

FIXED FREQUENCY SYNTHESIZER

SURFACE MOUNT MODEL: FCPL840-10

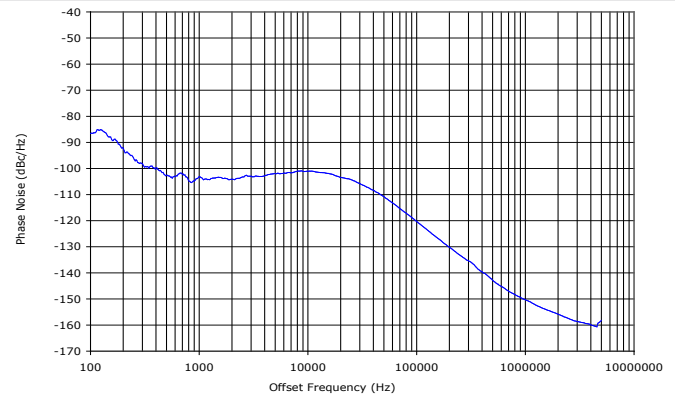
840 MHz

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ No Programming Required
- ▶ Lead Free - RoHS Compliant
- ▶ Patented REL-PRO® Technology
- ▶ Small Size, Surface Mount
- ▶ Buffered Output



Phase Noise

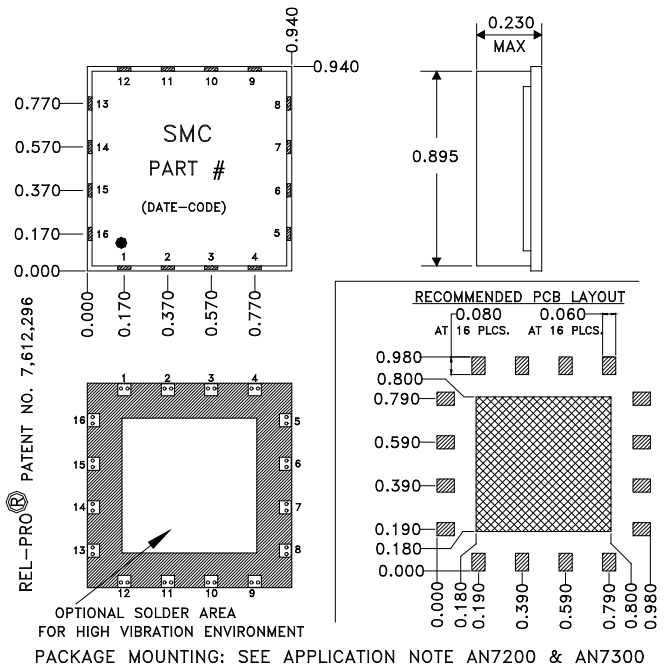


SPECIFICATIONS (Rev. D 12/21/10)

Frequency	840 MHz		
Reference Input Frequency	10 MHz		
Reference Input Voltage	1.0 V p-p to 3.3 V p-p		
Bias Voltage	Vcc	V (Vdc)	I (mA Max.)
	Vcc 1 (Digital)	+5	15
	Vcc 2 (Vtune)	+5	10
	Vcc 3 (VCO)	+5	55
Lock Detect Indicator	CMOS 3.3 V		
Output Power	+3 dBm (Min.)		
Spurious Suppression	85 dB (Typ.)		
Harmonic Suppression	18 dB (Typ.)		
Power Up Time	90 mSec (typ.) *		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 1 kHz	-103 dbc/Hz	
	@ 10 kHz	-101 dbc/Hz	
	@ 100 kHz	-120 dbc/Hz	
Operating Temperature Range	-40 to +85 °C		

* From stable power on to stable lock detect.

Package # 273LF



Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (Digital)	+5.25 V
Bias Voltage (Vtune)	+8.0 V
Bias Voltage (VCO)	+5.5 V
DC Voltage Applied to RF Out	± 25 V

PORT CONFIGURATION

Pin 6 - Ref. Input	Pin 13 - RF Out	NC - Not Connected
Pin 7 - Vcc 1 (Digital)	Pin 14 - Lock Detect	
Pin 8 - Vcc 2 (Tune)	Pin 1,2,3,4,5,15,16 - NC	
Pin 9 - Vcc 3 (VCO)	Pin 10,11,12 - GND.	

This product is manufactured under one or more of the following patents. Approved: 5,160,810; 5,122,621; 5,390,349; 5,416,449; 5,650,754; 5,805,431; 6,525,623; 6,850,575; 7,088,189; 7,180,381; 7,196,591; 7,262,670; 7,265,642; 7,292,113; 7,365,612; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 7,580,693; 7,586,381; 7,605,670; 7,636,021; 2,533,623 | Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/654173; 60/689090; 60/601823; 60/605791; EV31369834; 11/263766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787; 7,495,525; 2,548,311; 2,548,317; 7,545,229; 2,563,174; 7,580,693; 7,612,296; 2,524,751

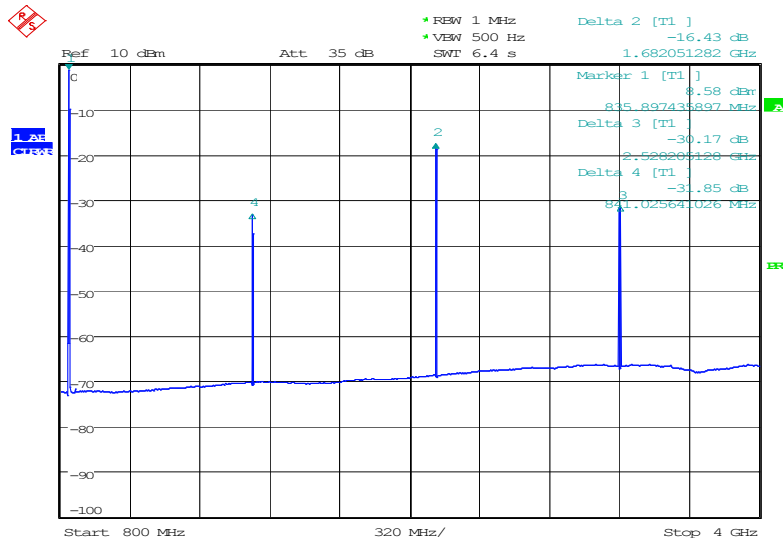


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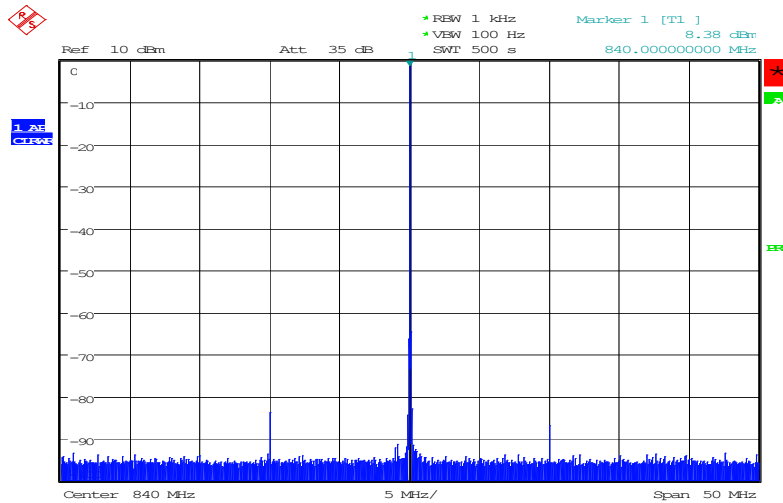
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840 MHz

HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS

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