

DIELECTRIC RESONATOR OSCILLATOR

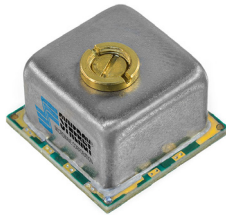
SURFACE MOUNT MODEL: SDR01121-7

FREQUENCY

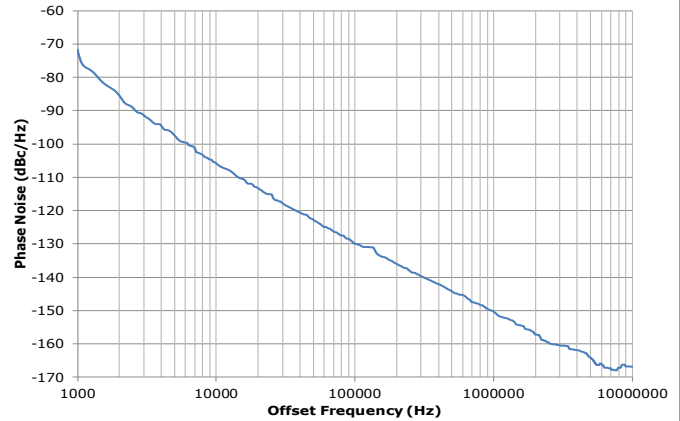
11.217 GHz

FEATURES:

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



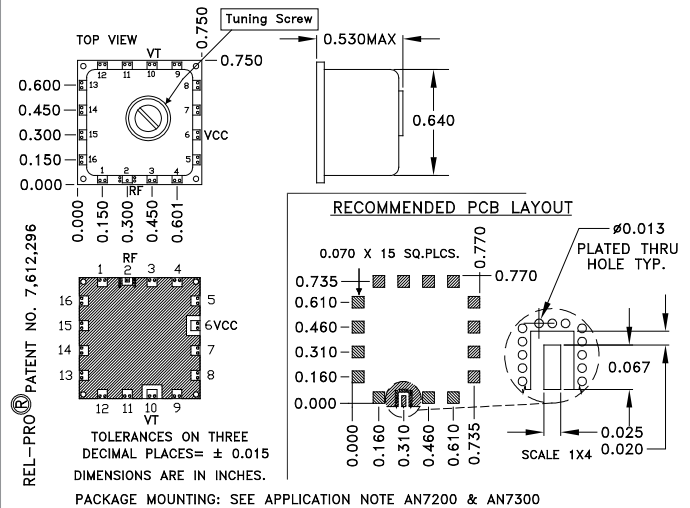
Phase Noise



SPECIFICATIONS (Rev. A 11/06/24)

Frequency	11.217 GHz								
Tuning Voltage	1 - 12 VDC								
Bias Voltage	+7 VDC @ 25 mA (Max.)								
Output Power	0 dBm (Min.)								
Tuning Sensitivity	0.3 MHz/V (Typ.)								
Thermal Drift	2 ppm / °C (Typ.)								
Output Impedance	50 Ohms (Nom.)								
Harmonic Suppression	30 dBc (Typ.)								
Frequency Pulling	1.2 MHz (Typ. @ 1.75:1 VSWR)								
Frequency Pushing	1.7 MHz/V (Typ.)								
Tuning Port Capacitance	35 pF (Typ.)								
Modulation Bandwidth	> 20 MHz								
Phase Noise	<table border="1"> <thead> <tr> <th>Offset</th> <th>dBc/Hz (Typ.)</th> </tr> </thead> <tbody> <tr> <td>10 kHz</td> <td>-106</td> </tr> <tr> <td>100 kHz</td> <td>-130</td> </tr> <tr> <td>1 MHz</td> <td>-150</td> </tr> </tbody> </table>	Offset	dBc/Hz (Typ.)	10 kHz	-106	100 kHz	-130	1 MHz	-150
	Offset	dBc/Hz (Typ.)							
	10 kHz	-106							
	100 kHz	-130							
1 MHz	-150								
Jitter	96 fs (@ 1 kHz to 30 MHz) (Typ.)								
Operating Temperature Range	-15 to +75°C								

Package # 396-1



Absolute Maximum Ratings

Storage Temp. Range	-30 to +85 °C
Bias Voltage	+7.5 V
Tuning Voltage	+16 V
DC Voltage Applied to RF Out	±25 V

Notes:

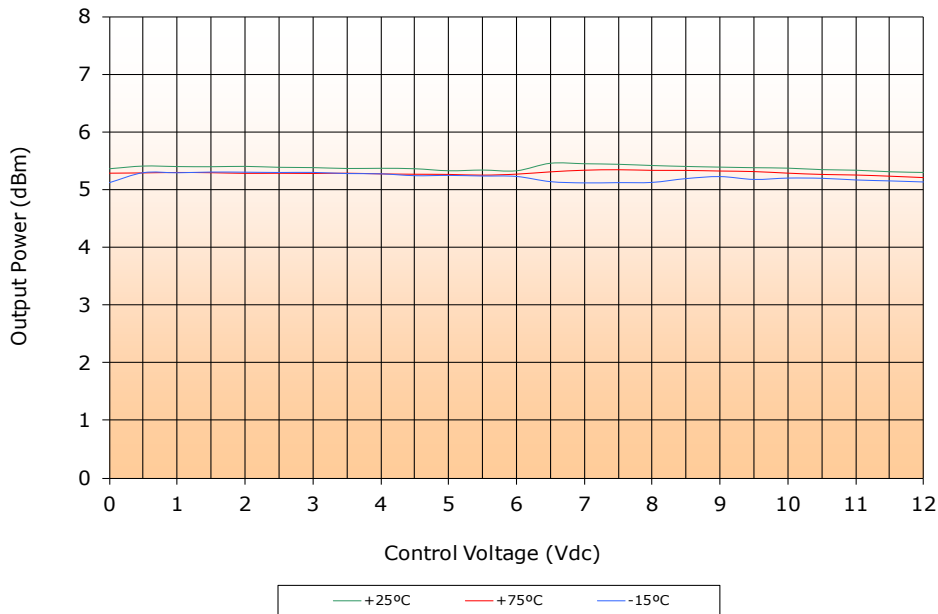
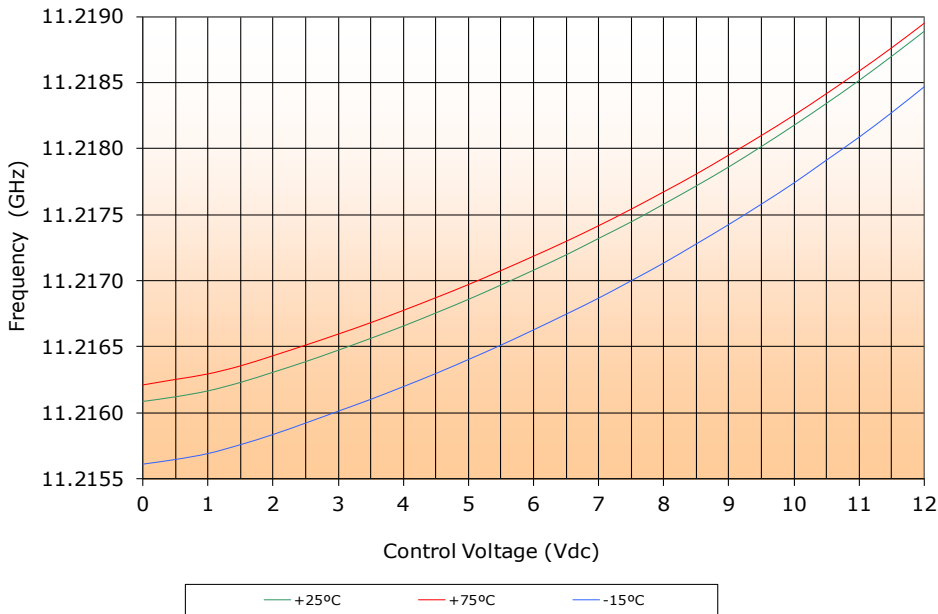
1. Tuning of the mechanical screw can cause significant shifts in frequency and cause irreversible damage to the product. Warranty is void if tuning screw exceeds ±0.5 turn max.
2. Test data measured with bias voltage at +8V.
3. Specifications guaranteed at 11.217 GHz.

DIELECTRIC RESONATOR OSCILLATOR SURFACE MOUNT MODEL: SDRO1121-7

FREQUENCY

11.217 GHz

PERFORMANCE PLOTS



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