

VOLTAGE CONTROLLED OSCILLATOR

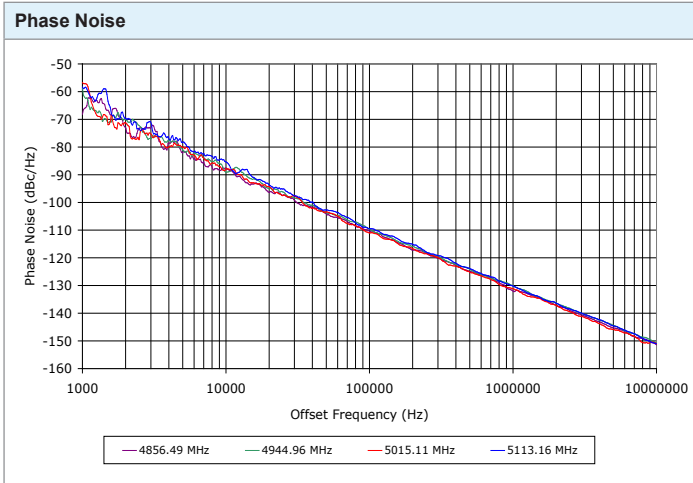
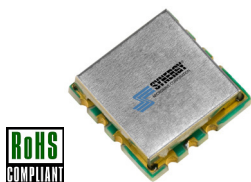
SURFACE MOUNT MODEL: DCO490517-5

OPTIMIZED BANDWIDTH

4900 - 5175 MHz

FEATURES:

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



SPECIFICATIONS (Rev. C 01/09/14)

| | | |
|-----------------------------|-----------------------------|--------|
| Frequency | 4900 - 5175 MHz | |
| Tuning Voltage | See table below. | |
| Bias Voltage | +5 VDC @ 22 mA (Max.) | |
| Output Power | -1 dBm (Min.) | |
| Tuning Sensitivity | 73 - 125 MHz/V (Typ.) | |
| Output Impedance | 50 Ohms (Nom.) | |
| Harmonic Suppression | 25 dB (Typ.) | |
| Frequency Pulling | 10 MHz (Typ. @ 1.75:1 VSWR) | |
| Frequency Pushing | 10 MHz/V (Typ.) | |
| Tuning Port Capacitance | 10 pF (Typ.) | |
| Typical Phase Noise | Offset | dBc/Hz |
| | 10 kHz | -88 |
| | 100 kHz | -110 |
| Operating Temperature Range | -40 to +85 °C | |

Package # 343

PIN AND PORT IDENTIFIERS ARE NOT MARKED (FOR REF. ONLY)

RECOMMENDED PCB LAYOUT

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 | 4900 (Max.) |
| 5 | 5175 (Min.) |

Absolute Maximum Ratings

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

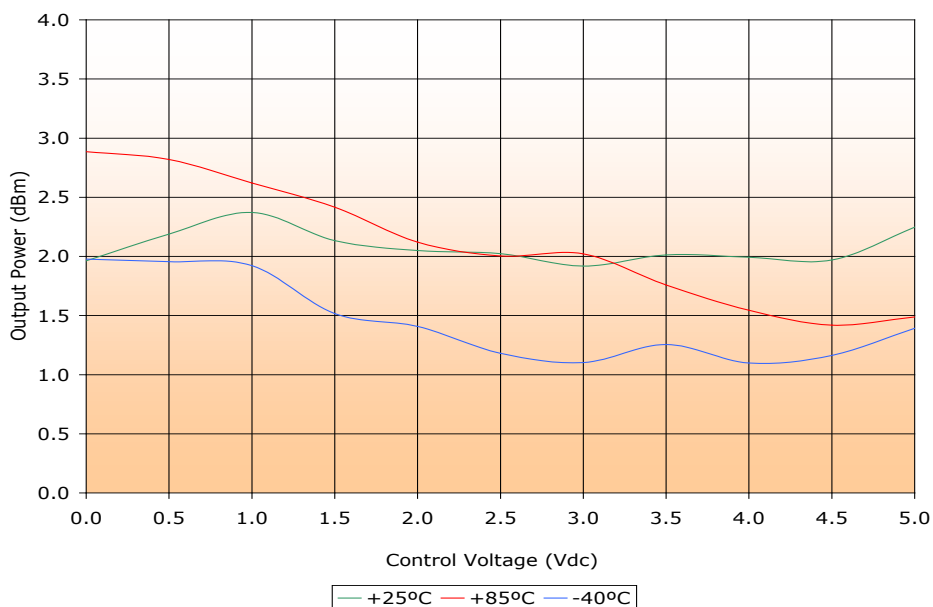
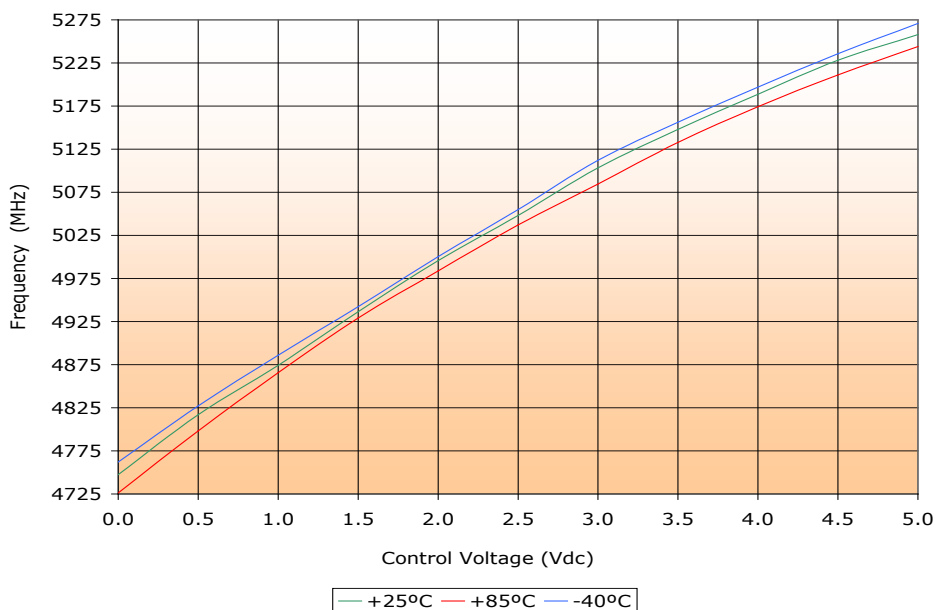
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