

DIELECTRIC RESONATOR OSCILLATOR

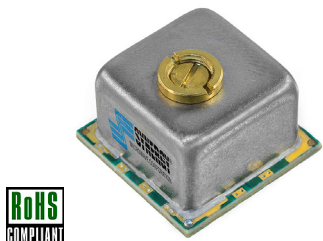
SURFACE MOUNT MODEL: SDRO740-8

FREQUENCY

7.4 GHz

FEATURES:

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



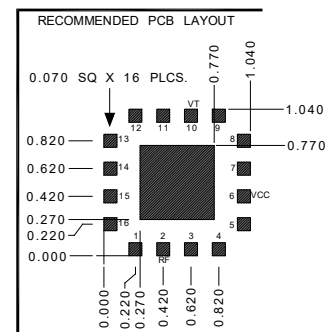
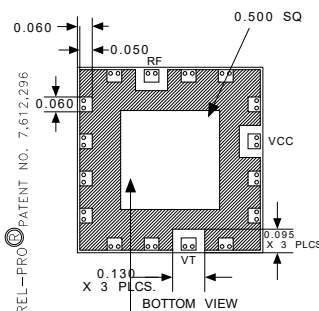
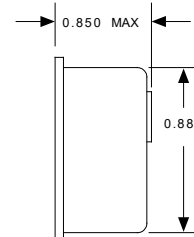
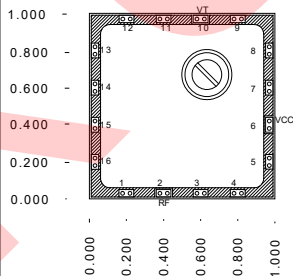
Phase Noise



SPECIFICATIONS

Frequency	7.4 GHz	
Tuning Voltage	1 - 10 VDC	
Bias Voltage	+8 VDC @ 30 mA (Max.)	
Output Power	5 dBm (Min.)	
Tuning Sensitivity	1 MHz/V (Typ.)	
Thermal Drift	2.3 ppm / °C (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	15 dBc (Typ.)	
Frequency Pulling	1 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	50 MHz/V (Typ.)	
Tuning Port Capacitance	10 pF (Typ.)	
Phase Noise @ 25°C	Offset	dBc/Hz (Typ.)
	10 kHz	-111
	100 kHz	-138
	1 MHz	-160
	10 MHz	-165
Operating Temperature Range	-15 to +75 °C	

Package # 479-2



REL-PRO PATENT NO. 7,612,296
OPTIONAL SOLDER AREA FOR HIGH-VIBRATION ENVIRONMENT
TOLERANCES ON THREE DECIMAL PLACES = ± 0.015
PACKAGE MOUNTING: SEE APPLICATION NOTE AN7200 & AN7300
DIMENSIONS ARE IN INCHES.
ALL UNLABELED PINS TO BE GROUNDED.

Absolute Maximum Ratings

Storage Temp. Range	-40 to +85 °C
Bias Voltage	+8.5 V
Tuning Voltage	+16 V
DC Voltage Applied to RF Out	±25 V

Notes:

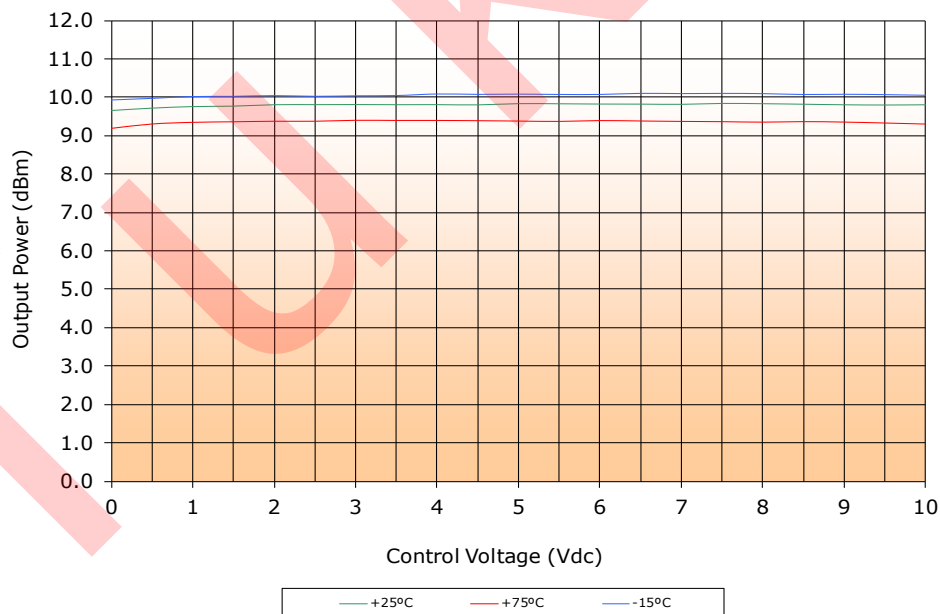
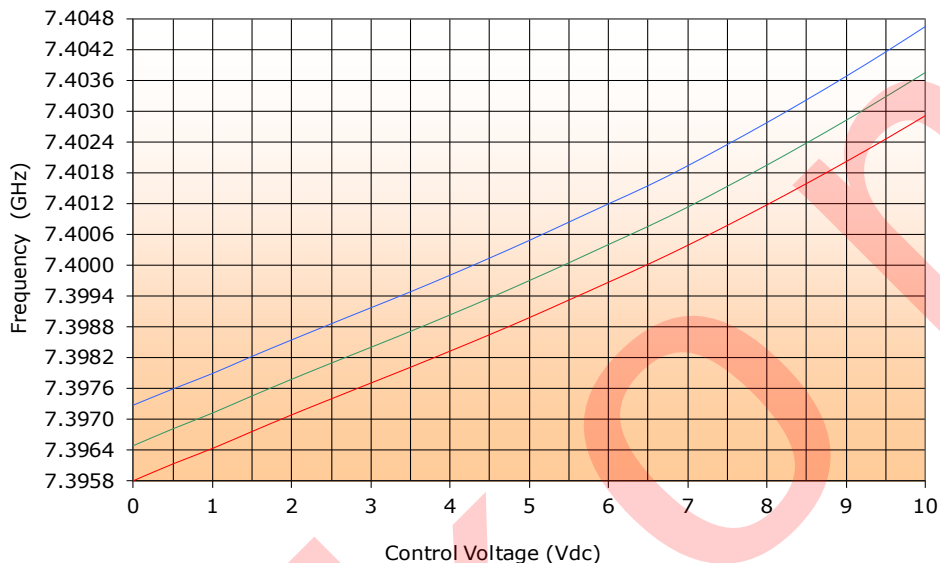
1. Tuning of the mechanical screw can cause significant shifts in frequency and cause irreversible damage to the product. Warranty is void if tuning screw exceeds ±0.5 turn max.
2. Test data measured with bias voltage at +8V.
3. Specifications guaranteed at 7.4 GHz.

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PERFORMANCE PLOTS

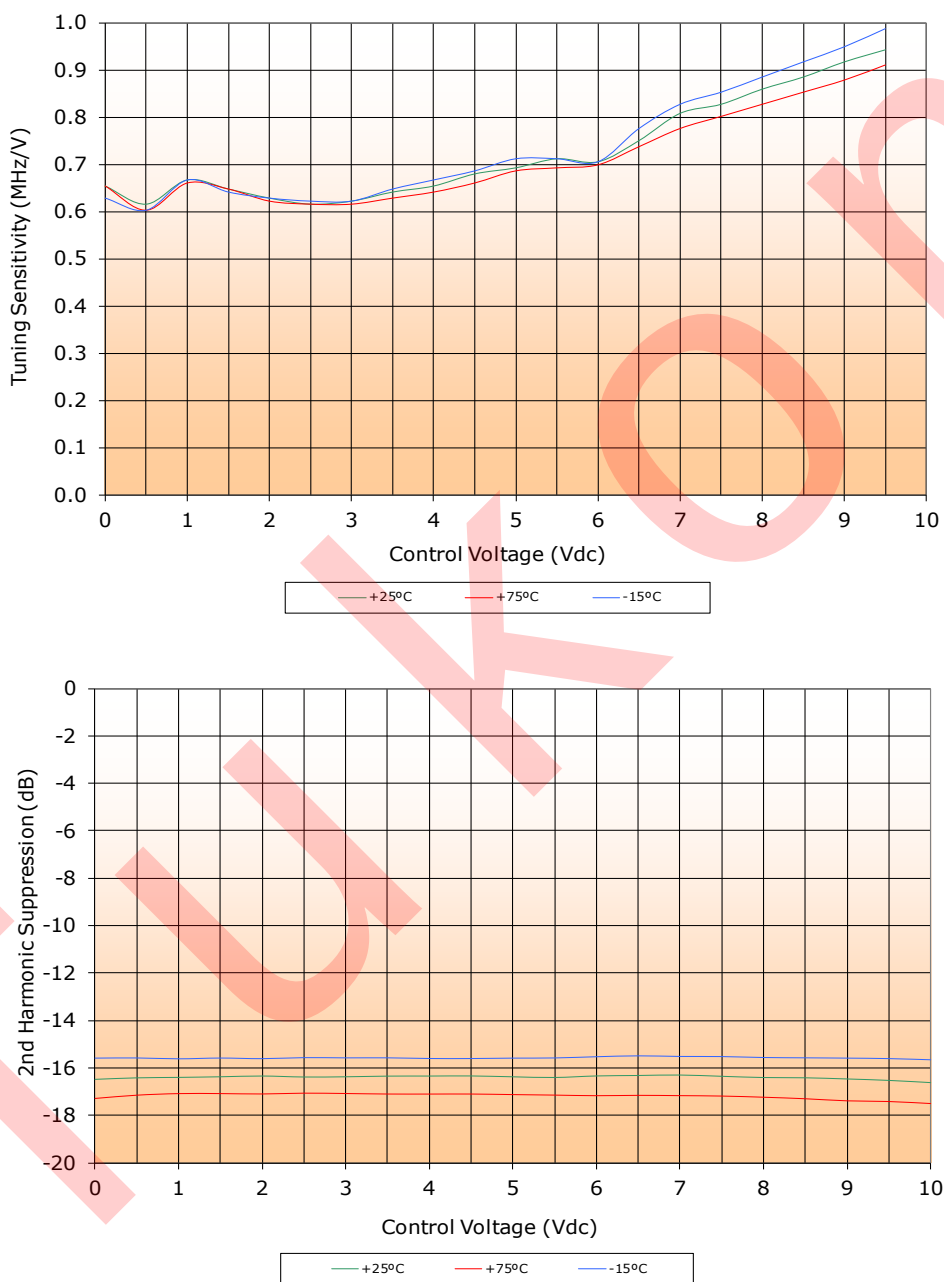
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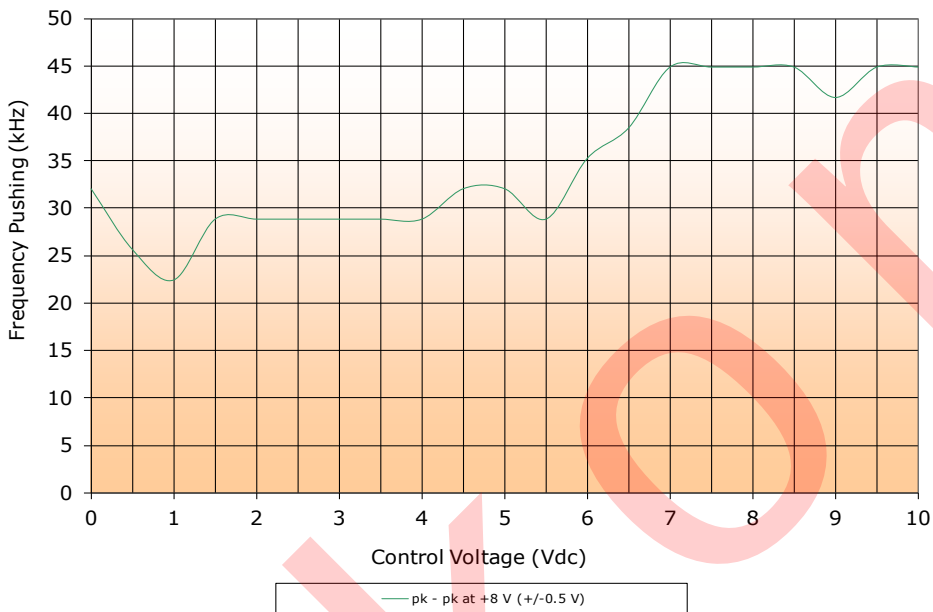
PERFORMANCE PLOTS



DIELECTRIC RESONATOR OSCILLATOR SURFACE MOUNT MODEL: SDRO740-8

FREQUENCY

7.4 GHz



PERFORMANCE PLOTS