

# VOLTAGE CONTROLLED SAW OSCILLATOR

## SURFACE MOUNT MODEL: HFSO1600-5

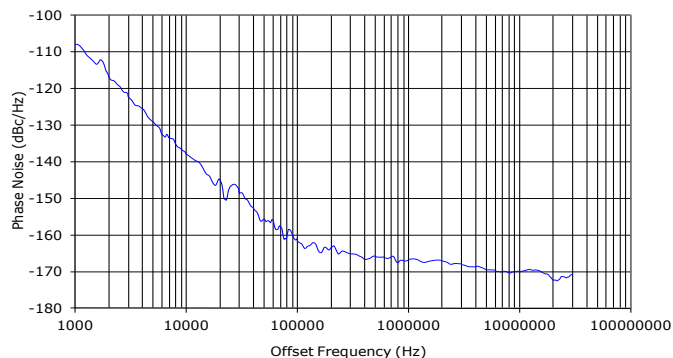
1600 MHz

### FEATURES:

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



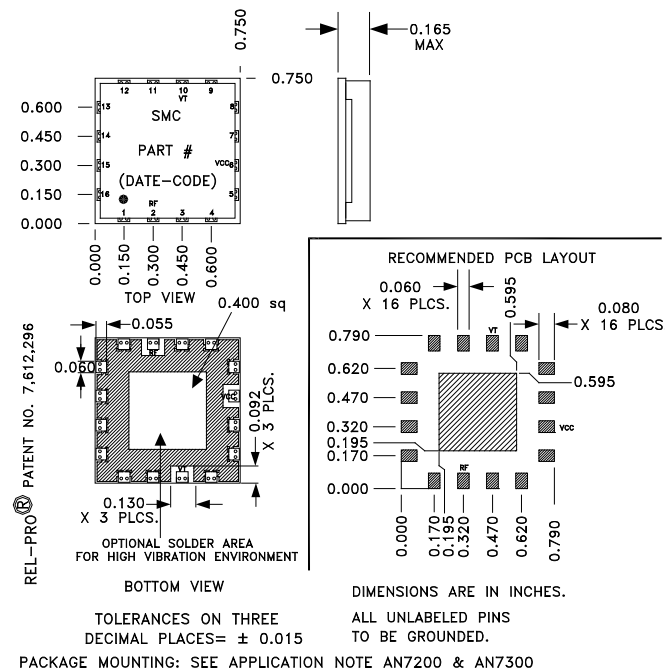
### Phase Noise



### SPECIFICATIONS (Rev. C 09/01/20)

Frequency	1600 MHz	
Tuning Voltage	0.5 - 12 VDC	
Bias Voltage (Vcc)	+5 VDC (± 5%) @ 100 mA (Max.)	
Output Power	+14 dBm (Min.)	
Tuning Sensitivity	38 kHz/V (Typ.)	
Thermal Drift	170 kHz (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression		dBc (Typ.)
	2nd	23
3rd	18	
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	Offset	dBc/Hz (Typ.)
	@ 10 kHz	-137
	@ 100 kHz	-161
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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 201 McLean Boulevard • Paterson, New Jersey 07504 USA  
 Tel: (973) 881-8800 • Fax: (973) 881-8361  
 E-Mail: [sales@synergymwave.com](mailto:sales@synergymwave.com) • Website: <http://www.synergymwave.com>  
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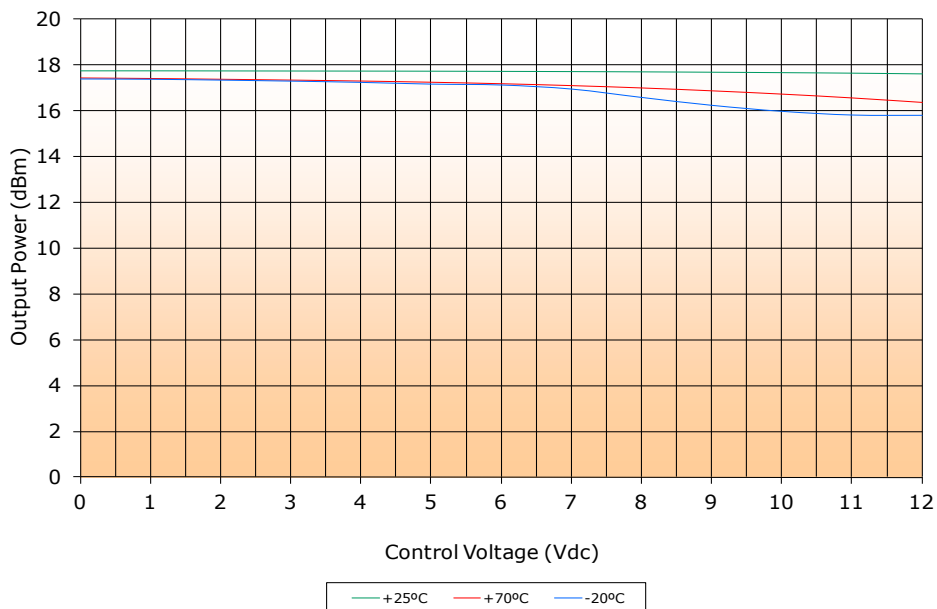
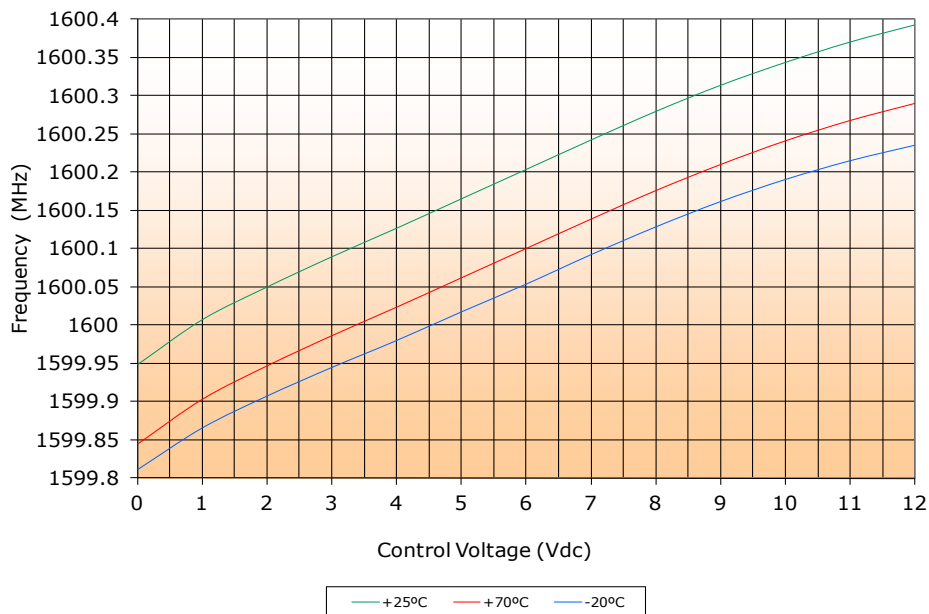


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PERFORMANCE PLOTS

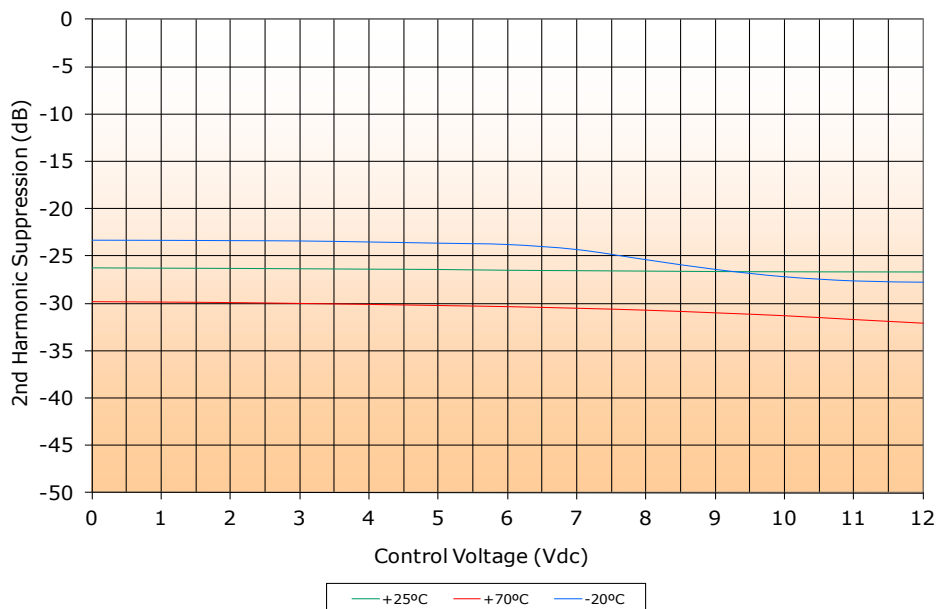
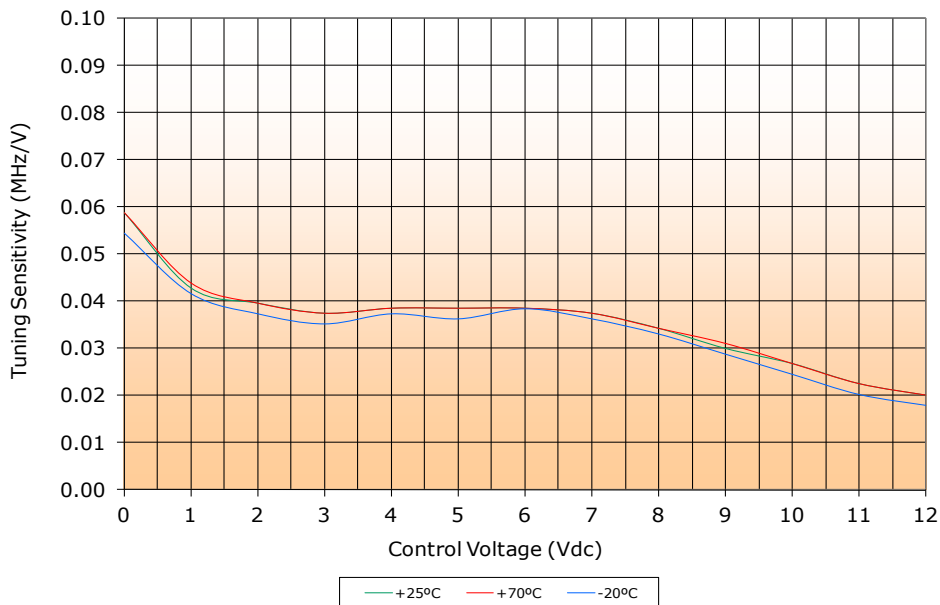


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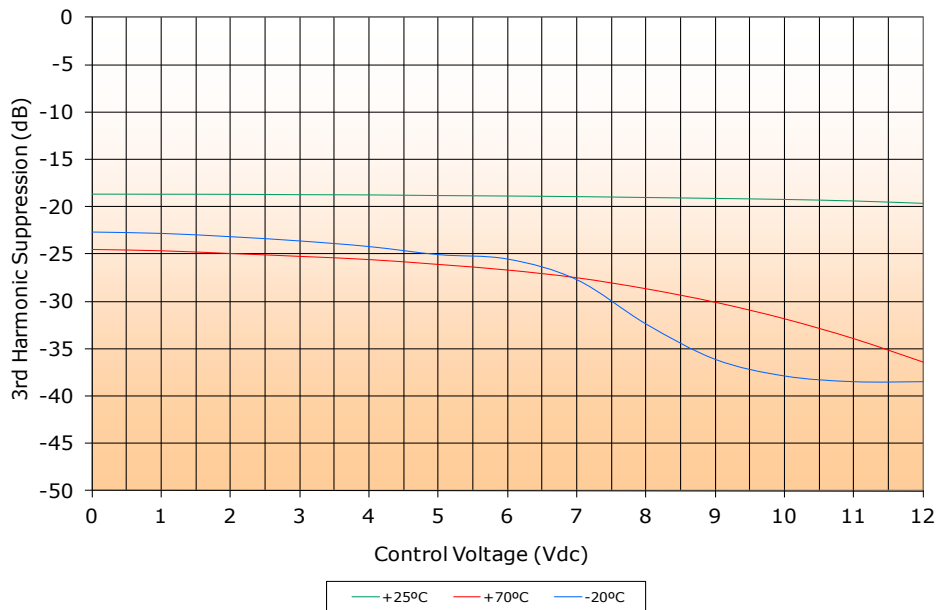
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PERFORMANCE PLOTS