

DIELECTRIC RESONATOR OSCILLATOR

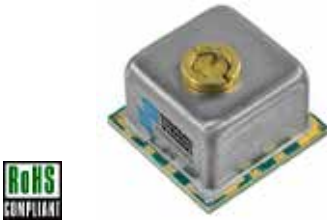
SURFACE MOUNT MODEL: SDRO800-8

FREQUENCY

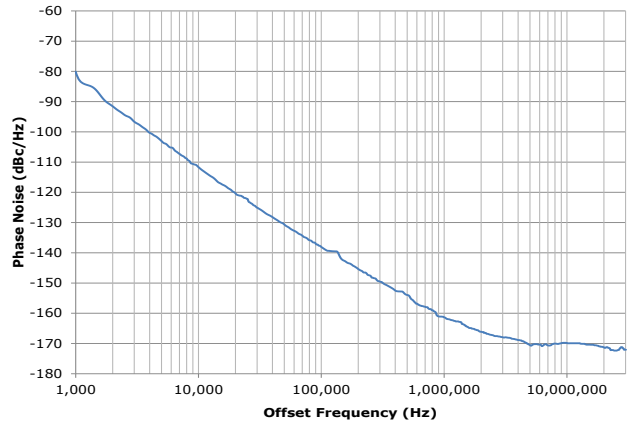
8 GHz

FEATURES:

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size Surface Mount
- ▶ Lead Free RoHS Compliant



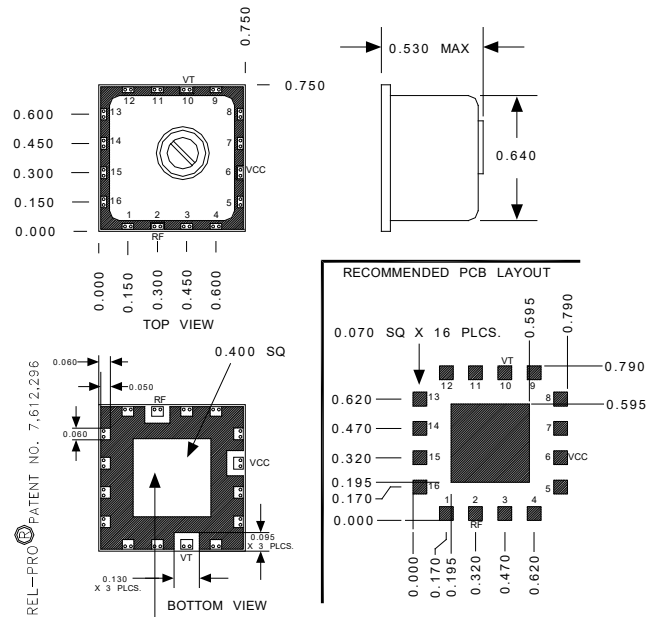
Phase Noise



SPECIFICATIONS (Rev. C 08/11/20)

Frequency	8 GHz	
Tuning Voltage	1 - 10 VDC	
Bias Voltage	+8 VDC @ 25 mA (Max.)	
Output Power	+1 dBm (Min.)	
Tuning Sensitivity	1.5 MHz/V (Typ.)	
Thermal Drift	5 ppm / °C (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	34 dBc (Typ.)	
Frequency Pulling	1 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	400 kHz/V (Typ.)	
Tuning Port Capacitance	10 pF (Typ.)	
Phase Noise @ 25°C	Offset	dBc/Hz (Typ.)
	10 kHz	-111
	100 kHz	-138
	1 MHz	-160
10 MHz	-170	
Operating Temperature Range	-15 to +75 °C	

Package # 396



Absolute Maximum Ratings

Storage Temp. Range	-30 to +85 °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 8 GHz.

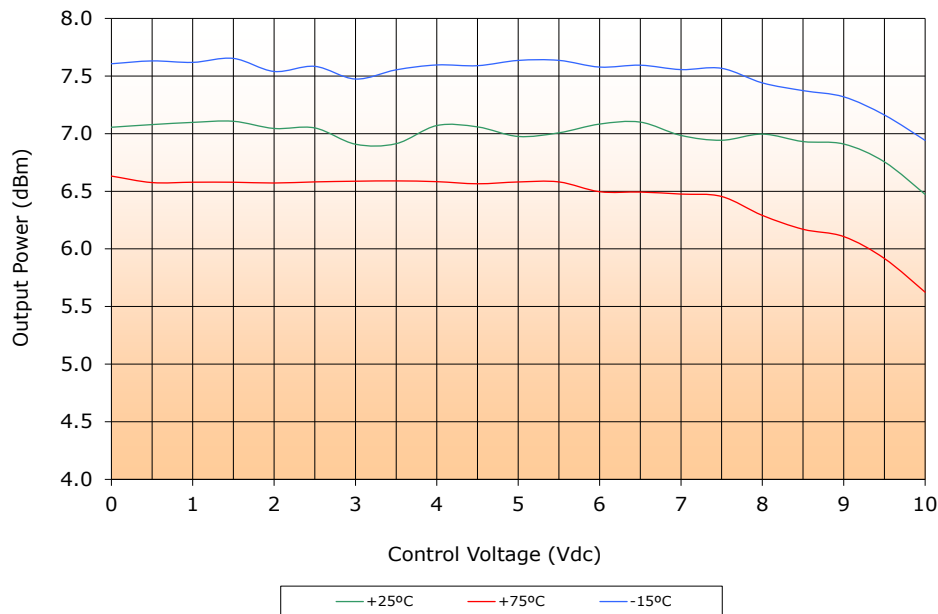
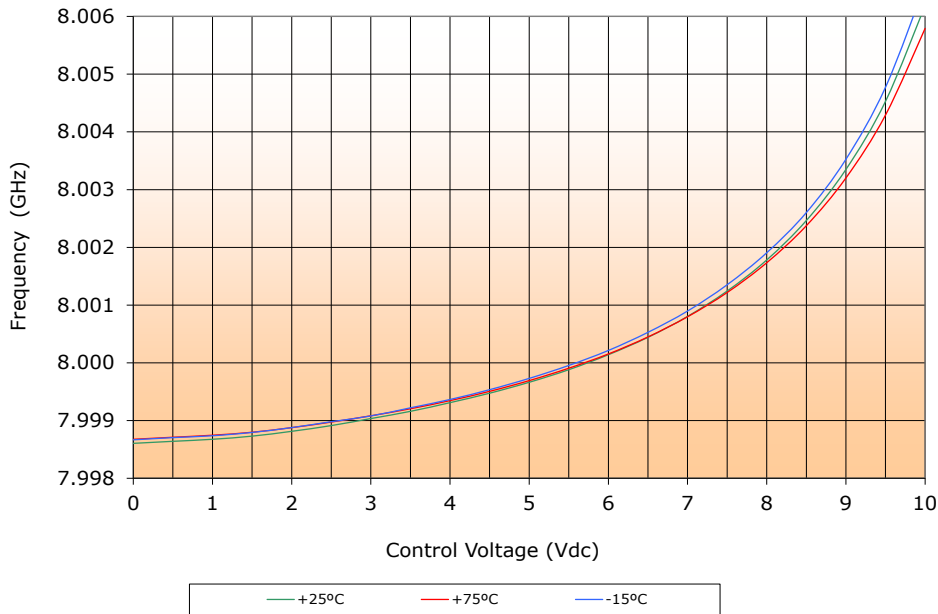
OPTIONAL SOLDER AREA FOR HIGH VIBRATION ENVIRONMENT
 TOLERANCES ON THREE DECIMAL PLACES = ± 0.015
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300

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PERFORMANCE PLOTS

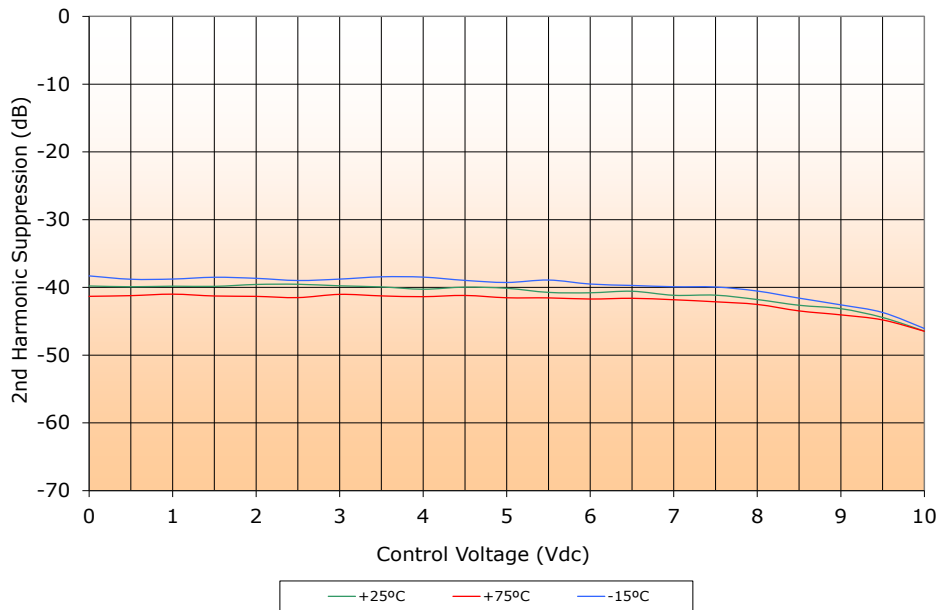
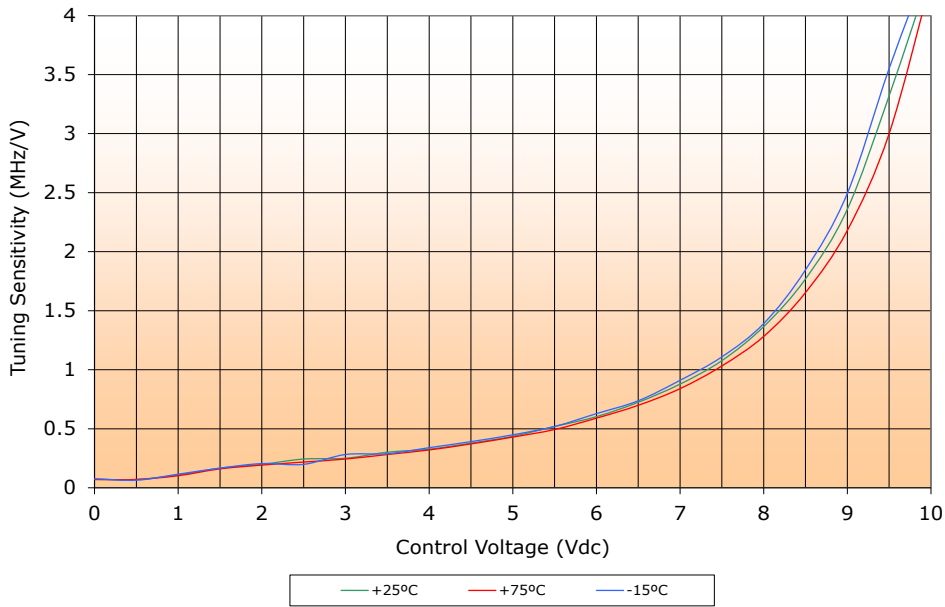


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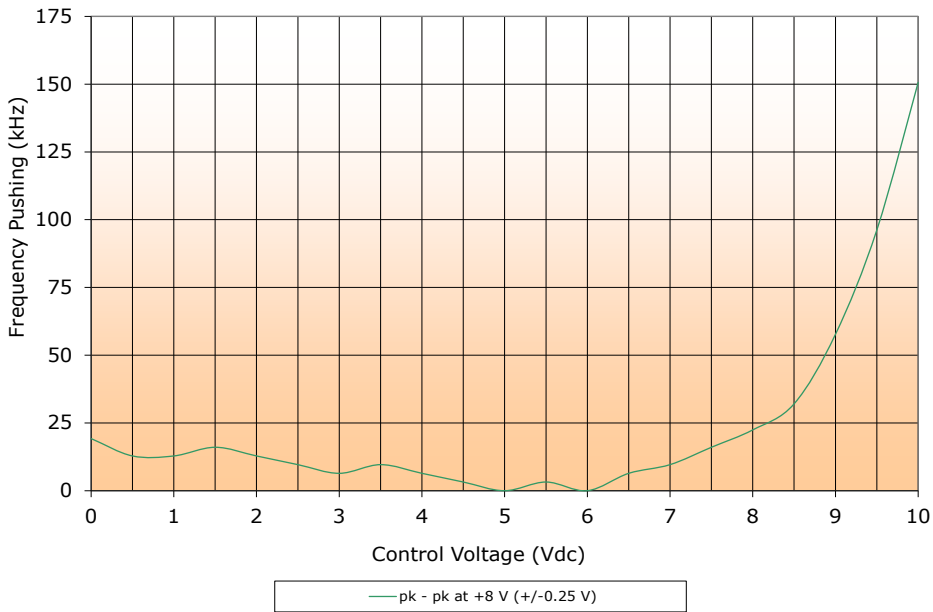
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