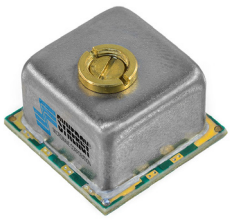
DIELECTRIC RESONATOR OSCILLATOR
SURFACE MOUNT MODEL: GSDRO1000-8XT

FREQUENCY 10 GHz

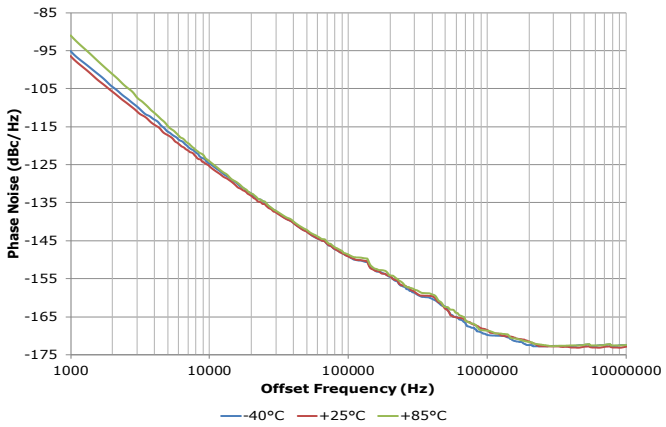
FEATURES:

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



RoHS COMPLIANT

Phase Noise



SPECIFICATIONS (Rev. E 10/01/25)

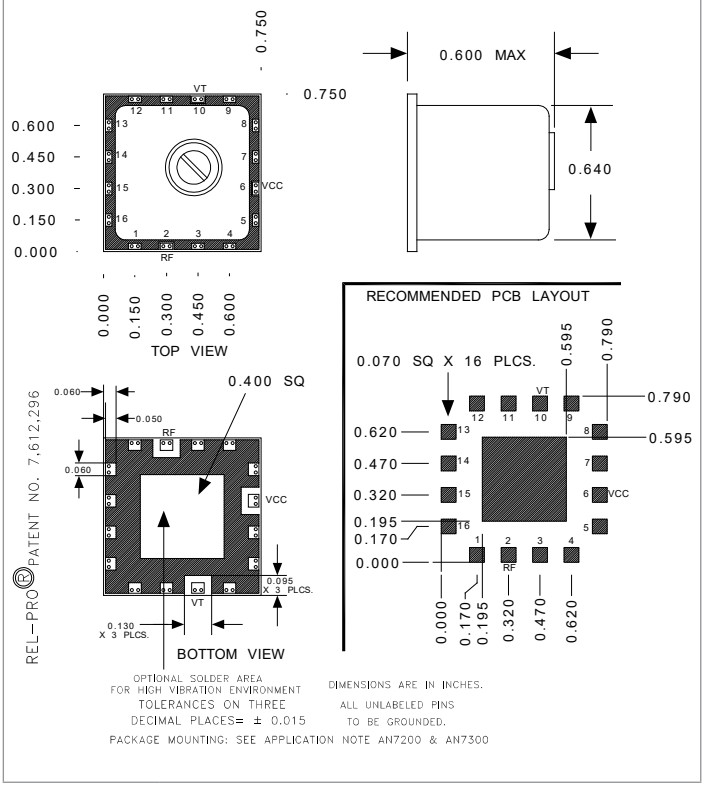
Frequency	10 GHz
Tuning Voltage	1 - 15 VDC
Bias Voltage	+8 VDC @ 25 mA (Max.)
Output Power	+3 dBm (Min.)
Tuning Sensitivity	0.35 MHz/V (Typ.)
Thermal Drift	0.5 ppm / °C (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	28 dBc (Typ.)
Frequency Pulling	100 kHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	100 kHz/V (Typ.)
Tuning Port Capacitance	35 pF (Typ.)
Phase Noise @ 25°C	Offset: dBc/Hz (Typ.) 10 kHz: -124 100 kHz: -149 1 MHz: -166 10 MHz: -168
Operating Temperature Range	-40 to +85 °C

Absolute Maximum Ratings

Storage Temp. Range	-45 to +90 ºC
Bias Voltage	+8.5 V
Tuning Voltage	+17 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.

Package #	396-7



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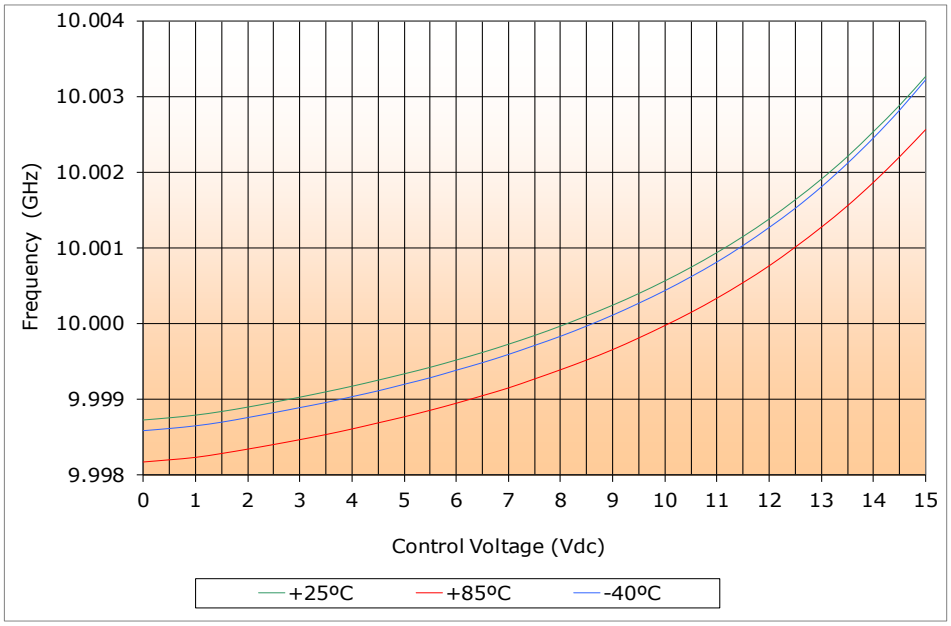
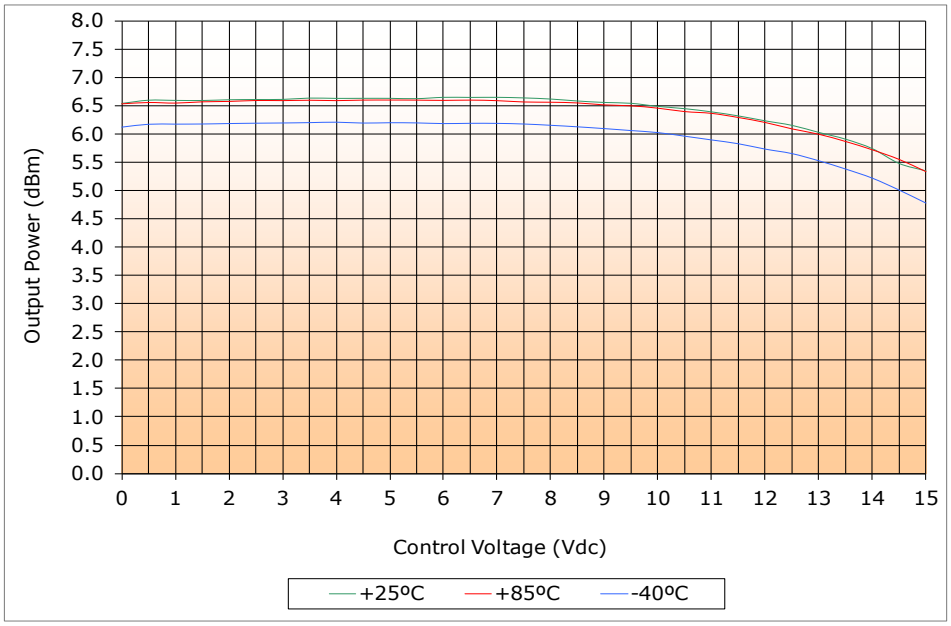
PERFORMANCE PLOTS





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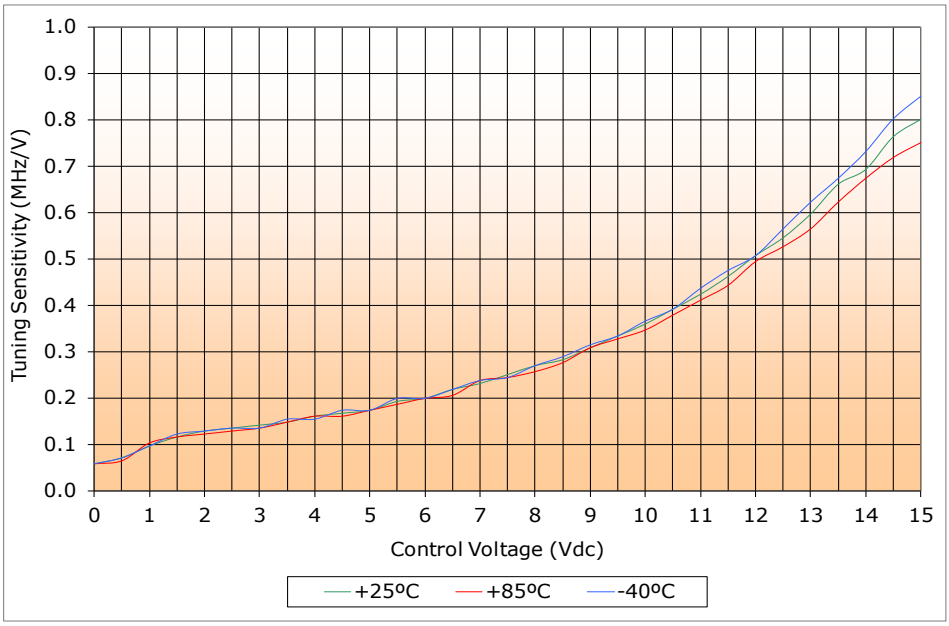

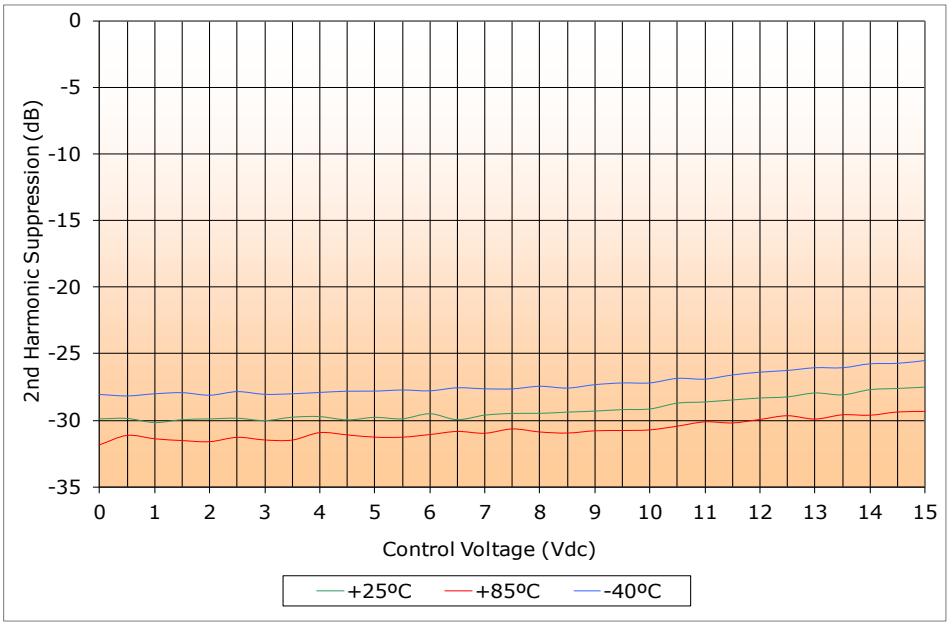

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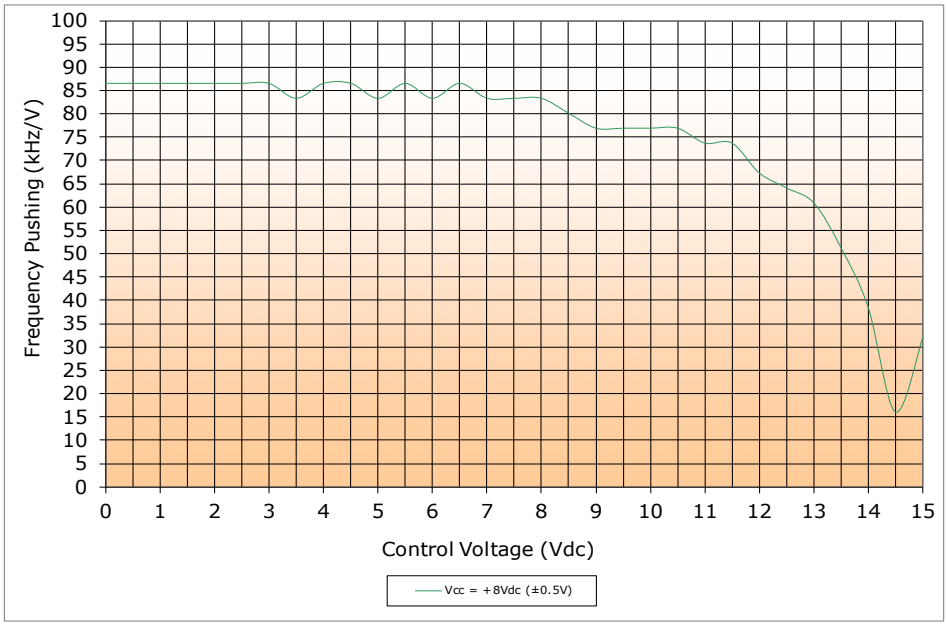

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