

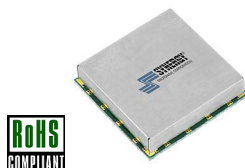
VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO800-5H

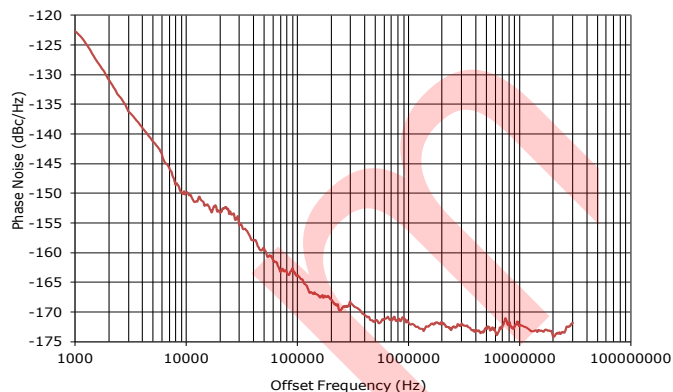
800 MHz

FEATURES:

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



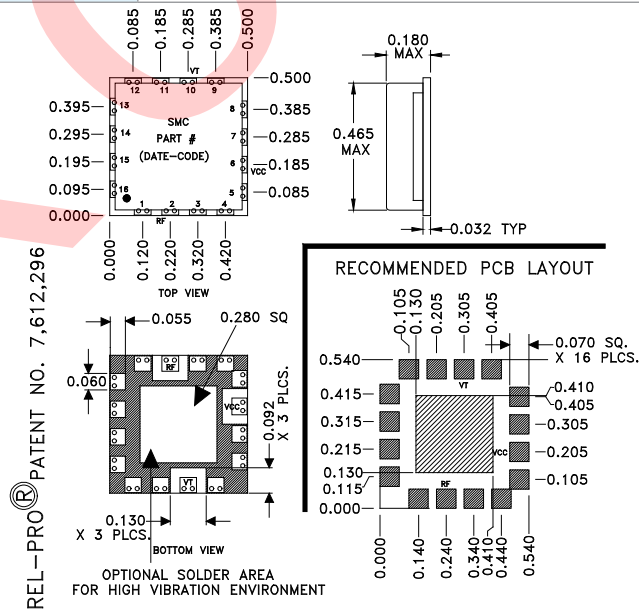
Phase Noise



SPECIFICATIONS (Rev. D 03/10/17)

Frequency	800 MHz						
Tuning Voltage	0.5 - 12 VDC						
Bias Voltage (Vcc)	+5 VDC (± 5%) @ 20 mA (Max.)						
Output Power	+3 dBm (Min.)						
Tuning Sensitivity	18 kHz/V (Typ.)						
Thermal Drift	80 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>20</td></tr> <tr> <td>3rd</td><td>23</td></tr> </tbody> </table>		dBc (Typ.)	2nd	20	3rd	23
	dBc (Typ.)						
2nd	20						
3rd	23						
Frequency Pulling	10 kHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	5 kHz/V (Typ.) Vcc ± 5%						
Tuning Port Capacitance	125 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>-150</td></tr> <tr> <td>@ 100 kHz</td><td>-164</td></tr> </tbody> </table>	Offset	dBc/Hz (Typ.)	@ 10 kHz	-150	@ 100 kHz	-164
Offset	dBc/Hz (Typ.)						
@ 10 kHz	-150						
@ 100 kHz	-164						
Operating Temperature Range	-20 to +70 °C						

Package # 278LF



TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300

Absolute Maximum Ratings

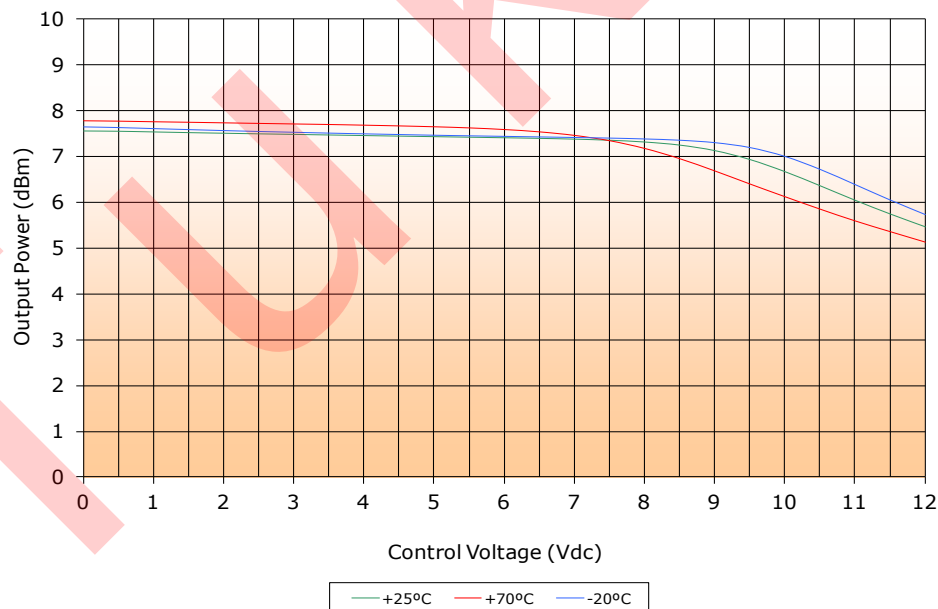
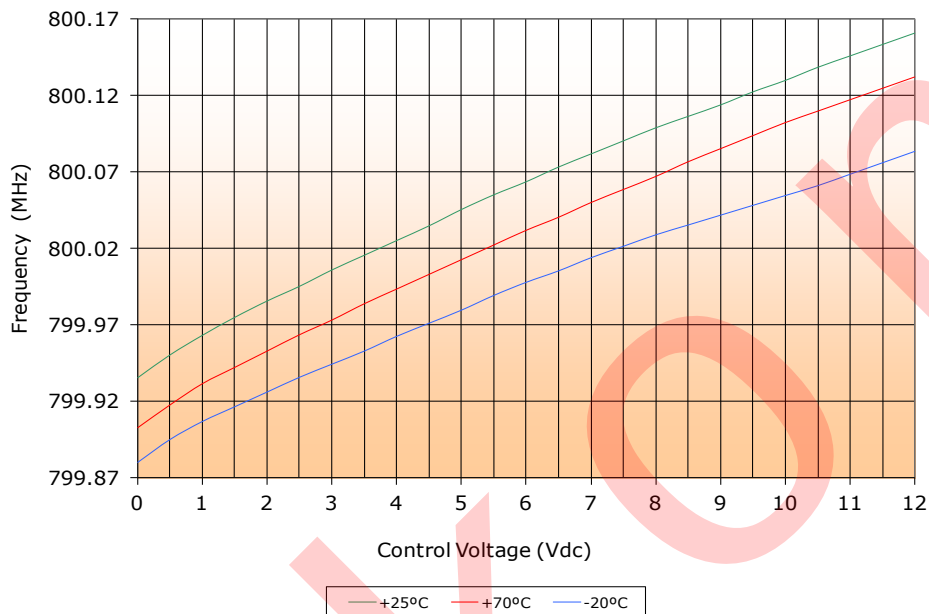
Storage Temp. Range	-40 to +85 °C
Bias Voltage	+5.5 V
Tuning Voltage	+15 V
DC Voltage Applied to RF Out	± 25 V

VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO800-5H

800 MHz

PERFORMANCE PLOTS

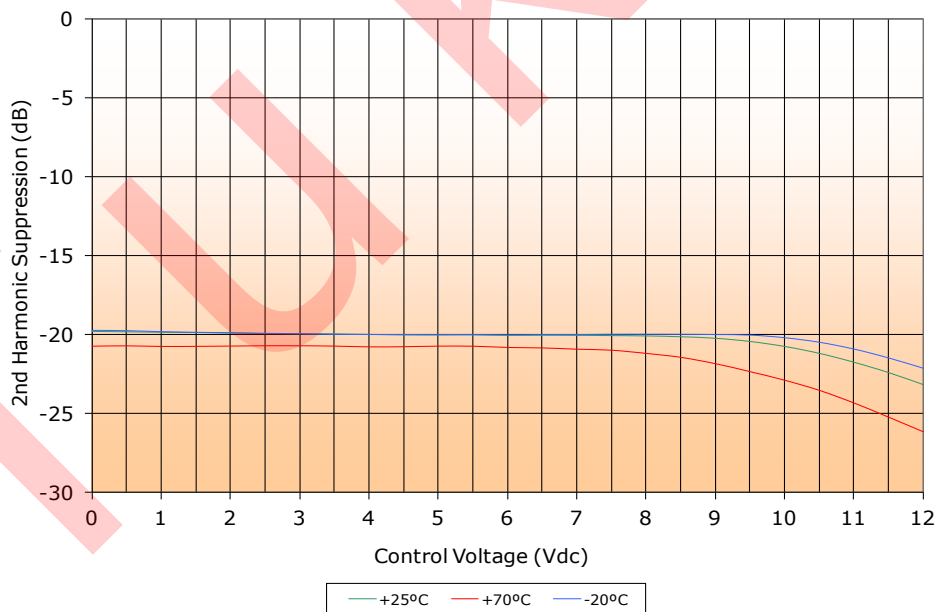
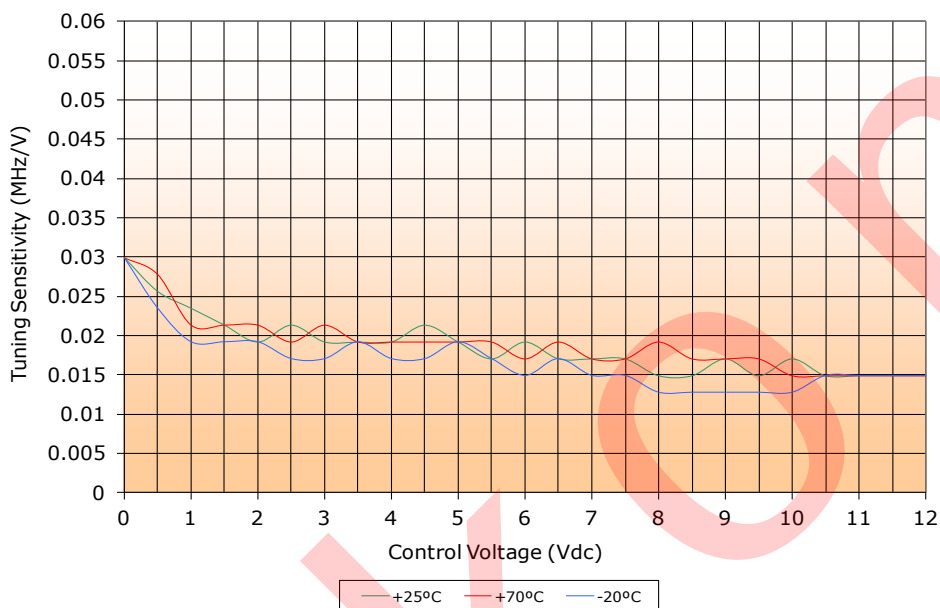


VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO800-5H

800 MHz

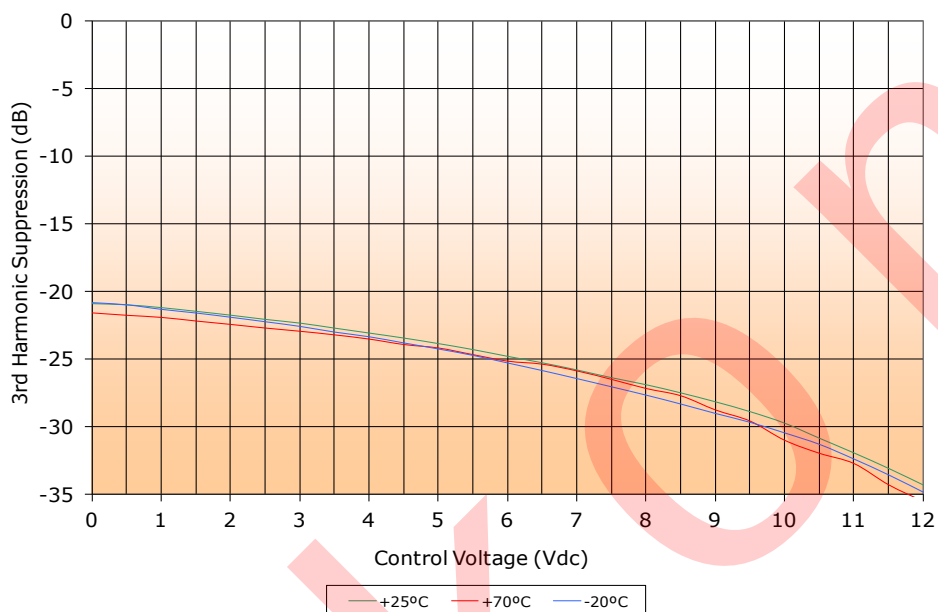
PERFORMANCE PLOTS



VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO800-5H

800 MHz



PERFORMANCE PLOTS