

# VOLTAGE CONTROLLED OSCILLATOR

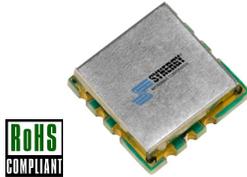
## SURFACE MOUNT MODEL: DCO615712-5

OPTIMIZED BANDWIDTH

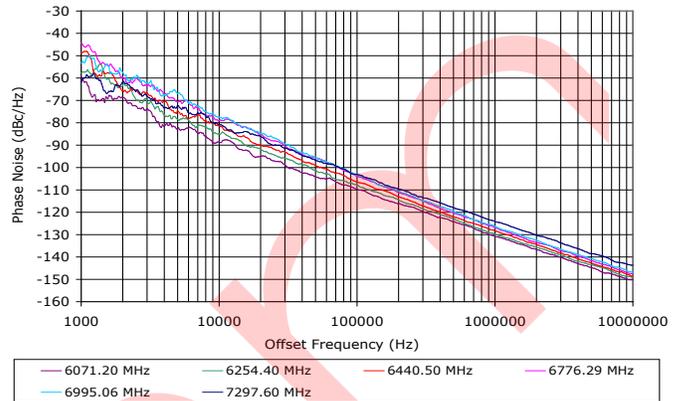
6150 - 7120 MHz

**FEATURES:**

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



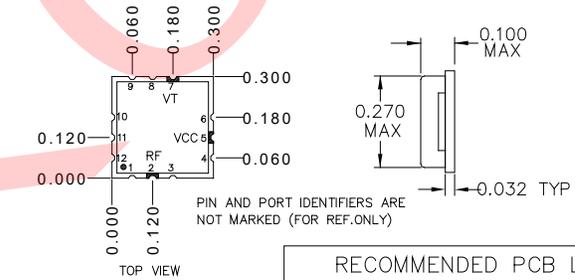
**Phase Noise**



**SPECIFICATIONS (Rev. B 04/27/18)**

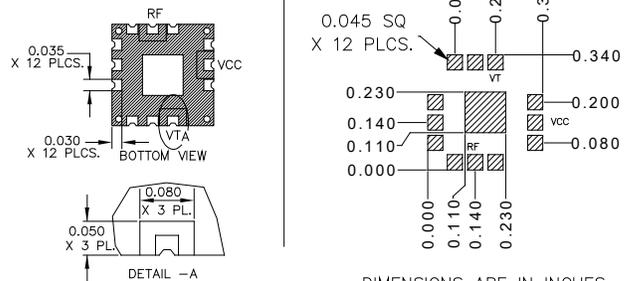
Frequency	6150 - 7120 MHz	
Tuning Voltage	See table below.	
Bias Voltage	+5 VDC @ 22 mA (Max.)	
Output Power	-4 dBm (Min.)	
Tuning Sensitivity	55 - 170 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	25 dB (Typ.)	
Frequency Pulling	12 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	12 MHz/V (Typ.)	
Tuning Port Capacitance	10 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-85
	100 kHz	-106
Operating Temperature Range	-40 to +85 °C	

Package # 364



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

**RECOMMENDED PCB LAYOUT**



DIMENSIONS ARE IN INCHES.

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015  
 ALL UNLABELED PINS TO BE GROUNDING.  
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300 & AN7302

**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	6150 (Max.)
5	6400 (Min.)
8	6800 (Min.)
12	7120 (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

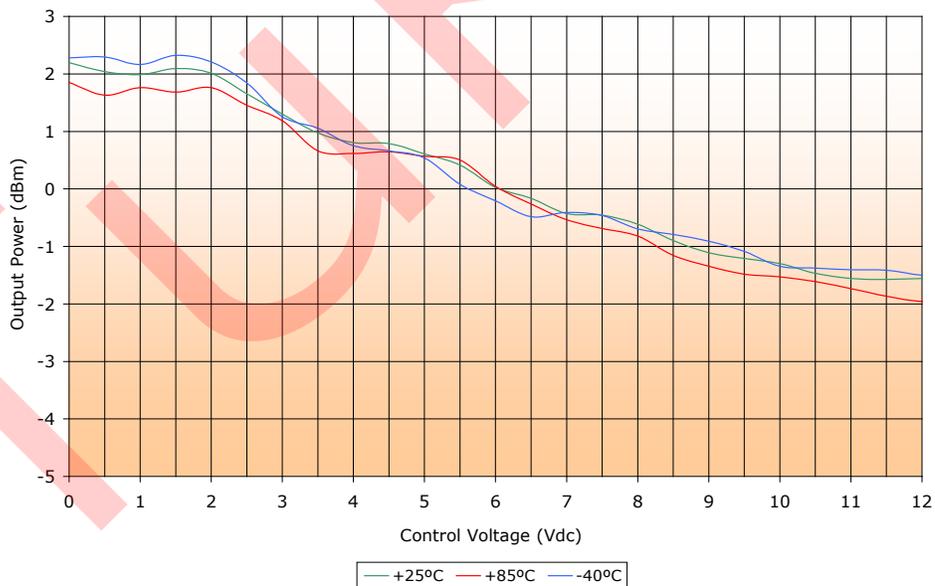
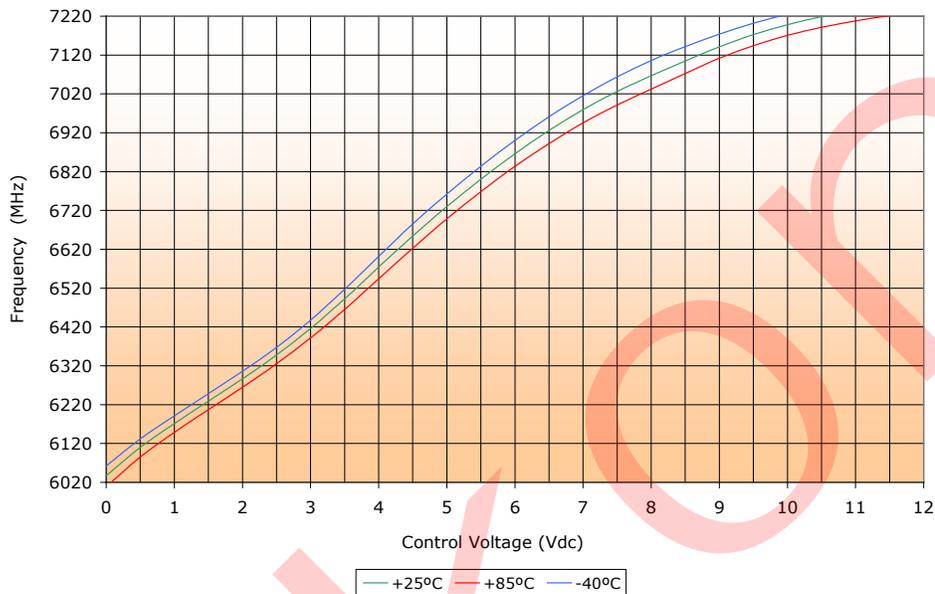
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PERFORMANCE PLOTS



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