

# VOLTAGE CONTROLLED OSCILLATOR

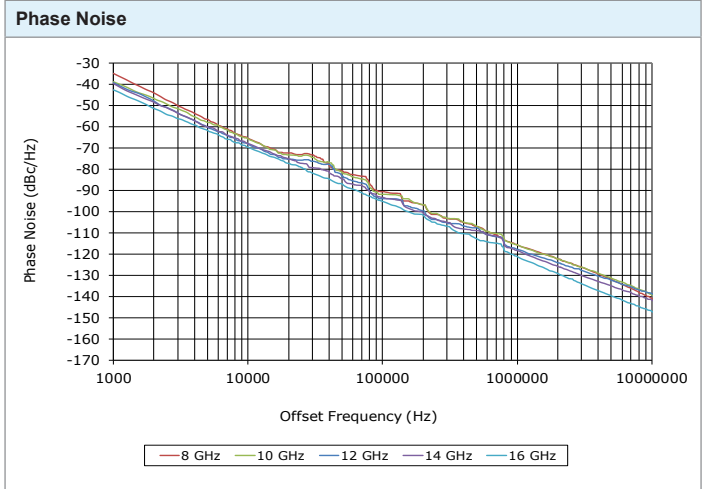
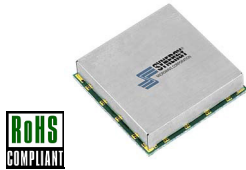
## SURFACE MOUNT MODEL: DCYS8001600-5

**X to Ku BAND**

**8000 - 16000 MHz**

**FEATURES:**

- ▶ Exceptional Phase Noise Performance
- ▶ Small Size, Surface Mount
- ▶ Lead Free Patented REL-PRO® Technology
- ▶ Buffered Output



**SPECIFICATIONS (Rev. D 03/06/23)**

Frequency	8000 - 16000 MHz	
Tuning Voltage	0.5 - 15 V	
Bias Voltage (Vcc 1)*	-1.7 VDC @ 5 mA (Typ.)	
Bias Voltage (Vcc 2)*	+5 VDC @ 190mA (Max.)	
Output Power	-1 dBm (Min.)	
Tuning Sensitivity	300 - 900 MHz/V (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Harmonic Suppression	17 dB (Typ.)	
Sub-Harmonic	10 dB (Typ.)	
Frequency Pulling	100 MHz (Typ. @ 1.75:1 VSWR)	
Frequency Pushing	25 MHz/V (Typ.)	
Tuning Port Capacitance	62 pF (Typ.)	
Typical Phase Noise	Offset	dBc/Hz
	10 kHz	-67
	100 kHz	-94

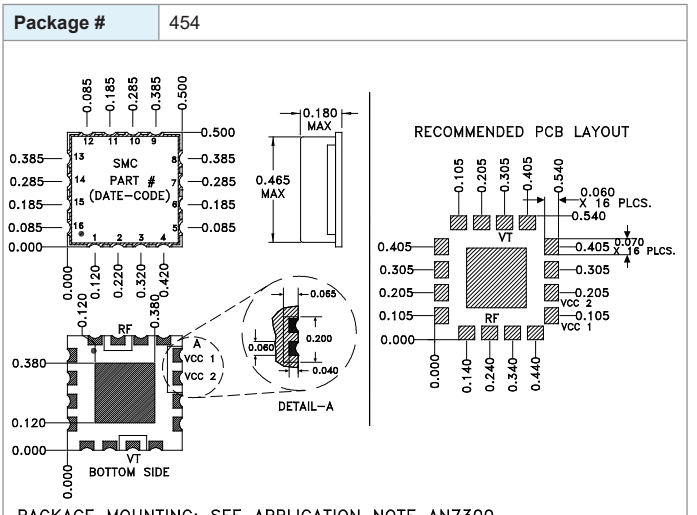
**Operating Temperature Range** -40 to +85 °C

*Notes:*  
 \* Follow bias voltage sequencing  
 1) Set Vcc1 & Vcc2 to zero volts.  
 2) Set Vcc1 (gate voltage) as specified above.  
 3) Set Vcc2 (drain voltage) as specified above.

Typical plots are not indicative of actual performance.

**Absolute Maximum Ratings**

Storage Temp. Range	-55 to +125 °C
Bias Voltage (VCC 1)	+5.5 V
Tuning Voltage (VCC 2)	-1.9 V
DC Voltage Applied to RF Out	±25 V



PACKAGE MOUNTING: SEE APPLICATION NOTE AN7300

Pin Out Config	
RF Out	Pin 1
Vcc 1	Pin 5
Vcc 2	Pin 6
Vtune	Pin 10
All Others	Case Ground

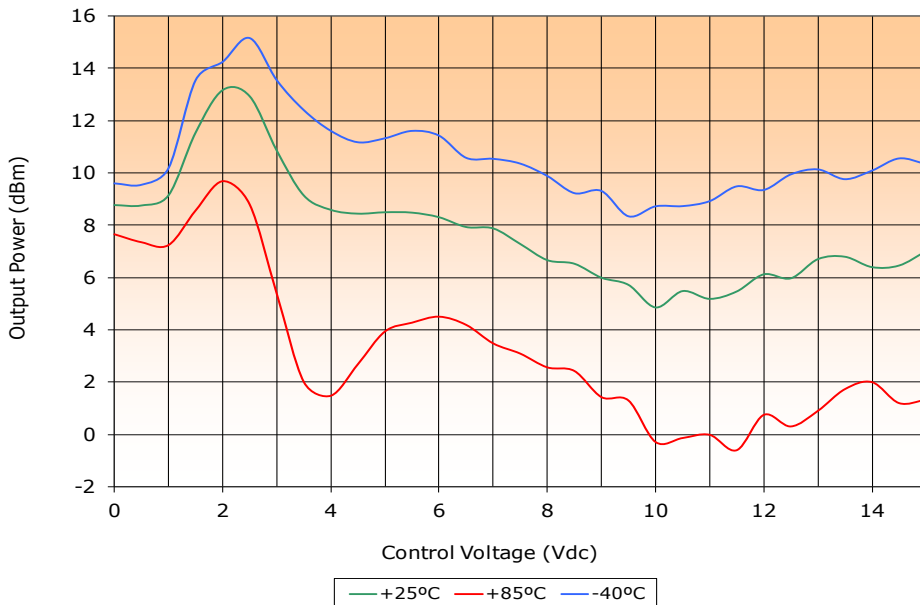
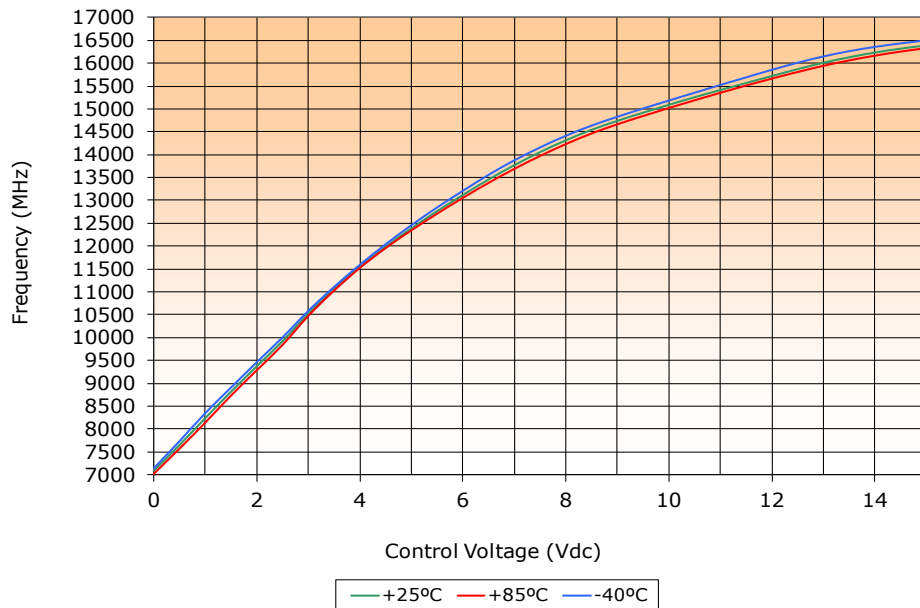
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