

# VOLTAGE CONTROLLED OSCILLATOR

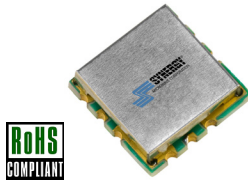
## SURFACE MOUNT MODEL: DCO579582-5

OPTIMIZED BANDWIDTH

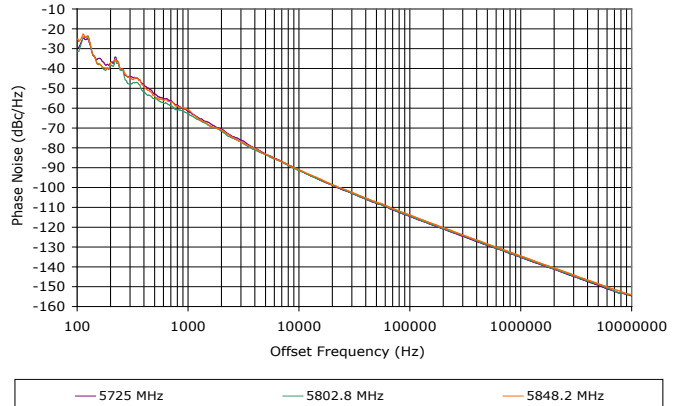
5725 - 5880 MHz

**FEATURES:**

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



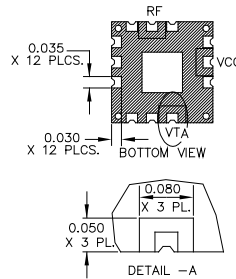
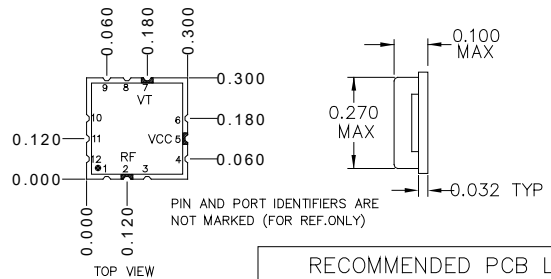
**Phase Noise**



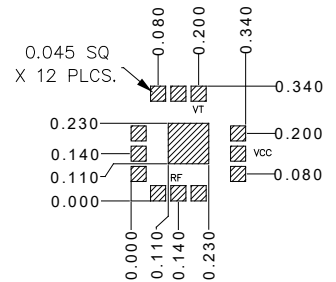
**SPECIFICATIONS (Rev. C 7/3/18)**

Frequency	5725 - 5880 MHz	
Tuning Voltage	See table below.	
Bias Voltage	+5 VDC @ 20 mA (Max.)	
Output Power	+1 dBm (Min.)	
Tuning Sensitivity	29 - 38 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	30 dB (Typ.)	
Frequency Pulling	12 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	12 MHz/V (Typ.)	
Tuning Port Capacitance	2.0 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-90
	100 kHz	-111
Operating Temperature Range	-40 to +85 °C	

Package # 364



**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

**Guaranteed Tuning Specifications**

Tuning Voltage ( V )	Frequency ( MHz )
0.5	5725 (Max.)
10	5880 (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

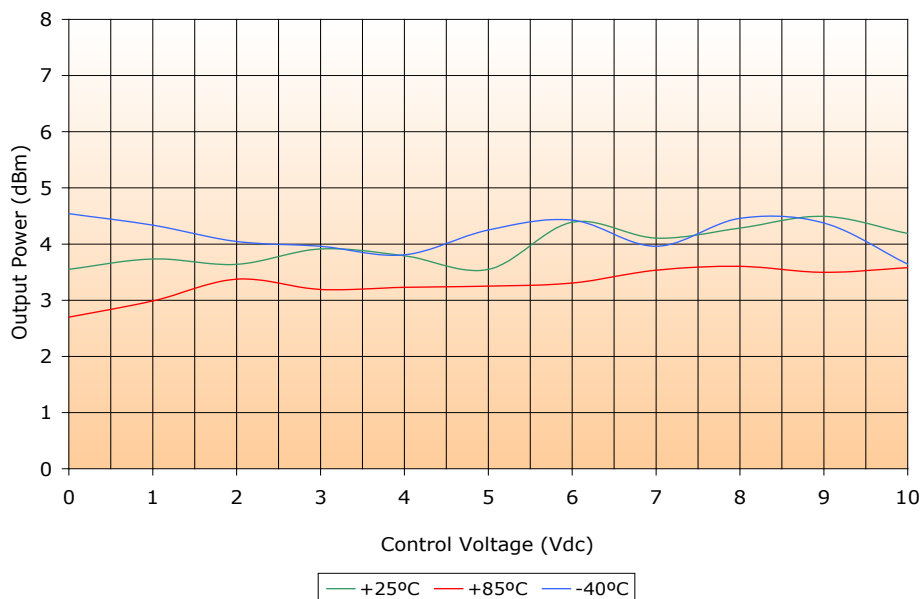
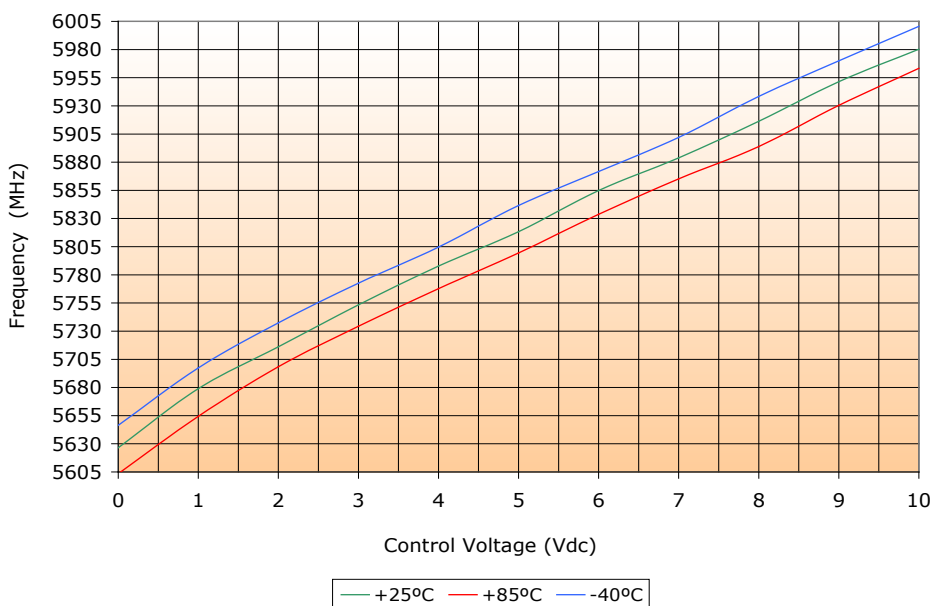
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PERFORMANCE PLOTS



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