

DIELECTRIC RESONATOR OSCILLATOR

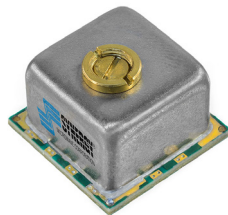
SURFACE MOUNT MODEL: SDRO684-8

FREQUENCY

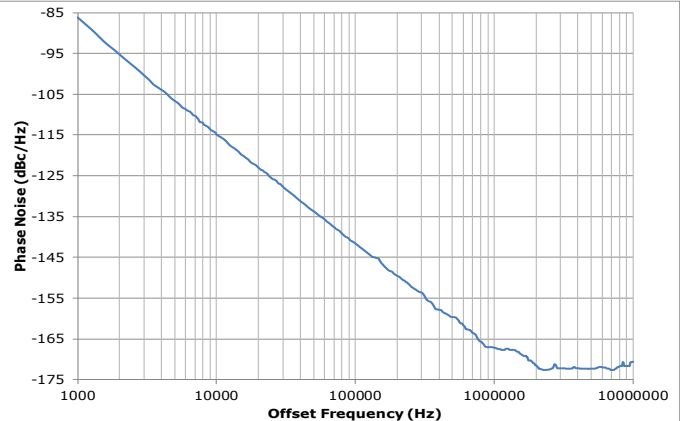
6.84 GHz

FEATURES:

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



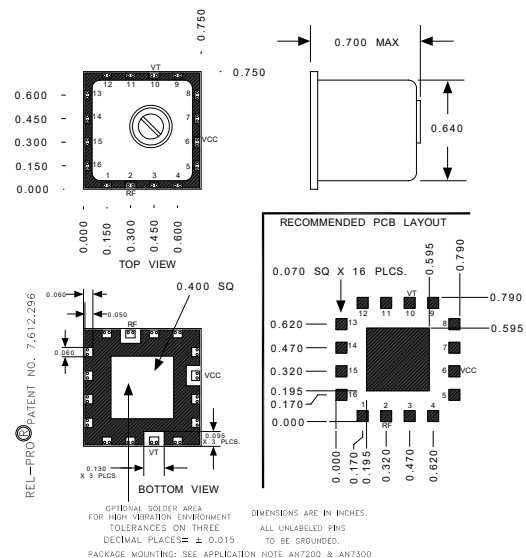
Phase Noise



SPECIFICATIONS

Frequency	6.84 GHz										
Tuning Voltage	1 - 10 VDC										
Bias Voltage	+8 VDC @ 25 mA (Max.)										
Output Power	4 dBm (Min.)										
Tuning Sensitivity	0.3 MHz/V (Typ.)										
Thermal Drift	0.3 ppm / °C (Typ.)										
Output Impedance	50 Ohms (Nom.)										
Harmonic Suppression	28 dBc (Typ.)										
Frequency Pulling	1 MHz (Typ.) @ 1.75:1 VSWR										
Frequency Pushing	16 MHz/V (Typ.)										
Tuning Port Capacitance	10 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>-114</td></tr> <tr> <td>100 kHz</td><td>-134</td></tr> <tr> <td>1 MHz</td><td>-154</td></tr> <tr> <td>10 MHz</td><td>-170</td></tr> </tbody> </table>	Offset	dBc/Hz (Typ.)	10 kHz	-114	100 kHz	-134	1 MHz	-154	10 MHz	-170
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10 kHz	-114										
100 kHz	-134										
1 MHz	-154										
10 MHz	-170										
Jitter	38 fs (@ 1 kHz to 10 MHz) (Typ.)										
Operating Temperature Range	-15 to +75°C										

Package # 396-6



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 6.84 GHz.

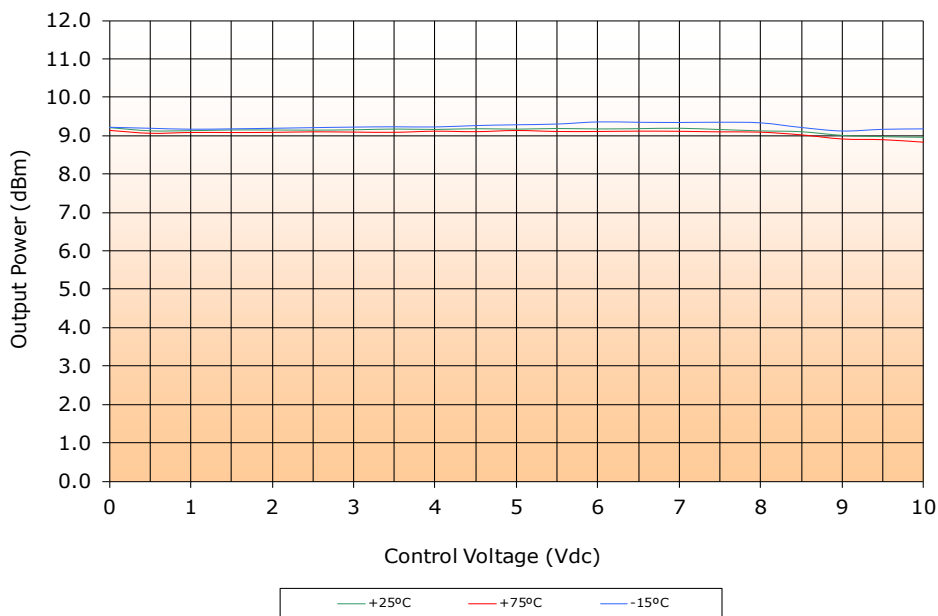
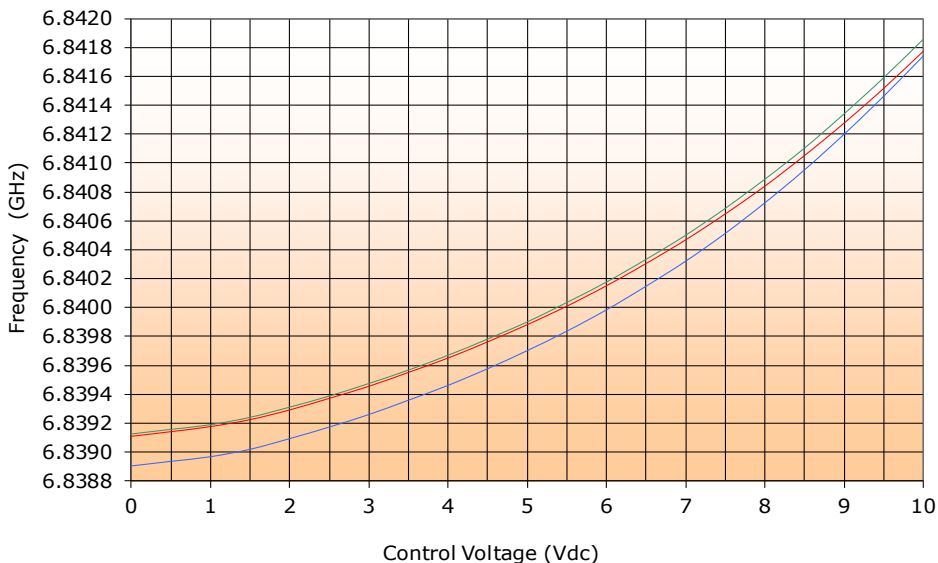
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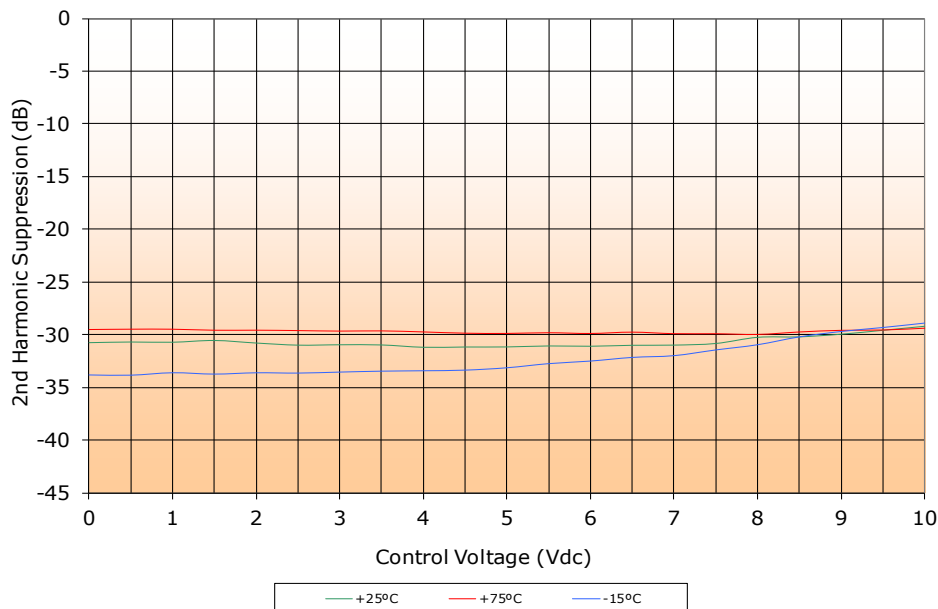
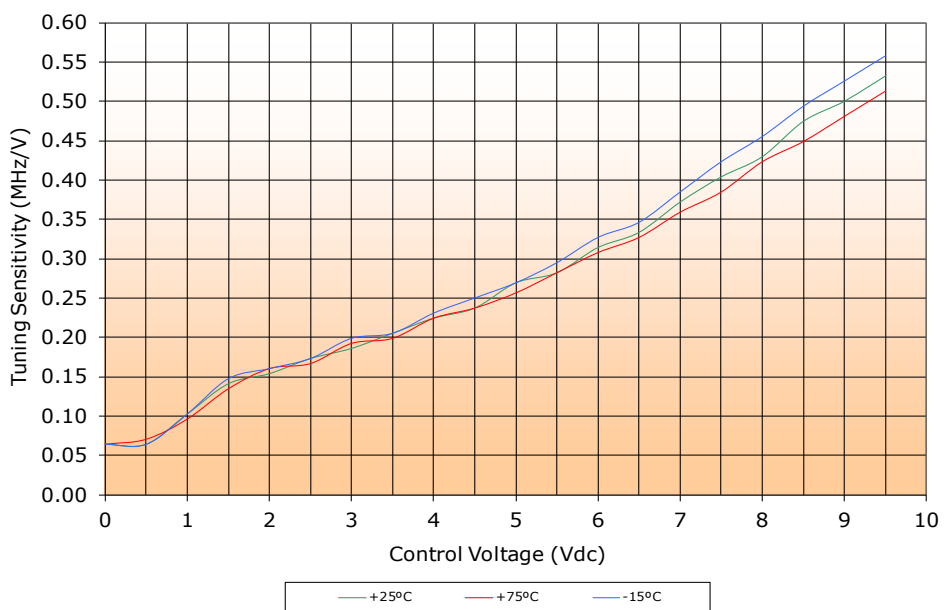
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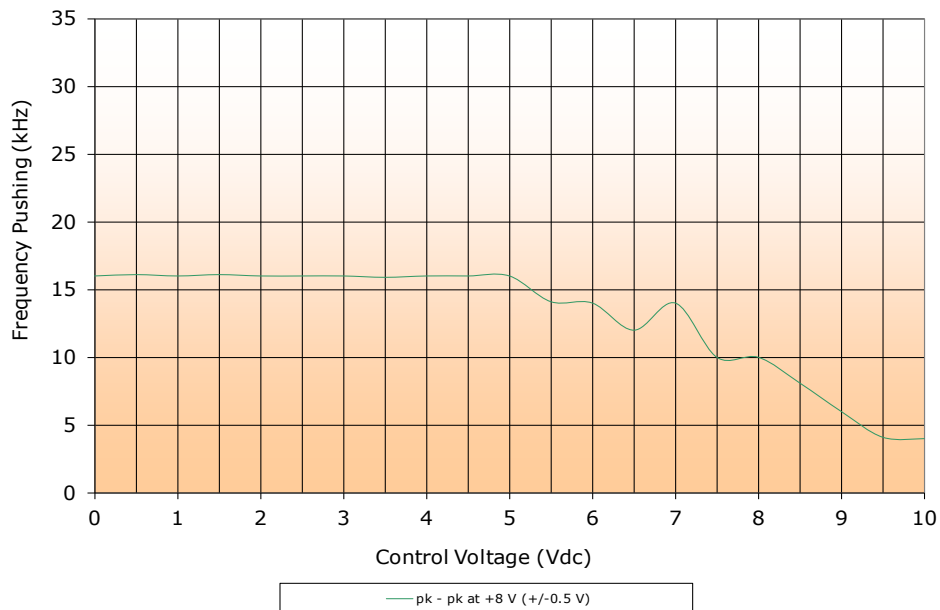


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