

# DIELECTRIC RESONATOR OSCILLATOR

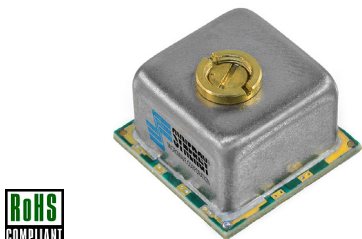
## SURFACE MOUNT MODEL: GSDRO832-8XT

### FREQUENCY

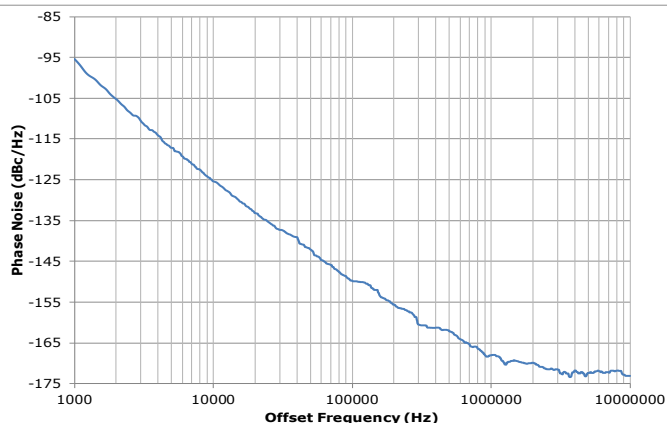
### 8.32 GHz

#### FEATURES:

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



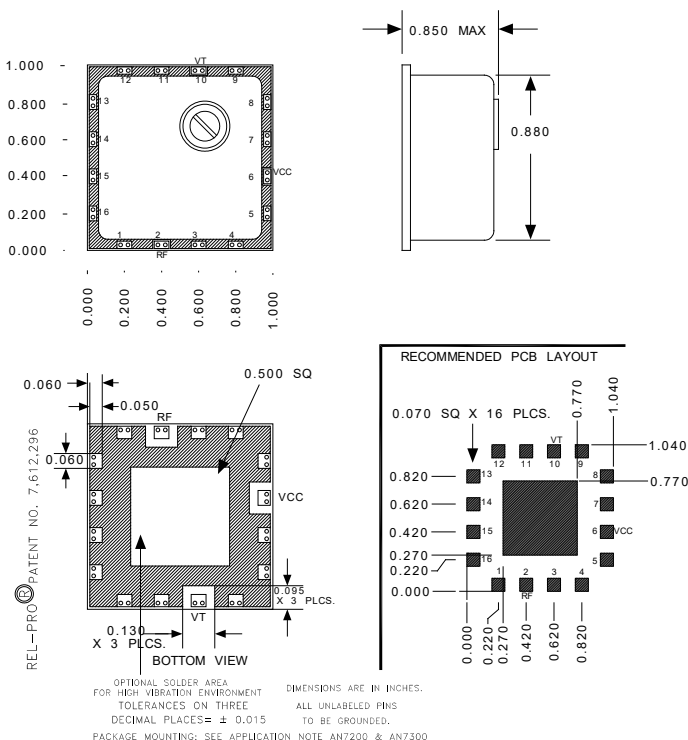
#### Phase Noise



#### SPECIFICATIONS (Rev. A 04/18/24)

|                             |                            |               |
|-----------------------------|----------------------------|---------------|
| Frequency                   | 8.32 GHz                   |               |
| Tuning Voltage              | 1 - 10 VDC                 |               |
| Bias Voltage                | +8 VDC @ 30 mA (Max.)      |               |
| Output Power                | +5 dBm (Min.)              |               |
| Tuning Sensitivity          | 0.35 MHz/V (Typ.)          |               |
| Thermal Drift               | 0.6 ppm / °C (Typ.)        |               |
| Output Impedance            | 50 Ohms (Nom.)             |               |
| Harmonic Suppression        | 32 dBc (Typ.)              |               |
| Frequency Pulling           | 1 kHz (Typ. @ 1.75:1 VSWR) |               |
| Frequency Pushing           | 25 kHz/V (Typ.)            |               |
| Tuning Port Capacitance     | 10 pF (Typ.)               |               |
| Phase Noise @ 25°C          | Offset                     | dBc/Hz (Typ.) |
|                             | 1 kHz                      | -95           |
|                             | 10 kHz                     | -125          |
|                             | 100 kHz                    | -149          |
|                             | 1 MHz                      | -167          |
|                             | 10 MHz                     | -173          |
| Operating Temperature Range | -40 to +85 °C              |               |

Package # 479-2



#### 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 8.32 GHz.

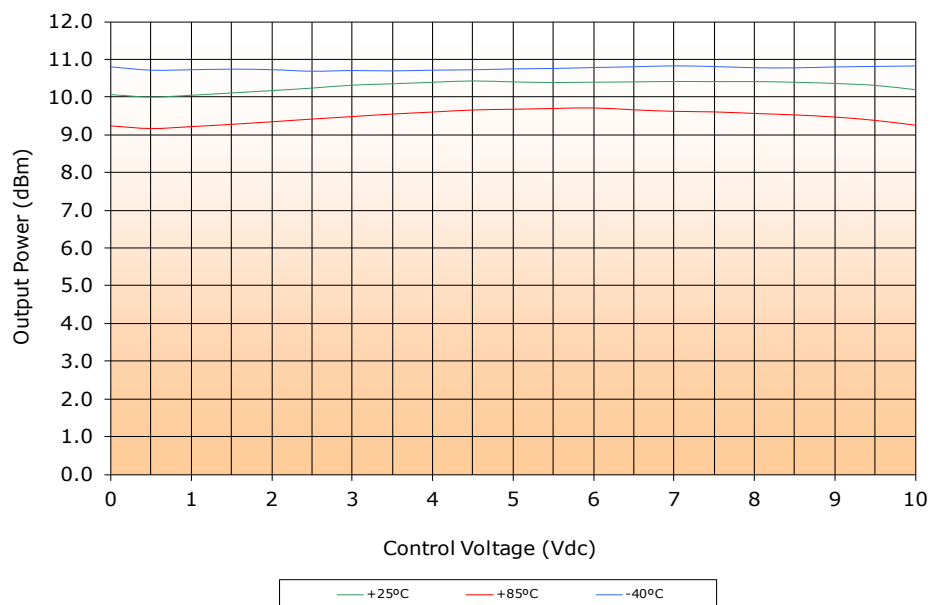
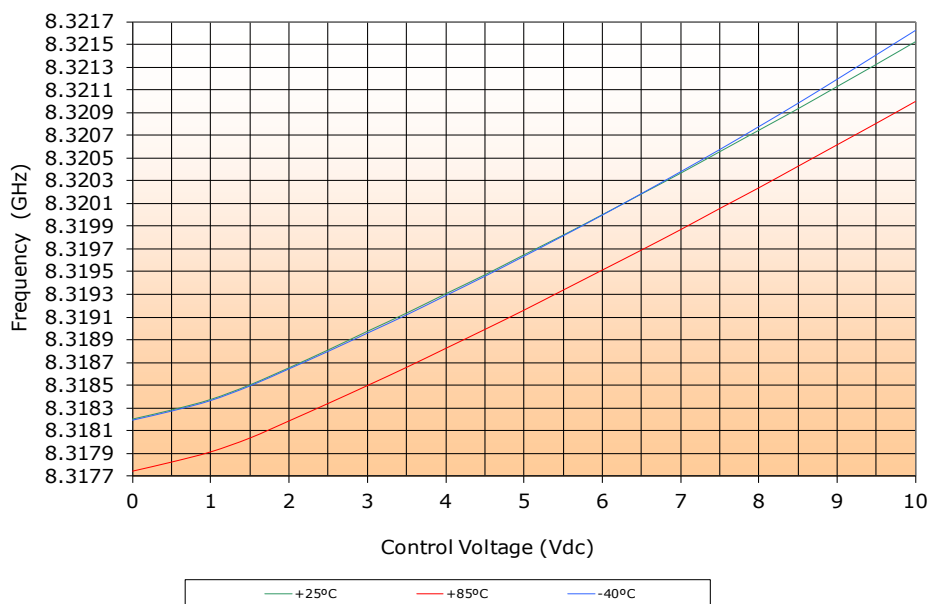
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PERFORMANCE PLOTS



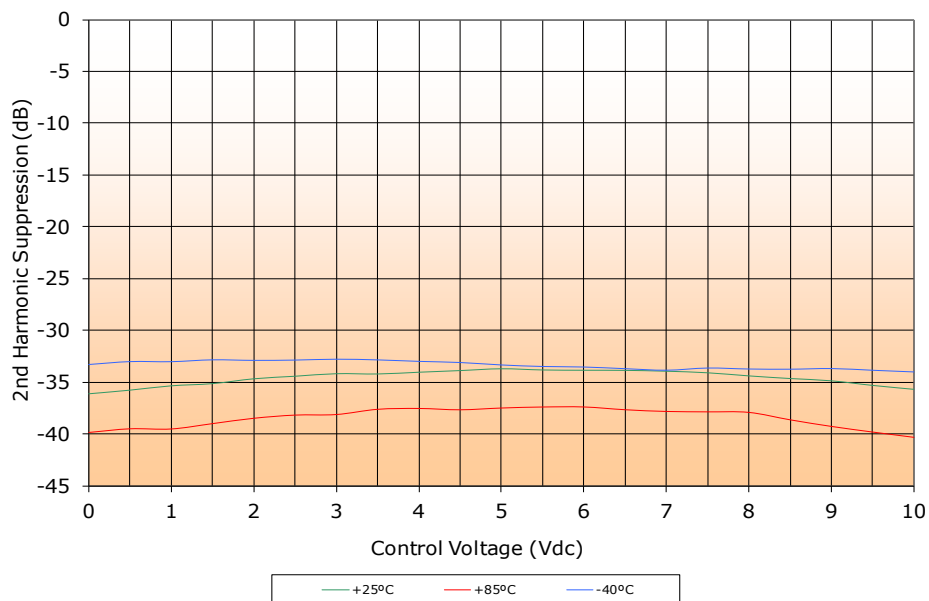
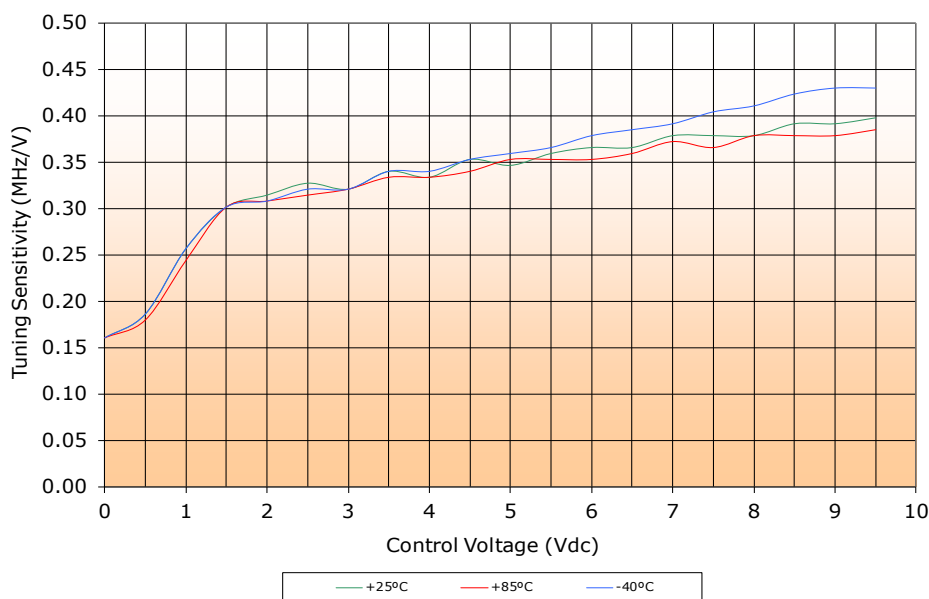
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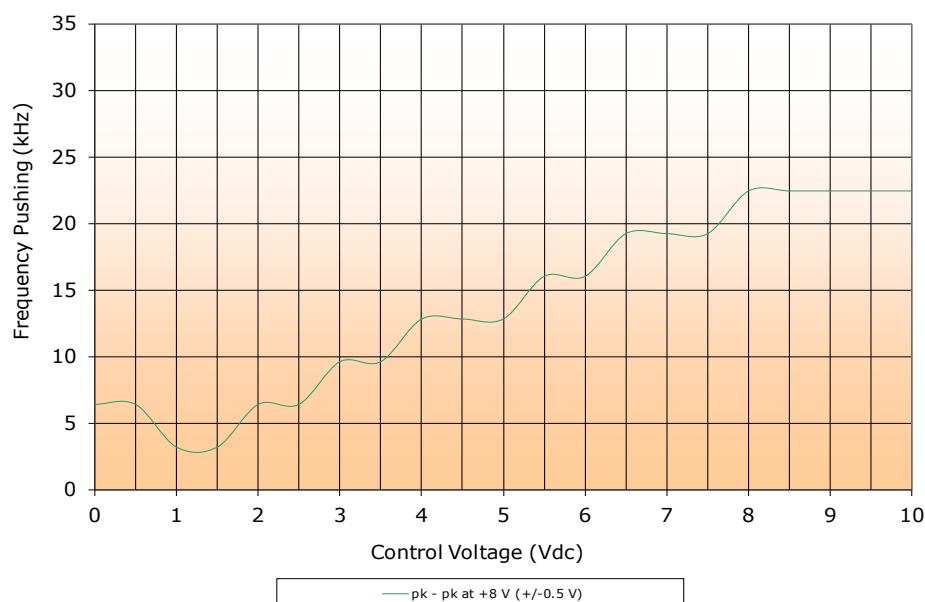


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