

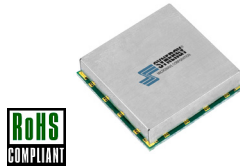
# VOLTAGE CONTROLLED SAW OSCILLATOR

## SURFACE MOUNT MODEL: HFSO2000-5TC

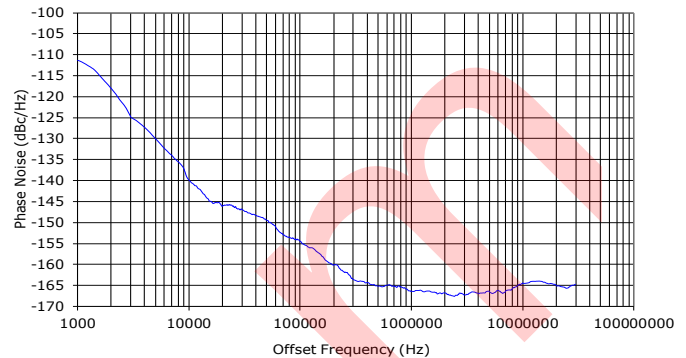
**2000 MHz**

### FEATURES:

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



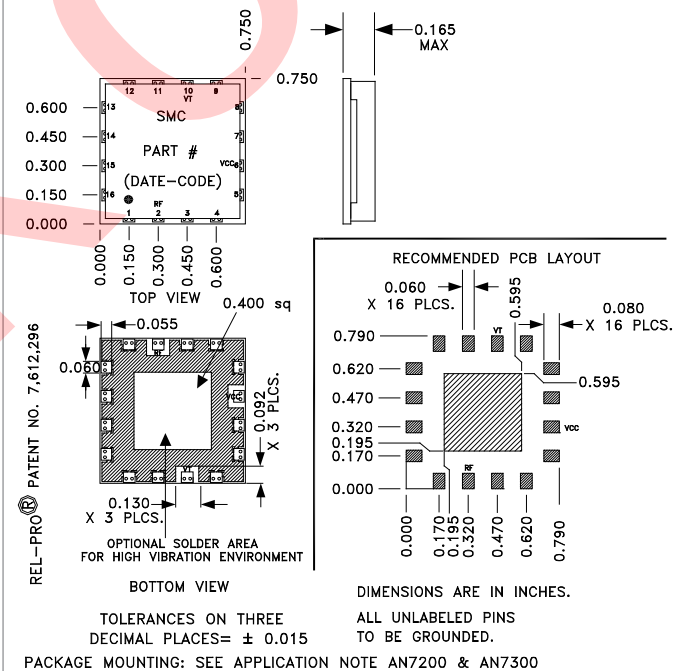
**Phase Noise**



### SPECIFICATIONS (Rev. B 02/03/22)

|                             |                                      |               |
|-----------------------------|--------------------------------------|---------------|
| Frequency                   | 2000 MHz                             |               |
| Tuning Voltage              | 0.5 - 12 VDC                         |               |
| Bias Voltage (Vcc)          | +5 VDC ( $\pm 5\%$ ) @ 100 mA (Max.) |               |
| Output Power                | +6 dBm (Min.)                        |               |
| Tuning Sensitivity          | 30 - 600 kHz/V (Typ.)                |               |
| Thermal Drift               | 550 kHz (Typ.)                       |               |
| Output Impedance            | 50 Ohms (Nom.)                       |               |
| Harmonic Suppression        |                                      | dBc (Typ.)    |
|                             | 2nd                                  | 14            |
| Sub-Harmonic Suppression    | 20 dBc (typ.)                        |               |
| Frequency Pulling           | 15 kHz (Typ. @ 1.75:1 VSWR)          |               |
| Frequency Pushing           | 20 kHz/V (Typ.) Vcc $\pm 5\%$        |               |
| Tuning Port Capacitance     | 55 pF (Typ.)                         |               |
| Phase Noise @ 25 °C         | Offset                               | dBc/Hz (Typ.) |
|                             | @ 10 kHz                             | -137          |
|                             | @ 100 kHz                            | -154          |
| Operating Temperature Range | -40 to +85 °C                        |               |

**Package #** 320-2LF



### Absolute Maximum Ratings

|                              |               |
|------------------------------|---------------|
| Storage Temp. Range          | -54 to +90 °C |
| Bias Voltage                 | +5.5 V        |
| Tuning Voltage               | +15 V         |
| DC Voltage Applied to RF Out | $\pm 25$ V    |

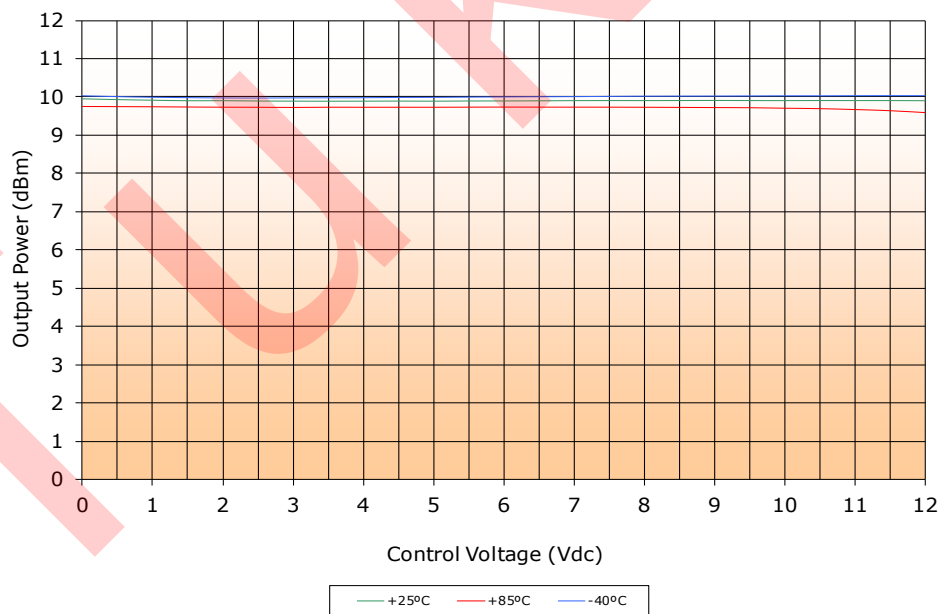
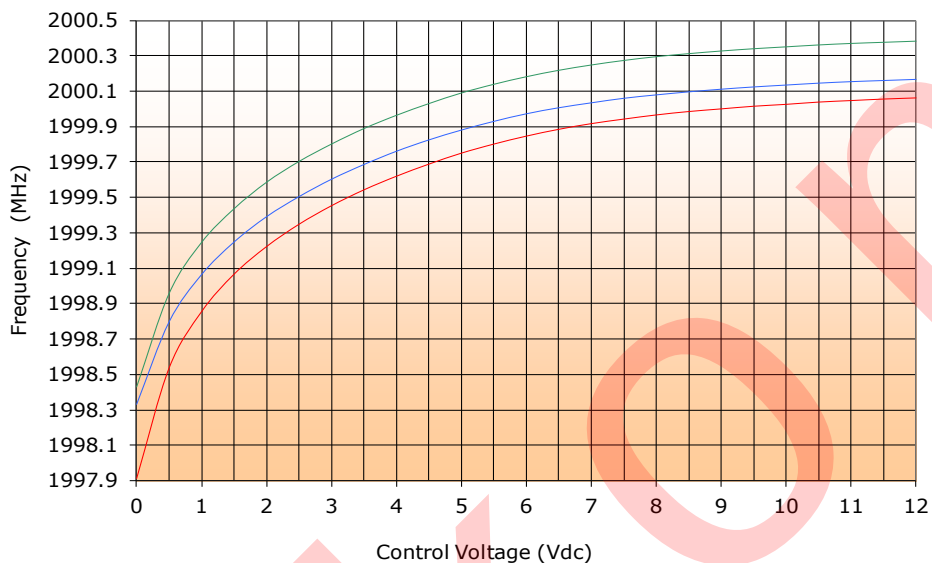
**Patent :** <http://www.synergymwave.com/patents>

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## SURFACE MOUNT MODEL: HFSO2000-5TC

2000 MHz

PERFORMANCE PLOTS



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