

DIELECTRIC RESONATOR OSCILLATOR

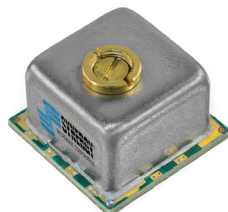
SURFACE MOUNT MODEL: SDRO1500-8XT

FREQUENCY

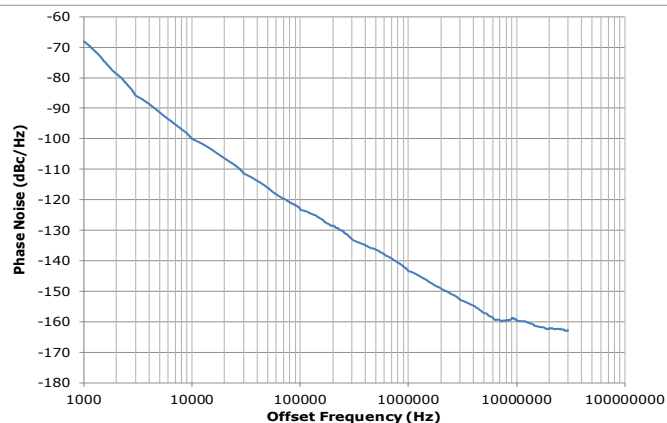
15 GHz

FEATURES:

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



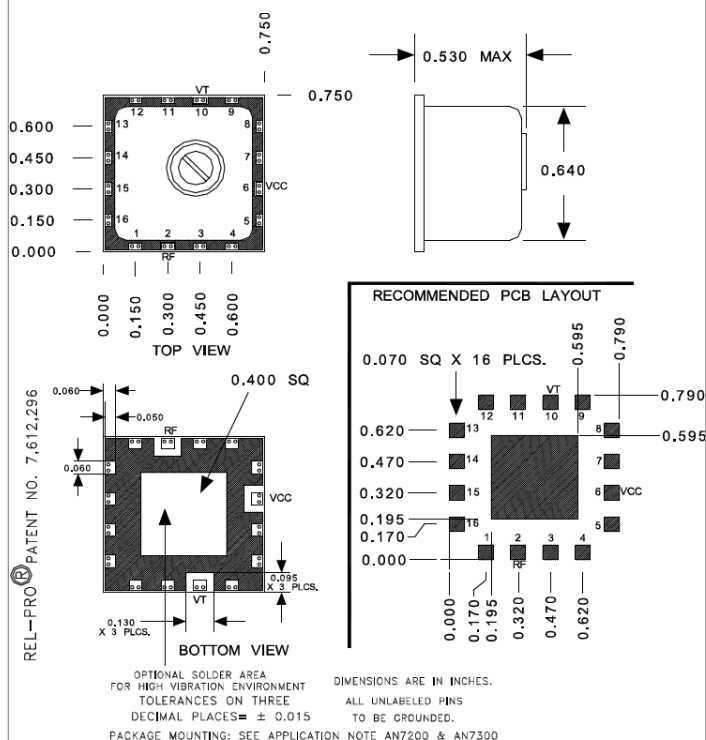
Phase Noise



SPECIFICATIONS

| | | |
|-----------------------------|------------------------------|---------------|
| Frequency | 15 GHz | |
| Tuning Voltage | 1 - 12 VDC | |
| Bias Voltage | +8 VDC @ 26 mA (Max.) | |
| Output Power | -6 dBm (Min.) | |
| Tuning Sensitivity | 1 MHz/V (Typ.) | |
| Thermal Drift | 4 ppm / °C (Typ.) | |
| Output Impedance | 50 Ohms (Nom.) | |
| Harmonic Suppression | 55 dBc (Typ.) | |
| Frequency Pulling | 1.5 MHz (Typ. @ 1.75:1 VSWR) | |
| Frequency Pushing | 1 MHz/V (Typ.) | |
| Tuning Port Capacitance | 10 pF (Typ.) | |
| Phase Noise @ 25°C | Offset | dBc/Hz (Typ.) |
| | 10 kHz | -99 |
| | 100 kHz | -122 |
| | 1 MHz | -142 |
| | 10 MHz | -160 |
| 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:

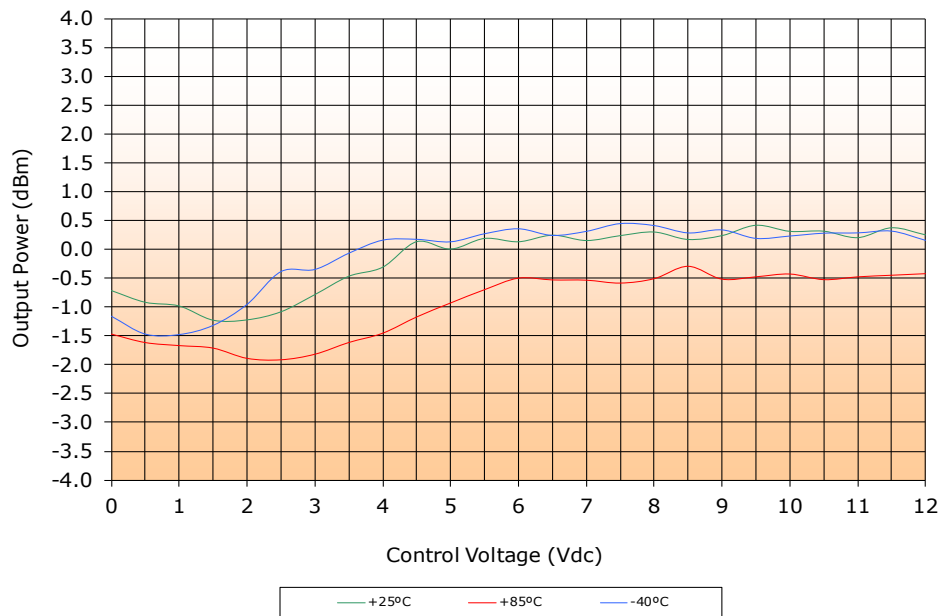
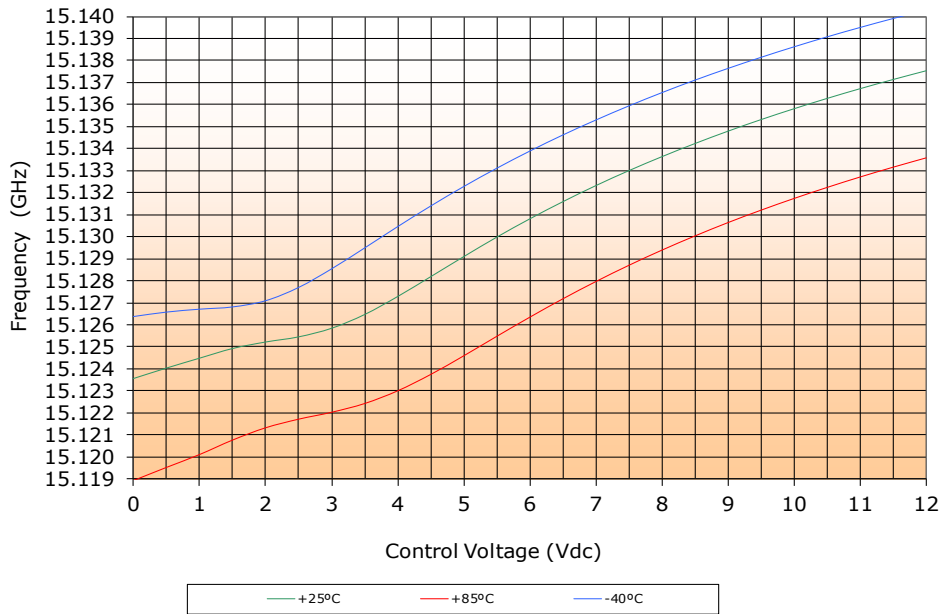
1. Tuning of the mechanical screw can cause significant shifts in frequency and cause irreversible damage to the product. Warranty is void if tuning screw exceeds ±0.5 turn max.
2. Test data measured with bias voltage at +8V.
3. Specifications guaranteed at 15 GHz.

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PERFORMANCE PLOTS

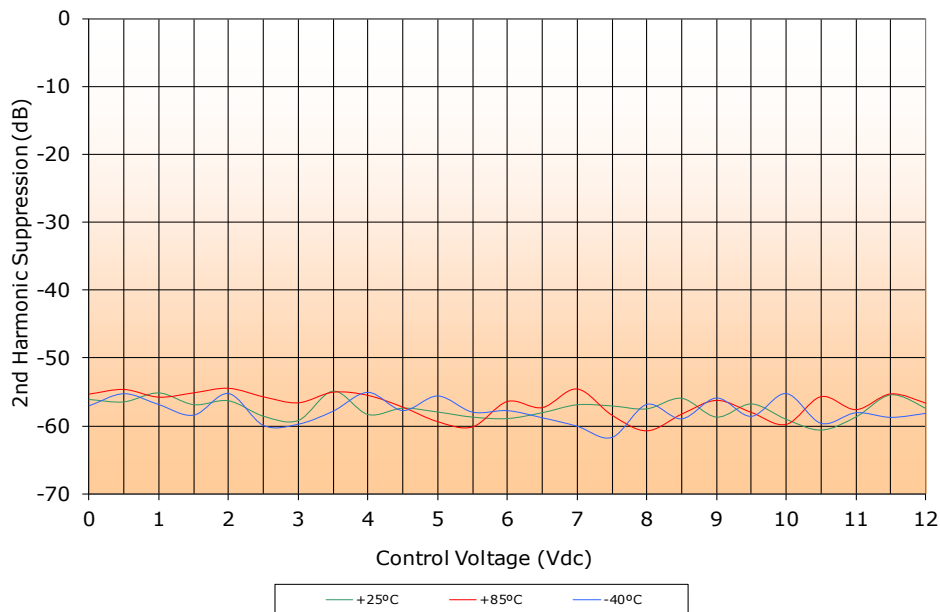
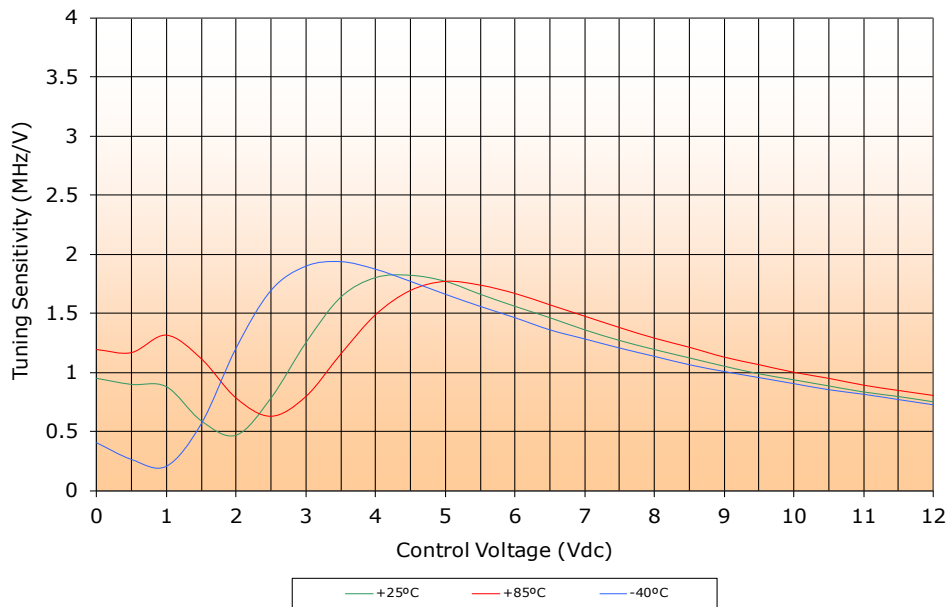


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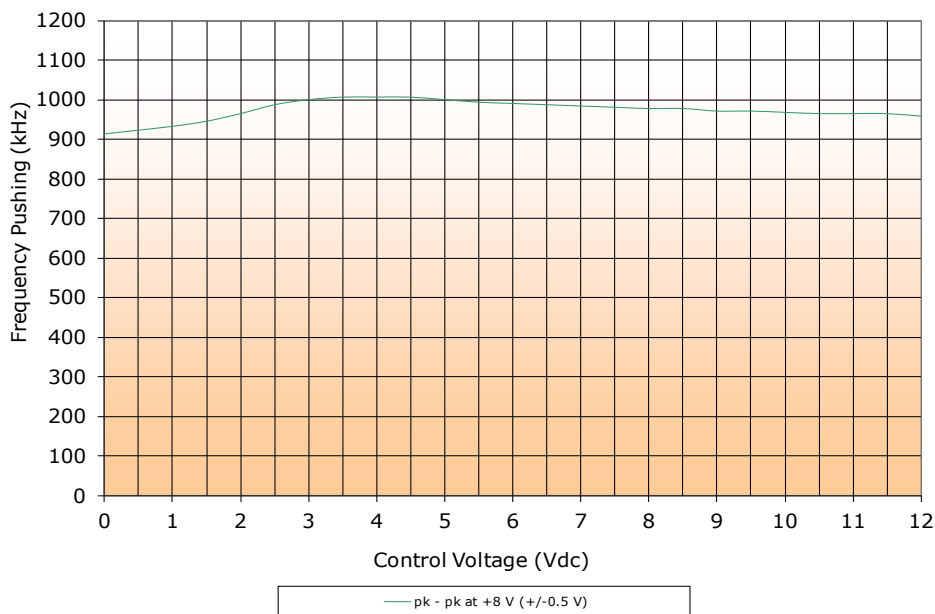
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