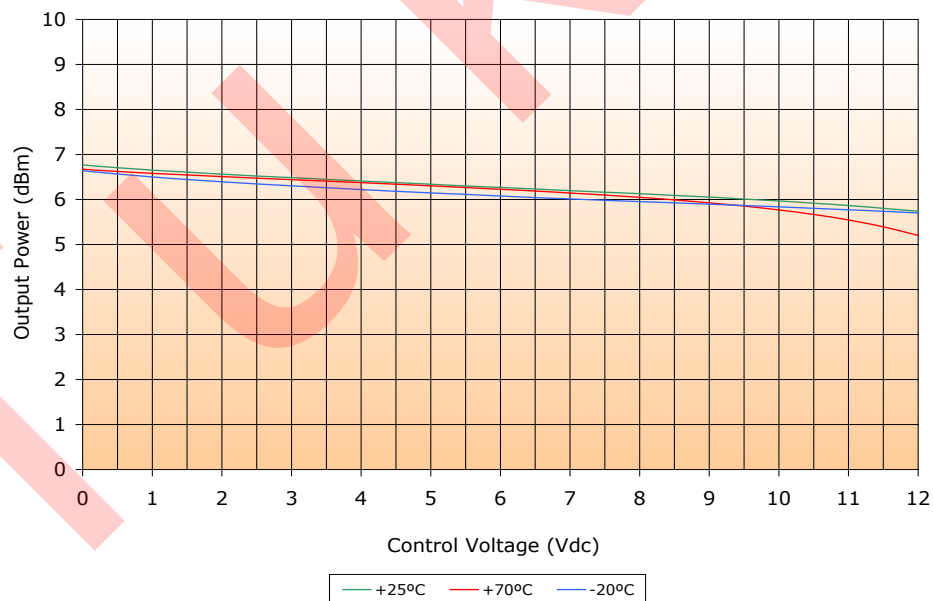
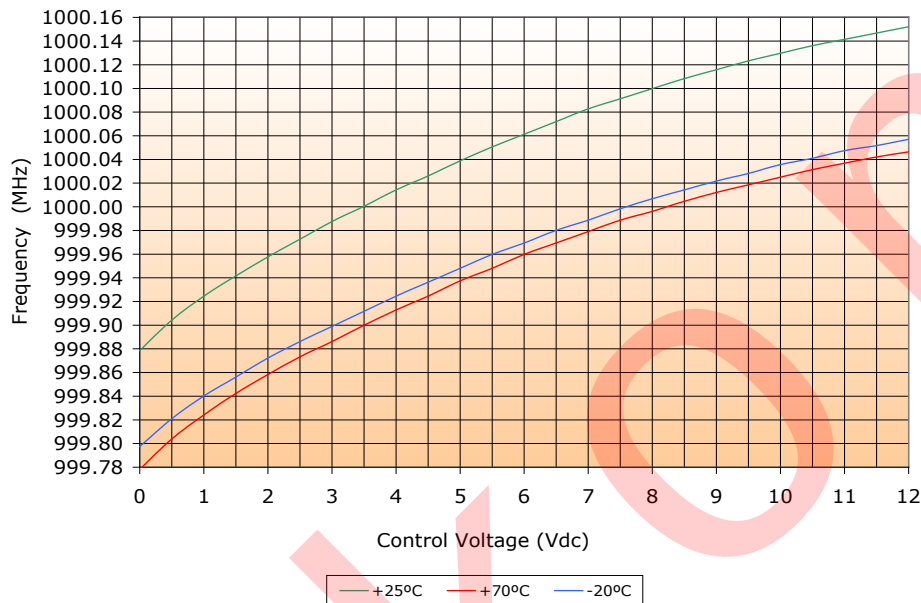


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PERFORMANCE PLOTS

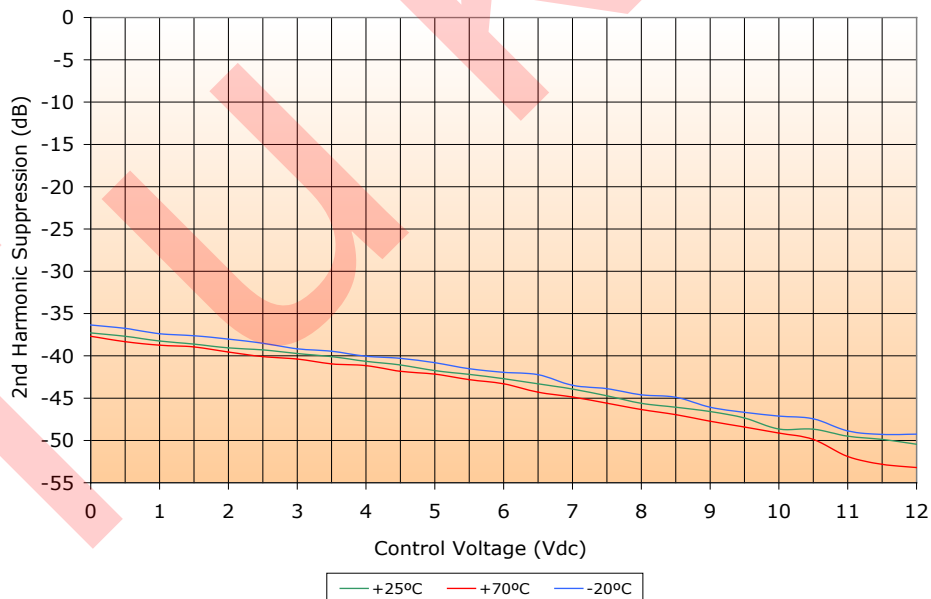
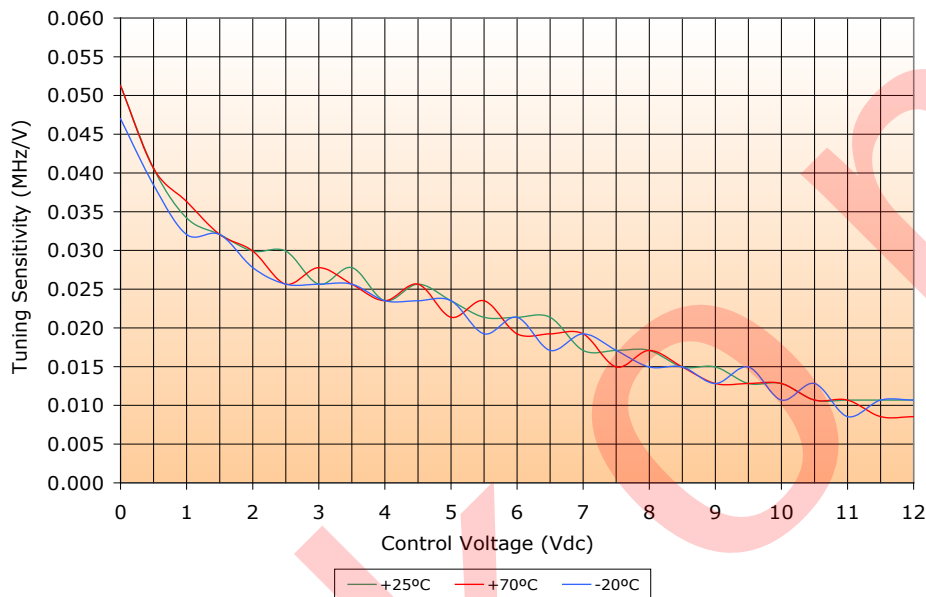


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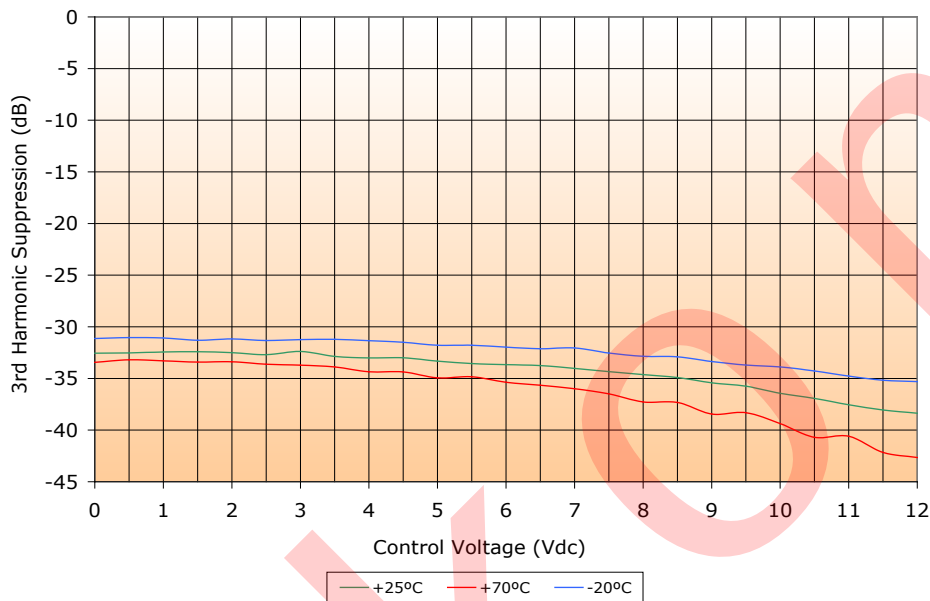
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