

VOLTAGE CONTROLLED OSCILLATOR

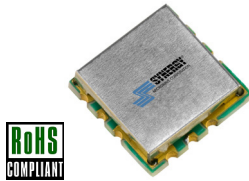
SURFACE MOUNT MODEL: DCO432493-5

OPTIMIZED BANDWIDTH

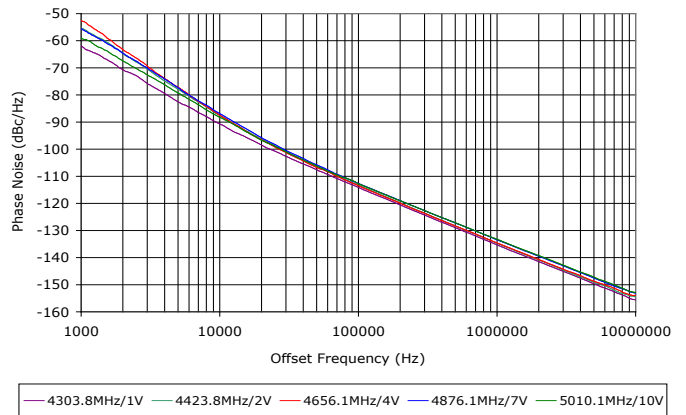
4325 - 5000 MHz

FEATURES:

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



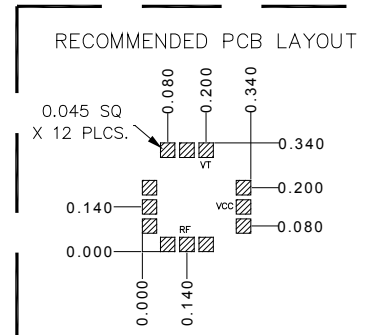
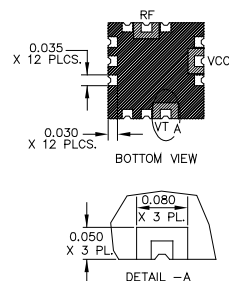
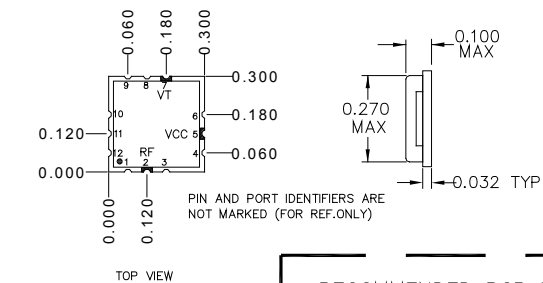
Phase Noise



SPECIFICATIONS (Rev D 01/09/14)

| | | |
|-----------------------------|-----------------------------|--------|
| Frequency | 4325 - 5000 MHz | |
| Tuning Voltage | See table below. | |
| Bias Voltage | +5 VDC @ 21 mA (Max.) | |
| Output Power | 0 dBm (Min.) | |
| Tuning Sensitivity | 40 - 118 MHz/V (Typ.) | |
| Output Impedance | 50 Ohms (Nom.) | |
| Harmonic Suppression | 25 dB (Typ.) | |
| Frequency Pulling | 10 MHz (Typ. @ 1.75:1 VSWR) | |
| Frequency Pushing | 8 MHz/V (Typ.) | |
| Tuning Port Capacitance | 33 pF (Typ.) | |
| Typical Phase Noise | Offset | dBc/Hz |
| | 10 kHz | -88 |
| | 100 kHz | -113 |
| Operating Temperature Range | -40 to +85 °C | |

Package # 343



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300 & AN7302

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015

DIMENSIONS ARE IN INCHES. ALL UNLABELED PINS TO BE GROUNDING.

Guaranteed Tuning Specifications

| Tuning Voltage (V) | Frequency (MHz) |
|----------------------|-------------------|
| 0.5 | 4325 (Max.) |
| 5 | 4680 (Min.) |
| 8 | 4850 (Min.) |
| 11 | 4950 (Min.) |
| 12 | 5000 (Min.) |

Absolute Maximum Ratings

| | |
|------------------------------|----------------|
| Storage Temp. Range | -55 to +125 °C |
| Bias Voltage | +5.5 V |
| Tuning Voltage | +15 V |
| DC Voltage Applied to RF Out | ± 25 V |

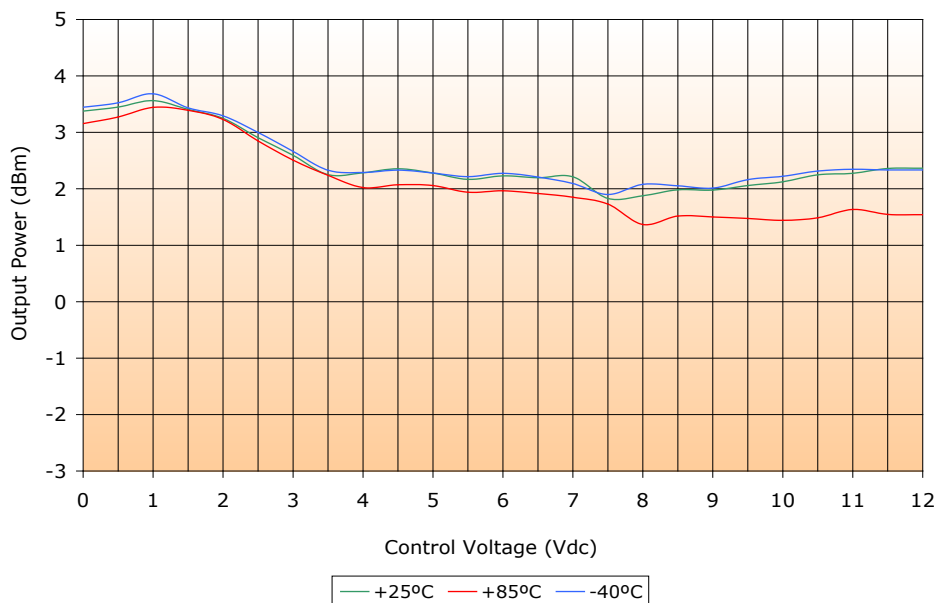
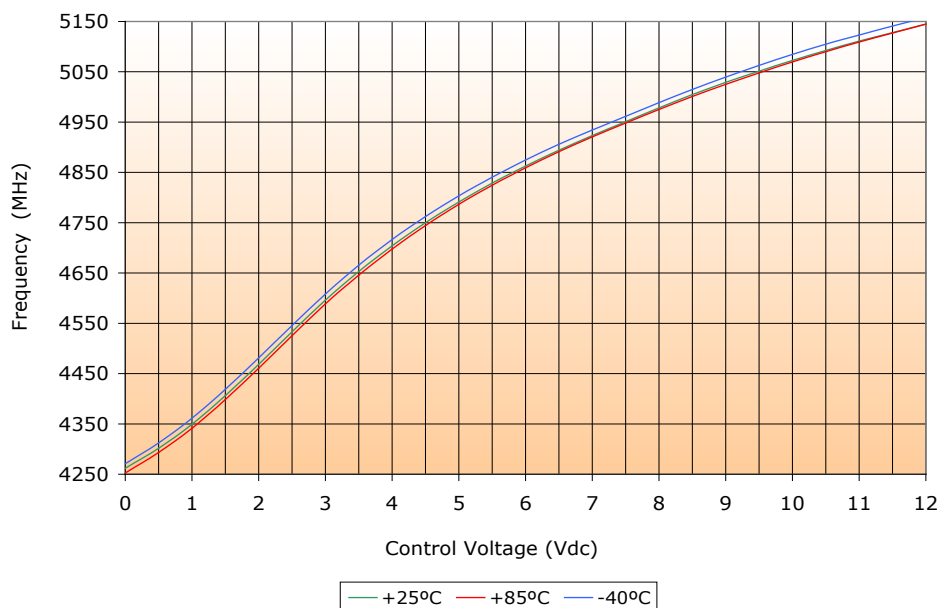
VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO432493-5

OPTIMIZED BANDWIDTH

4325 - 5000 MHz

PERFORMANCE PLOTS



VOLTAGE CONTROLLED OSCILLATOR

SURFACE MOUNT MODEL: DCO432493-5

OPTIMIZED BANDWIDTH

4325 - 5000 MHz

PERFORMANCE PLOTS

