

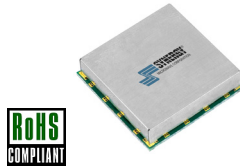
VOLTAGE CONTROLLED SAW OSCILLATOR

SURFACE MOUNT MODEL: HFSO1500-5

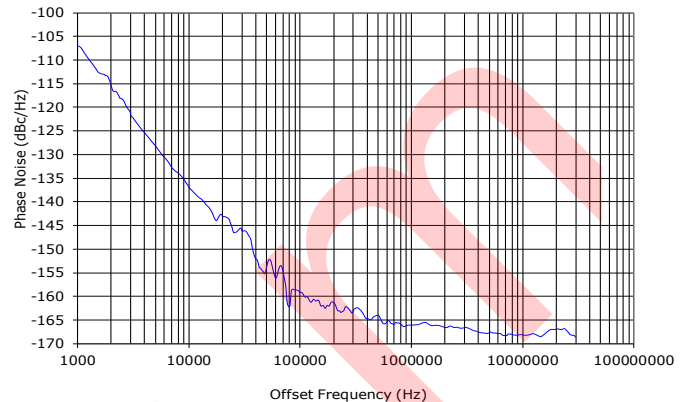
1500 MHz

FEATURES:

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



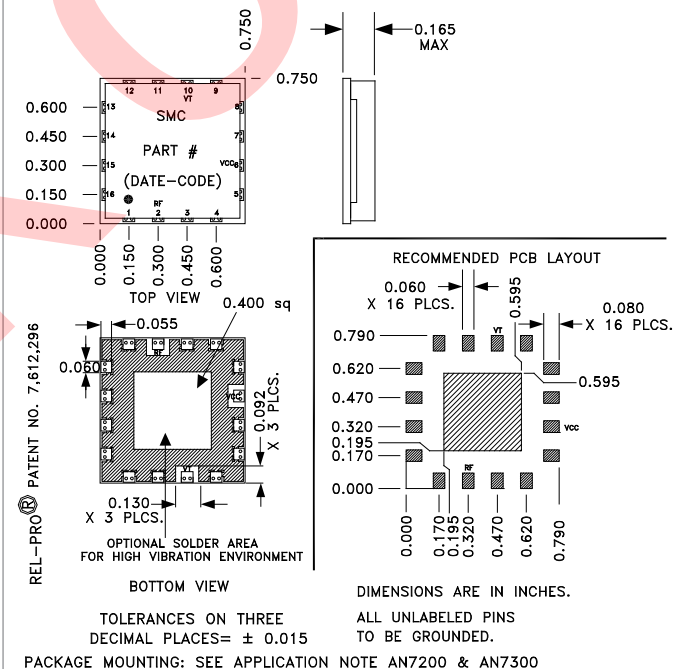
Phase Noise



SPECIFICATIONS (Rev. A 09/01/20)

Frequency	1500 MHz						
Tuning Voltage	0.5 - 12 VDC						
Bias Voltage (Vcc)	+5 VDC @ 100 mA (Max.)						
Output Power	+10 dBm (Min.)						
Tuning Sensitivity	30 kHz/V (Typ.)						
Thermal Drift	170 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>16</td></tr> <tr> <td>3rd</td><td>25</td></tr> </tbody> </table>		dBc (Typ.)	2nd	16	3rd	25
	dBc (Typ.)						
2nd	16						
3rd	25						
Sub-Harmonic Suppression	23 dBc (Typ.)						
Frequency Pulling	15 kHz (Typ. @ 1.75:1 VSWR)						
Frequency Pushing	20 kHz/V (Typ.) Vcc ±5%						
Tuning Port Capacitance	75 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>-140</td></tr> <tr> <td>@ 100 kHz</td><td>-160</td></tr> </tbody> </table>	Offset	dBc/Hz (Typ.)	@ 10 kHz	-140	@ 100 kHz	-160
Offset	dBc/Hz (Typ.)						
@ 10 kHz	-140						
@ 100 kHz	-160						
Operating Temperature Range	-20 to +70 °C						

Package # 320-2LF



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

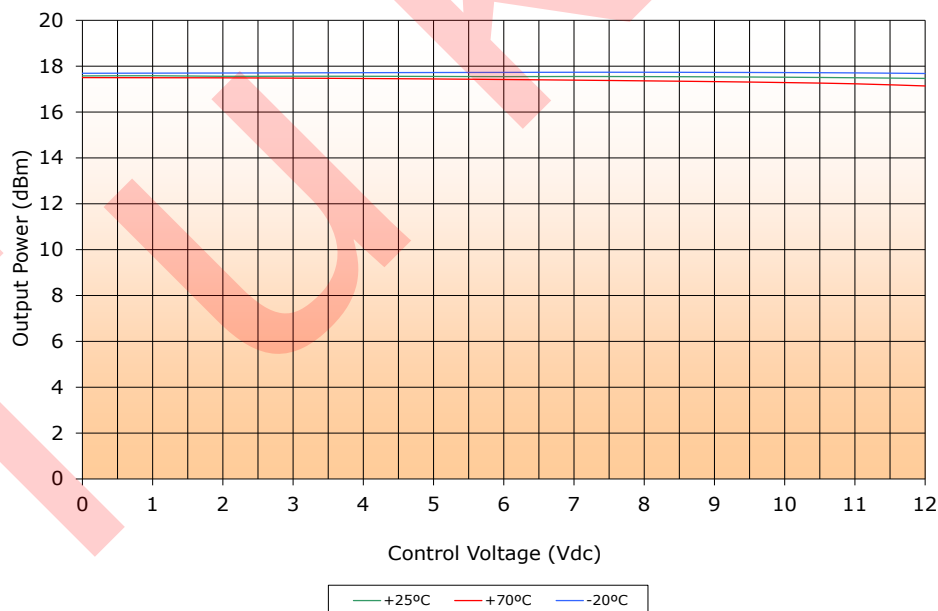
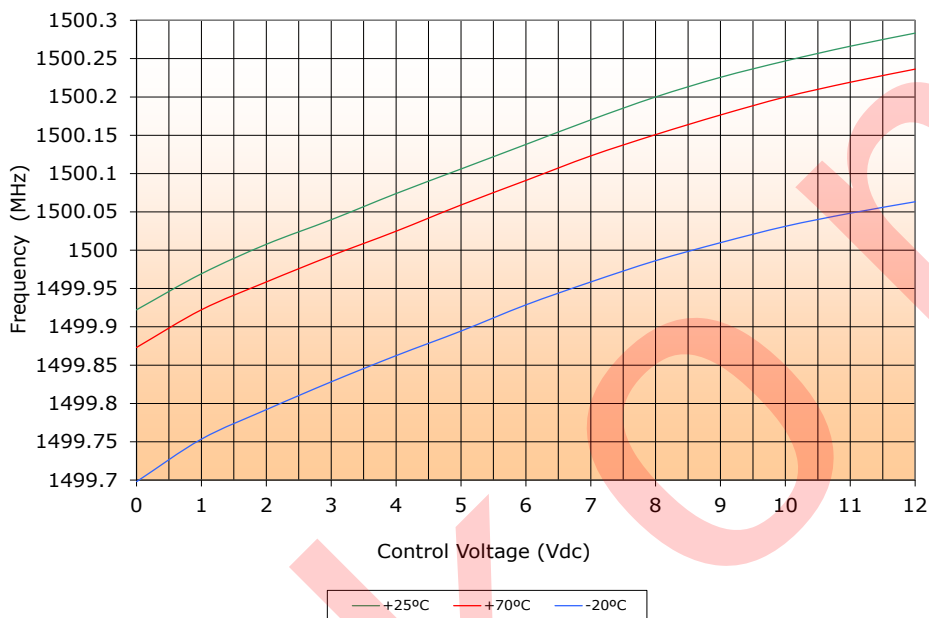
Patent : <http://www.synergymwave.com/patents>

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1500 MHz

PERFORMANCE PLOTS

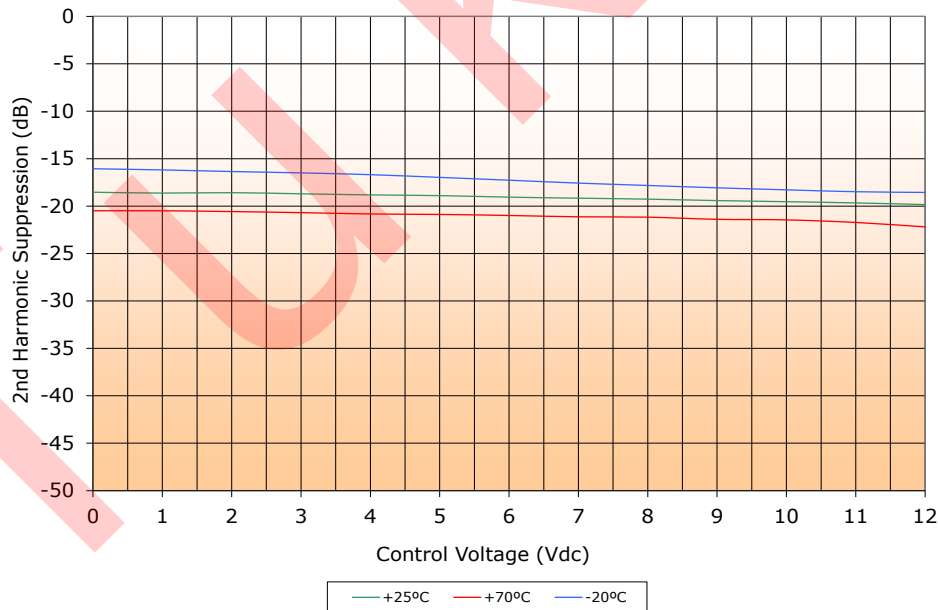
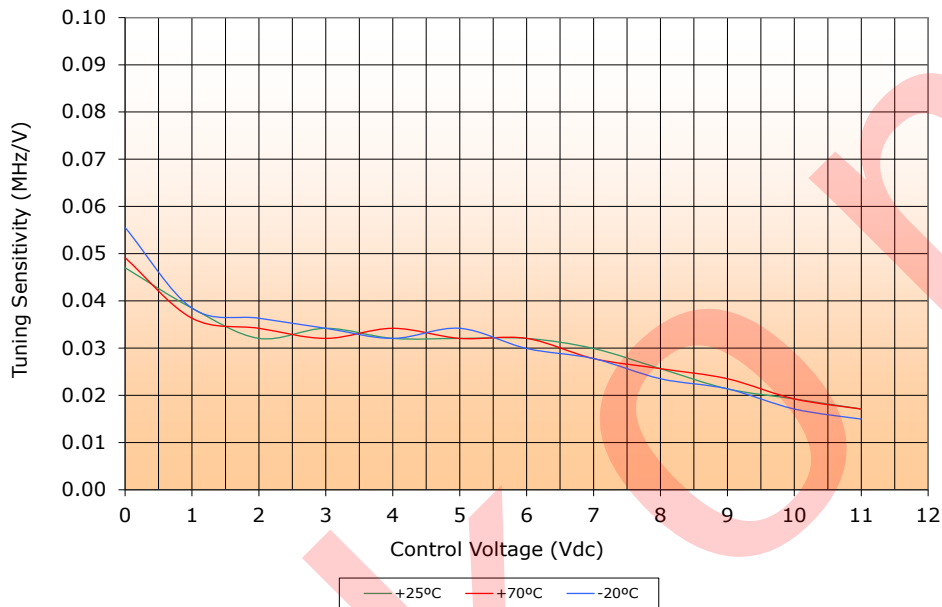


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1500 MHz

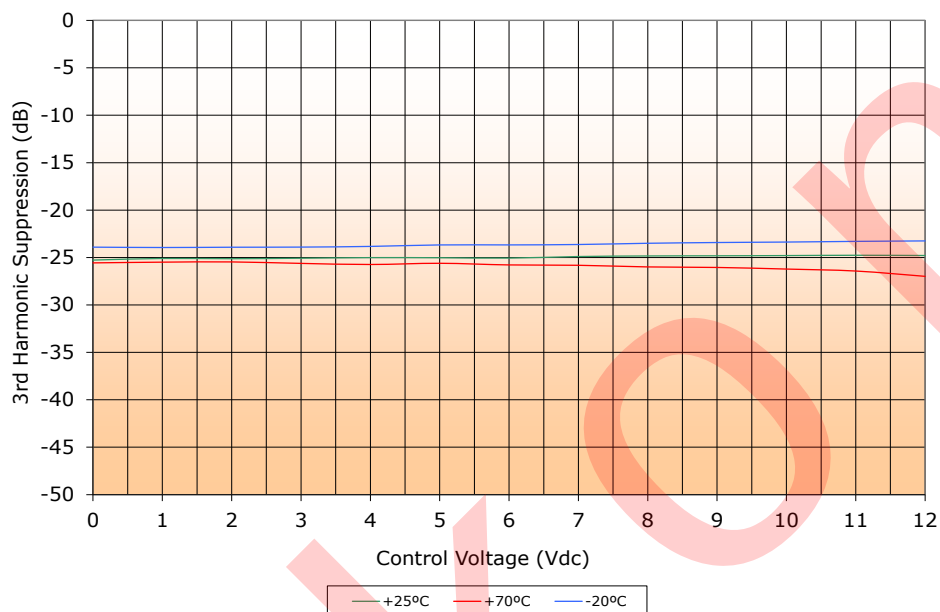
PERFORMANCE PLOTS



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PERFORMANCE PLOTS