

INTEGRATED FREQUENCY SYNTHESIZER

SURFACE MOUNT MODEL: FSH250300-1M

OPTIMIZED LOOP PARAMETERS

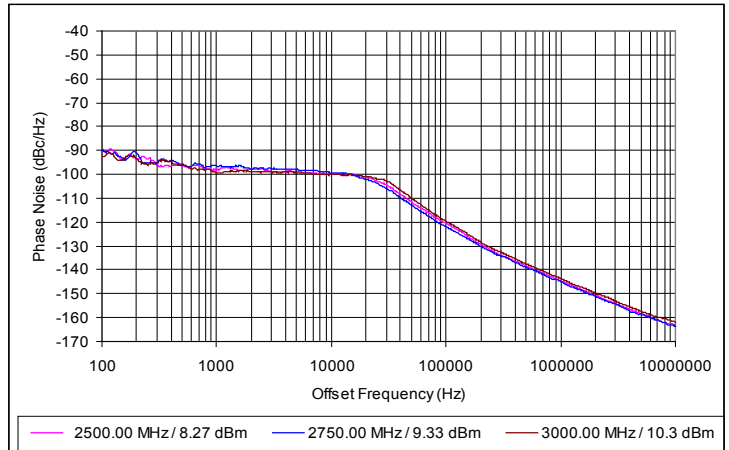
2500 - 3000 MHz

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ Optimized Reference Sidebands
- ▶ Lead Free - RoHS Compliant
- ▶ Patent Pending REL-PRO® Technology
- ▶ Small Size, Surface Mount



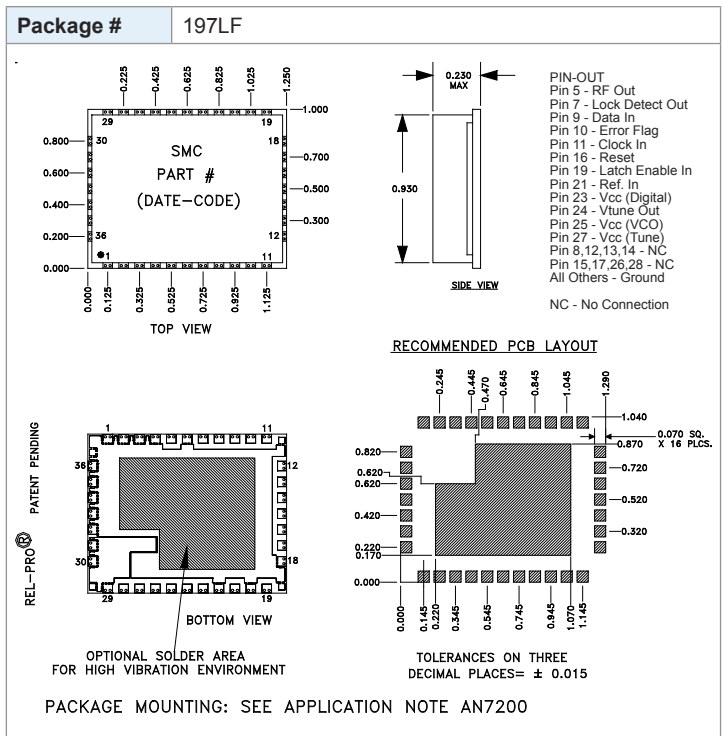
Phase Noise



SPECIFICATIONS (Rev. B 10/02/06)

Frequency	2500 - 3000 MHz		
Step Size	10 MHz		
Reference Input Frequency	10 MHz *		
Reference Input Voltage	1 V p-p to 3.3 V p-p		
Bias Voltage	Vcc	V (Vdc)	I (mA Max.)
	Digital	+5	50
	VCO	+10	40
	Tune	+24	50
Output Power	+8 dBm (Min.)		
VSWR	1.8:1 (Typ.)		
Spurious Suppression	-90 dBc (Typ.)		
Harmonic Suppression	-25 dBc (Typ.)		
Settling Time	15 mSec (Typ.) **		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 1 kHz	-95 dbc/Hz	
	@ 10 kHz	-98 dbc/Hz	
	@ 100 kHz	-122 dbc/Hz	
Operating Temperature Range	-40 to +85 °C		
Programming	See Application Note: AN7100		

* Reference input frequency is programmable in multiples of the step size. 10 MHz is the default setting.
 ** From the rising edge of LE to stable lock detect



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
 Pending: 60/493075; 60/501371 & 60/501790; 60/527957 & 60/528670; 60/563481; 60/564173; 60/589090; 60/601823;
 60/605791; EV31369834; 11/259766; 60/622485 & 60/710310; 10/937525/60/736901; 60/732787
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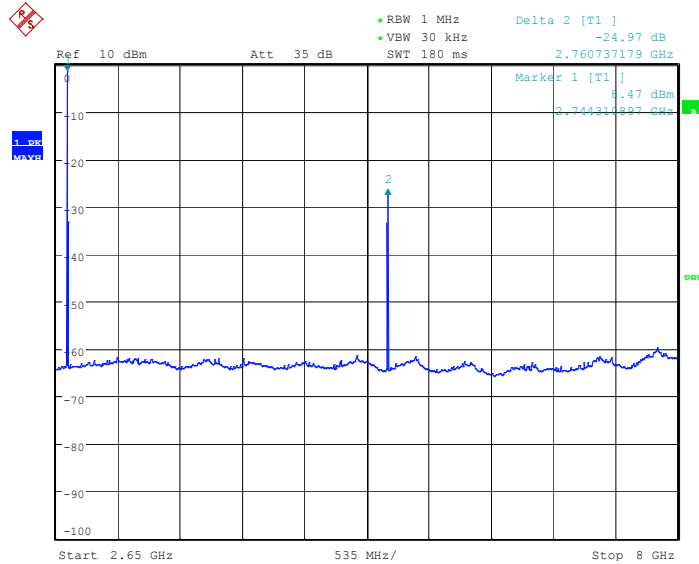
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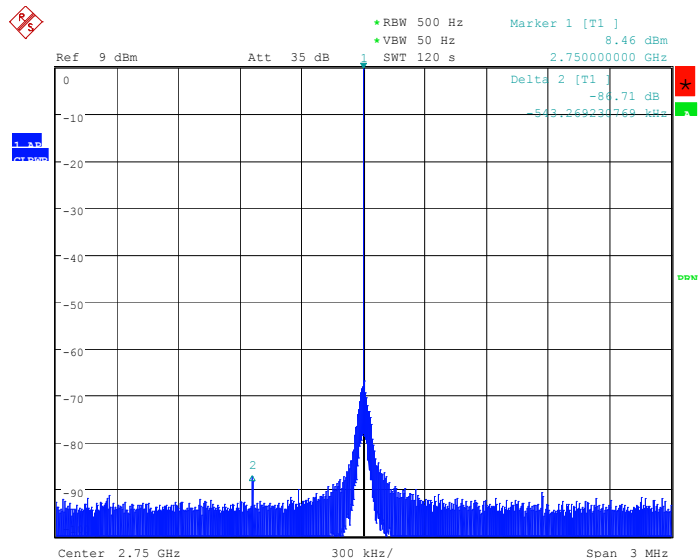
OPTIMIZED LOOP PARAMETERS

2500 - 3000 MHz

HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS

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