

VOLTAGE CONTROLLED OSCILLATOR

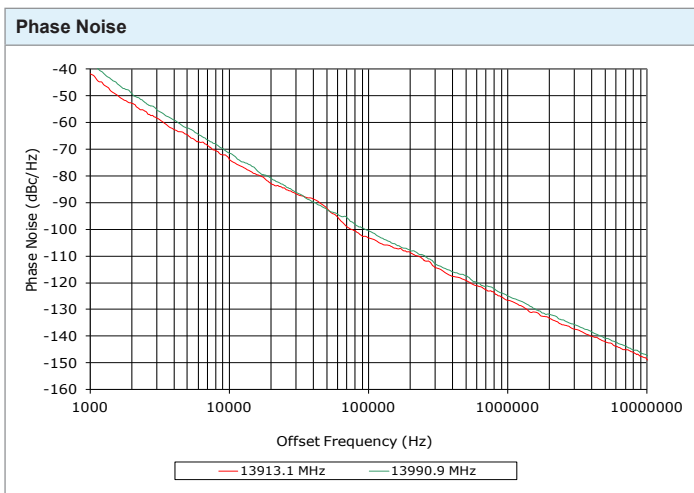
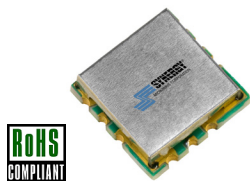
SURFACE MOUNT MODEL: DXO13901400-5

Ku-BAND OPTIMIZED BANDWIDTH

13900 - 14000 MHz

FEATURES:

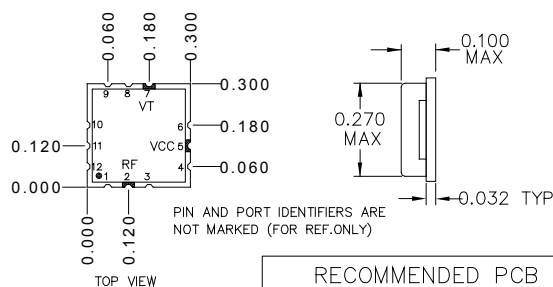
- ▶ Miniature Size, Surface Mount (0.3" x 0.3")
- ▶ Low Phase Noise Performance
- ▶ Fast Tuning
- ▶ Planar Resonator Construction



SPECIFICATIONS (Rev B 04/18/14)

Frequency	13900 - 14000 MHz
Tuning Voltage	See table below.
Bias Voltage	+5 VDC @ 22 mA (Max.)
Output Power	0 dBm (Min.)
Tuning Sensitivity	60 - 90 MHz/V (Typ.)
Output Impedance	50 Ohms (Nom.)
Harmonic Suppression	30 dB (Typ.)
Frequency Pulling	40 MHz (Typ. @ 1.75:1 VSWR)
Frequency Pushing	18 MHz/V (Typ.)
Tuning Port Capacitance	2.2 pF (Typ.)
Phase Noise @ 10 kHz	-72 dBc/Hz (Typ.)
Operating Temperature Range	-40 to +85 °C

Package # 364



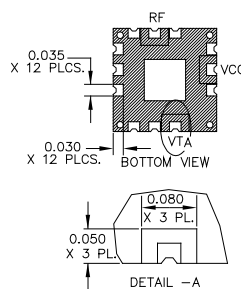
Guaranteed Tuning Specifications

Tuning Voltage (V)	Frequency (MHz)
0.5	13900 (Max.)
8	14000 (Min.)

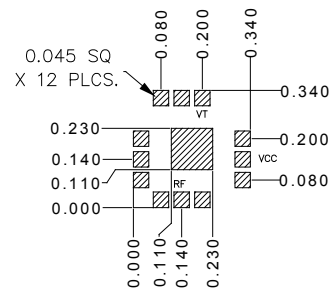
Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage	+5.5 V
Tuning Voltage	+12V
DC Voltage Applied to RF Out	± 25 V

Patent : <http://www.synergymwave.com/patents>



RECOMMENDED PCB LAYOUT



DIMENSIONS ARE IN INCHES.
 TOLERANCES ON THREE DECIMAL PLACES= ± 0.015
 ALL UNLABELED PINS TO BE GROUNDED.
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300 & AN7302

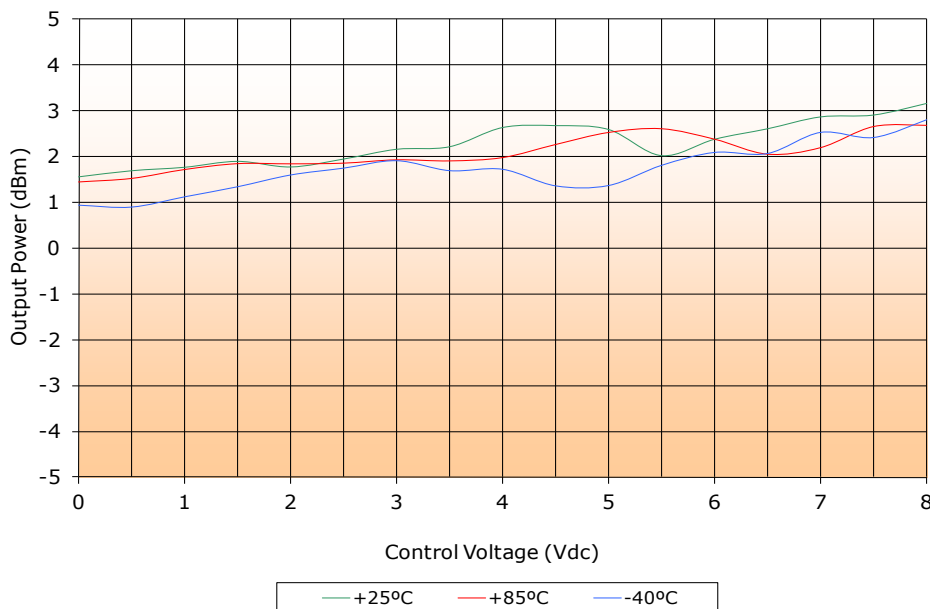
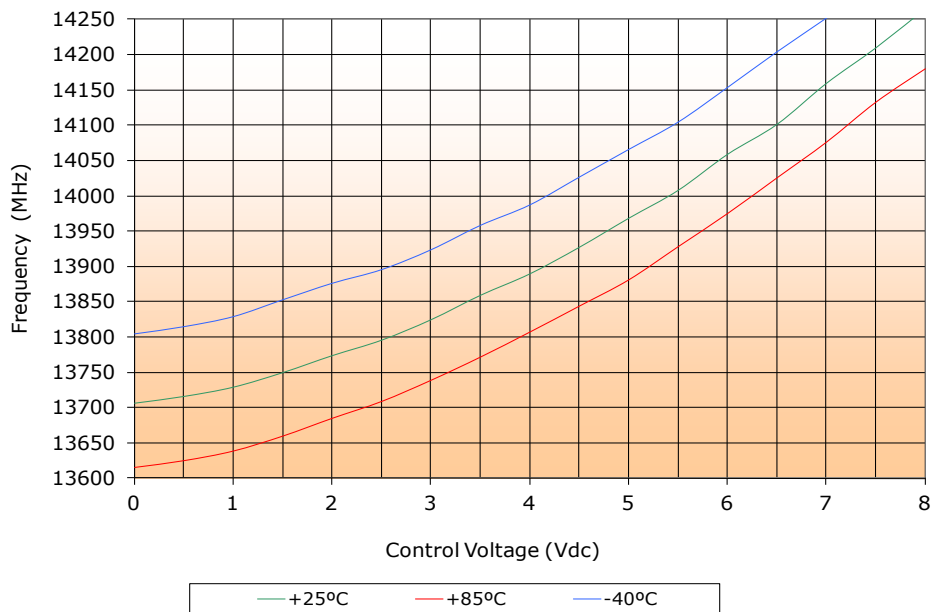
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PERFORMANCE PLOTS



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