

DIELECTRIC RESONATOR OSCILLATOR

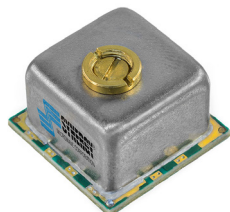
SURFACE MOUNT MODEL: SDRO1000-8XT

FREQUENCY

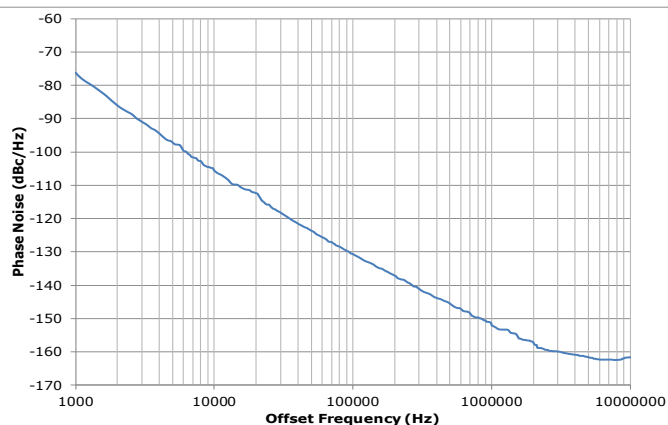
10 GHz

FEATURES:

- ▶ Extended Operating Temperature Range
- ▶ Exceptional Phase Noise Performance
- ▶ Small Size Surface Mount
- ▶ Lead Free RoHS Compliant



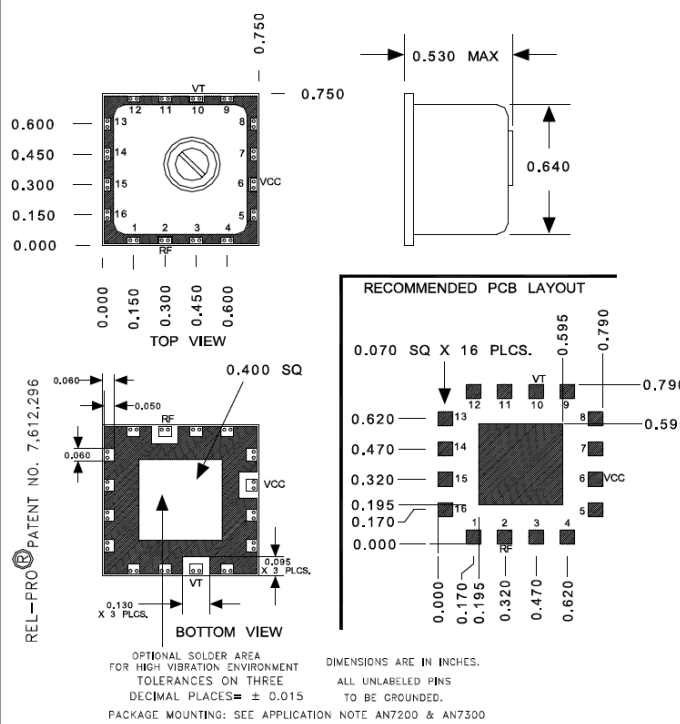
Phase Noise



SPECIFICATIONS

Frequency	10 GHz	
Tuning Voltage	1 - 10 VDC	
Bias Voltage	+8 VDC @ 25 mA (Max.)	
Output Power	-4 dBm (Min.)	
Tuning Sensitivity	1.5 MHz/V (Typ.)	
Thermal Drift	5 ppm / °C (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	25 dBc (Typ.)	
Frequency Pulling	500 kHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	750 kHz/V (Typ.)	
Tuning Port Capacitance	35 pF (Typ.)	
Phase Noise @ 25°C	Offset	dBc/Hz (Typ.)
	10 kHz	-104
	100 kHz	-130
	1 MHz	-150
	10 MHz	-162
Operating Temperature Range	-40 to +85 °C	

Package # 396



Absolute Maximum Ratings

Storage Temp. Range	-45 to +90 °C
Bias Voltage	+8.5 V
Tuning Voltage	+16 V
DC Voltage Applied to RF Out	±25 V

Notes:

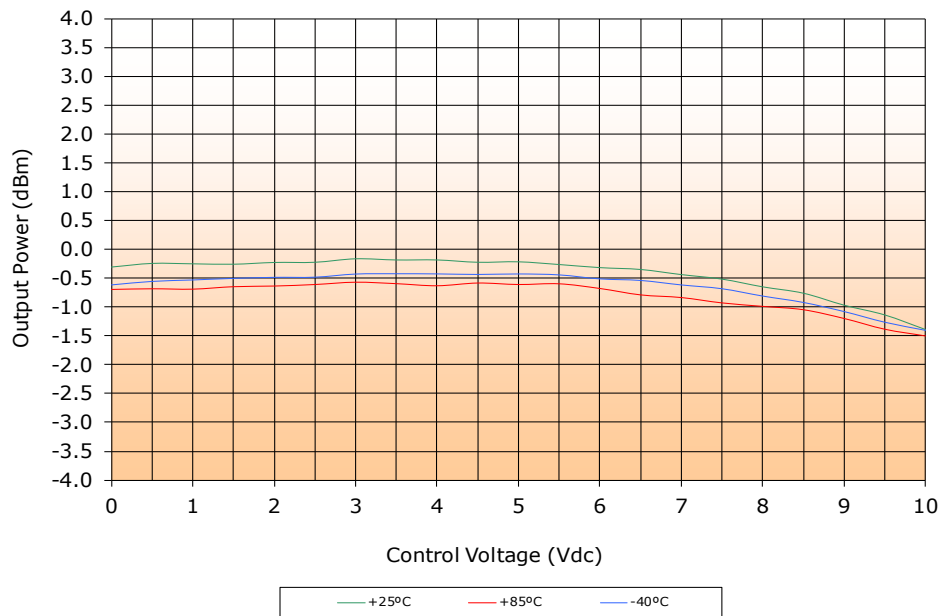
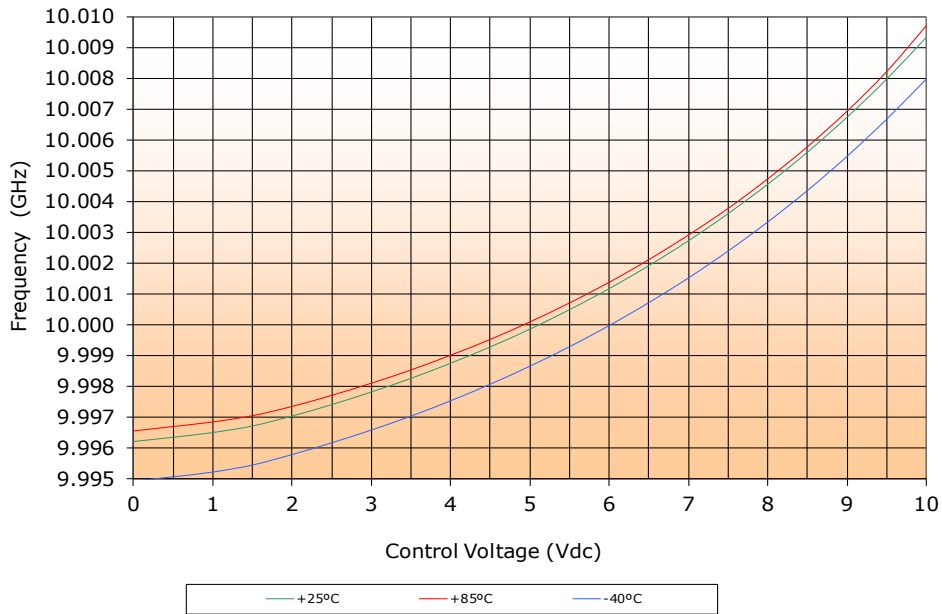
1. Tuning of the mechanical screw can cause significant shifts in frequency and cause irreversible damage to the product. Warranty is void if tuning screw exceeds ±0.5 turn max.
2. Test data measured with bias voltage at +8V.
3. Specifications guaranteed at 10 GHz.

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PERFORMANCE PLOTS

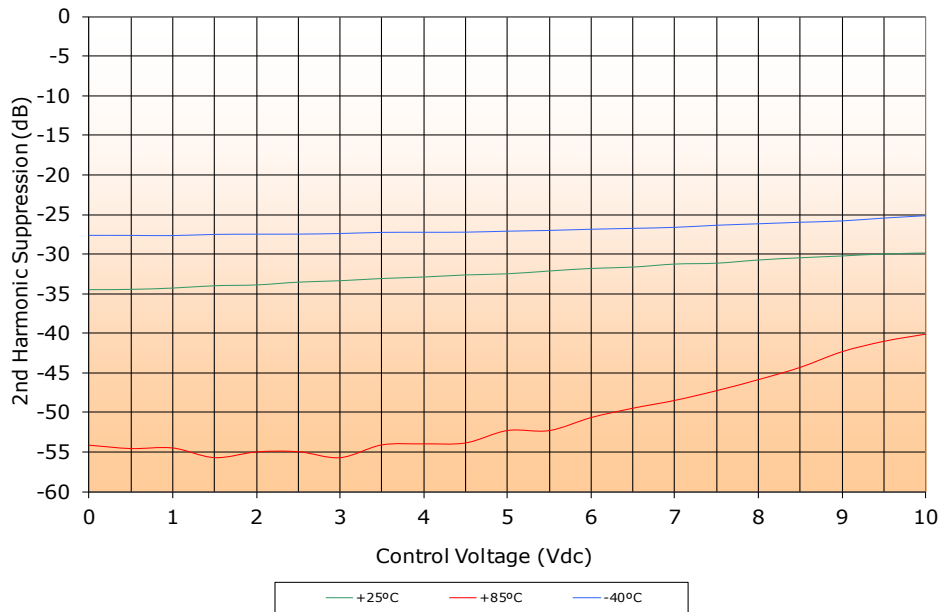
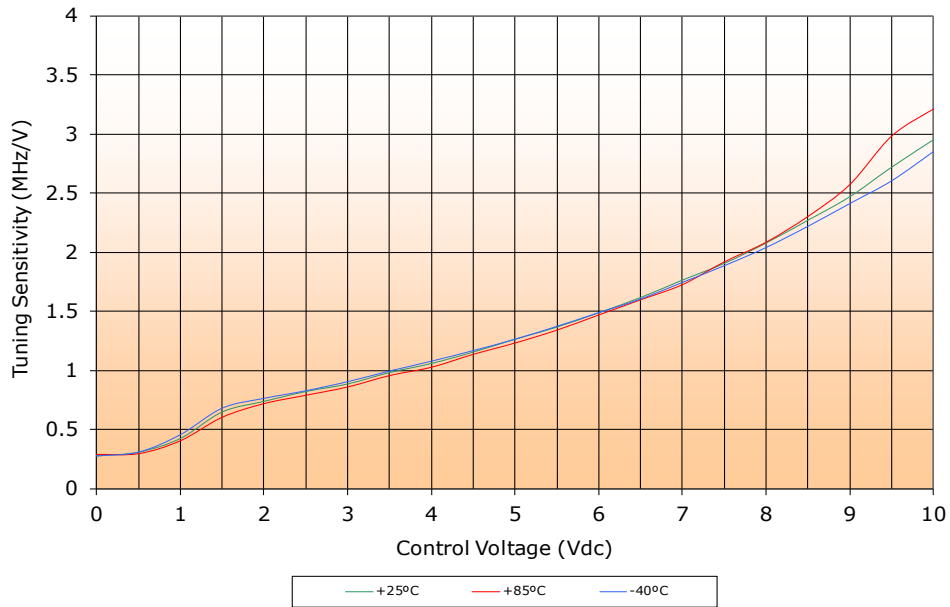


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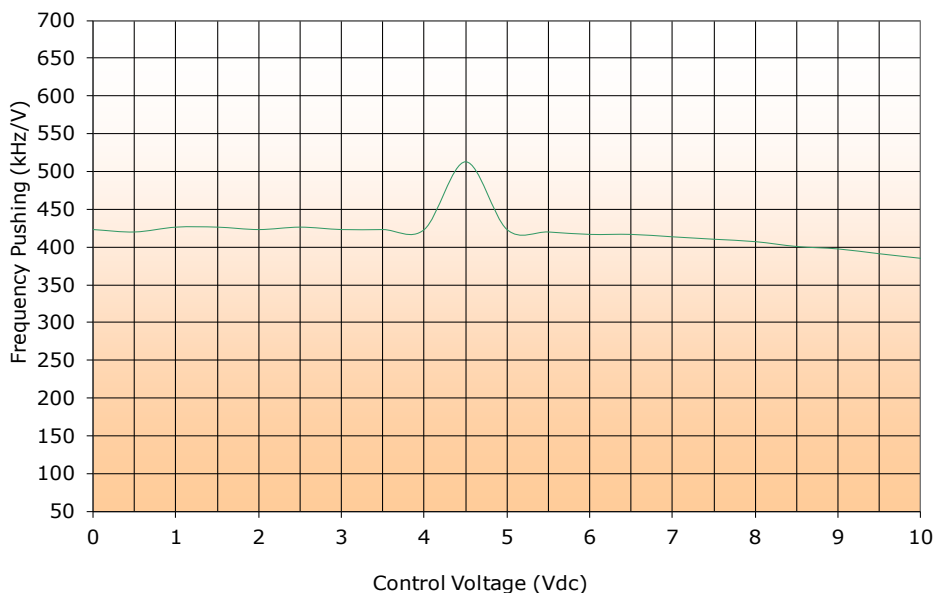
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