

# INTELLIGENT INTERACTIVE SYNTHESIZER

## SURFACE MOUNT MODEL: FSW1545-50

WIDE BANDWIDTH

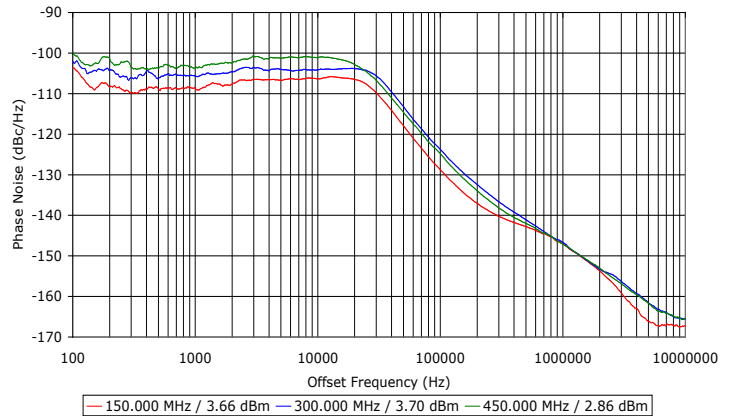
150 - 450 MHz

**FEATURES:**

- ▶ Exceptionally Low Phase Noise
- ▶ Interactive Communication
- ▶ Standard Programming Interface
- ▶ Ultra Wide Tuning Range
- ▶ Lead Free - RoHS Compliant
- ▶ Patent Pending REL-PRO® Technology
- ▶ Small Size, Surface Mount



**Phase Noise**

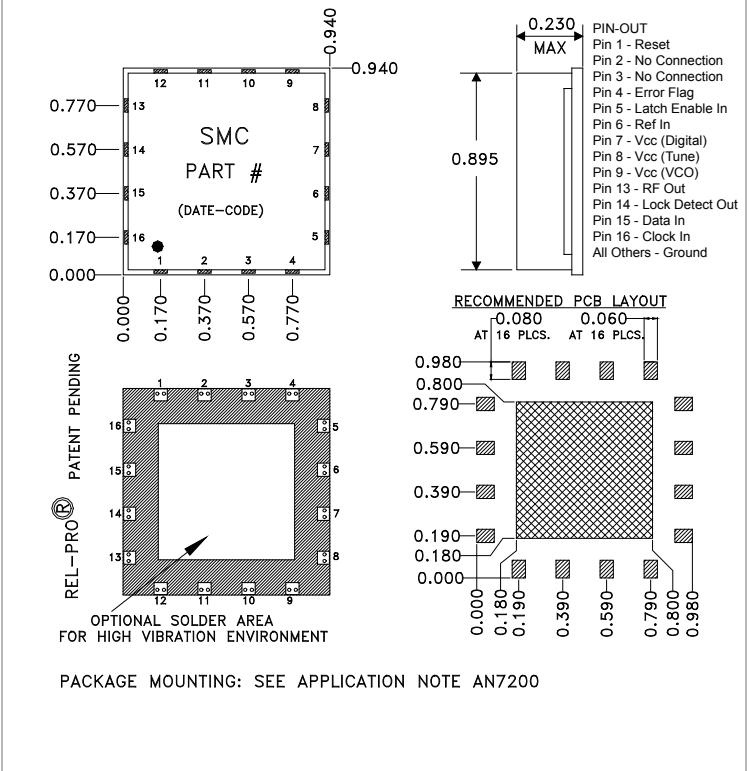


**SPECIFICATIONS (Rev. N 12/09/08)**

<b>Frequency</b>	150-450 MHz		
<b>Step Size</b>	500 kHz		
<b>Reference Input Frequency</b>	10 MHz		
<b>Reference Input Voltage</b>	1 V p-p to 3.3 V p-p		
<b>Bias Voltage</b>	Vcc	V (Vdc)	I (mA Max)
	Digital	+5	10
	VCO	+5	35
	Tune	+25	5
<b>Output Power</b>	0 dBm (Min)		
<b>Spurious Suppression</b>	-90 dBc (Typ.)		
<b>Harmonic Suppression</b>	-25 dBc (Typ)		
<b>Settling Time</b>	10 mSec (Max.) *		
<b>Output Impedance</b>	50 Ohms		
<b>Typical Phase Noise</b>	Offset	Phase Noise	
	@ 1 kHz	-103 dbc/Hz	
	@ 10 kHz	-103 dbc/Hz	
	@ 100 kHz	-125 dbc/Hz	
<b>Operating Temperature Range</b>	-40 to +85 °C		
<b>Programming</b>	See Application Note: AN7100		

\* From the rising edge of LE to stable lock detect

**Package #** 273LF



SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

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  
**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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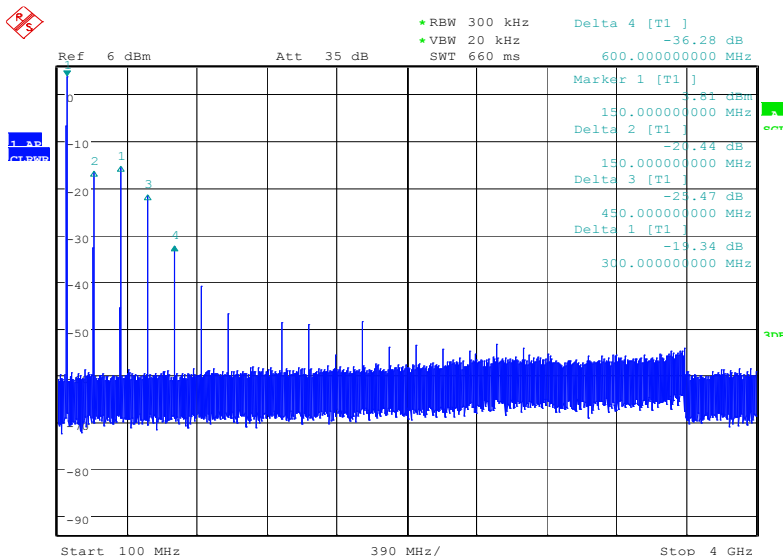
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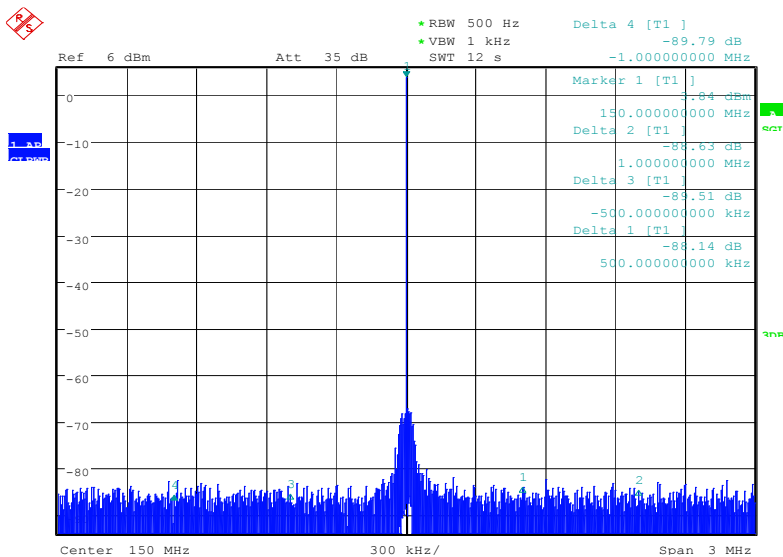
150 - 450 MHz

PERFORMANCE PLOTS

Harmonic suppression



Reference sideband suppression



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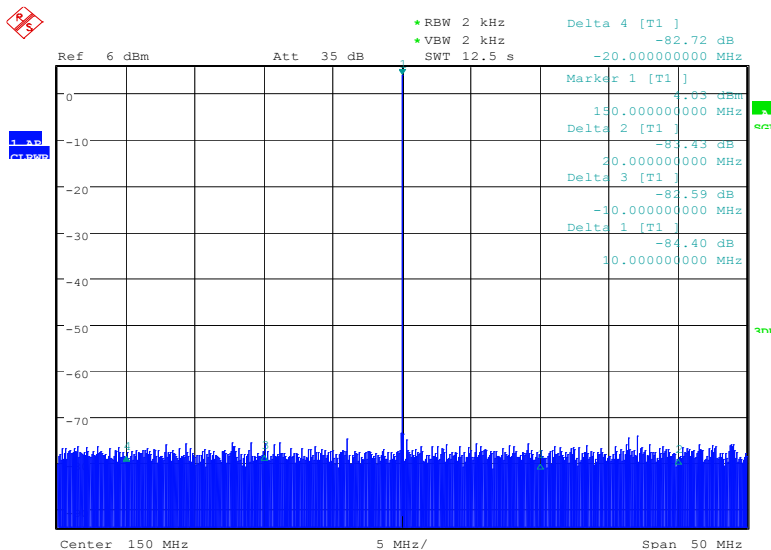
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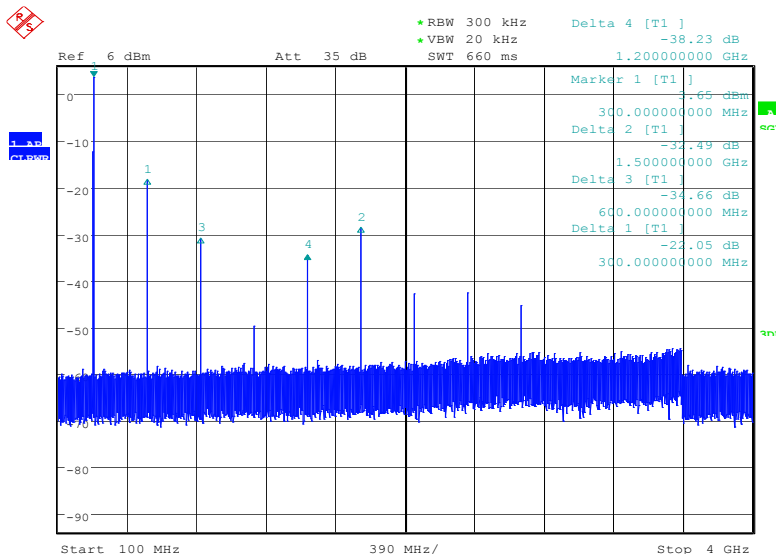
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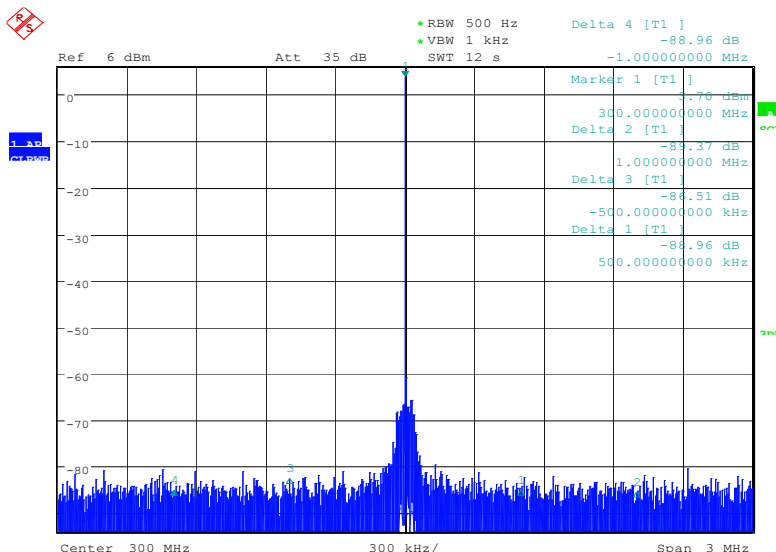
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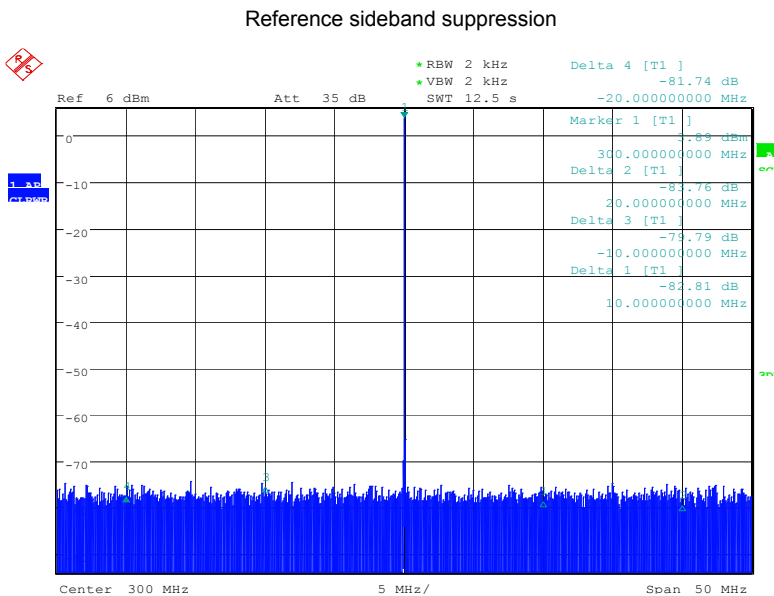


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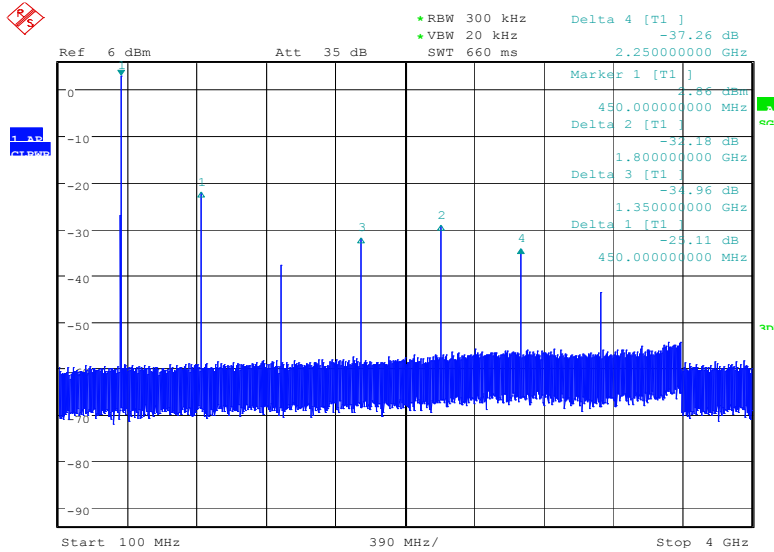
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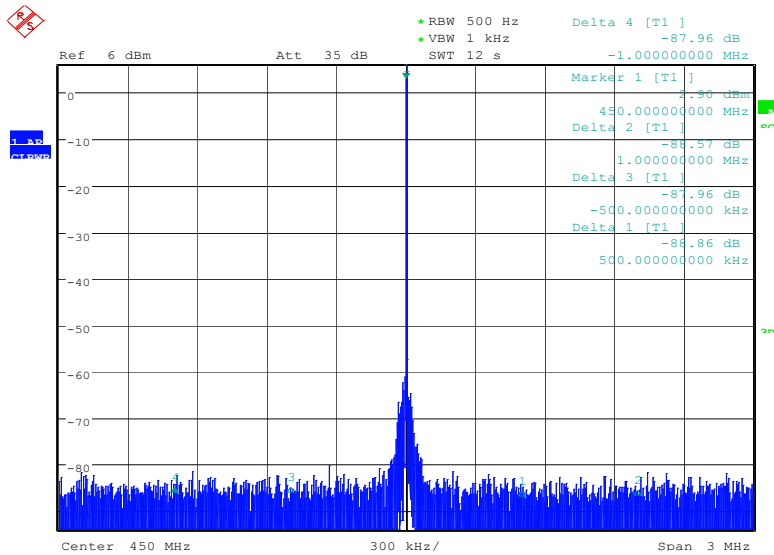
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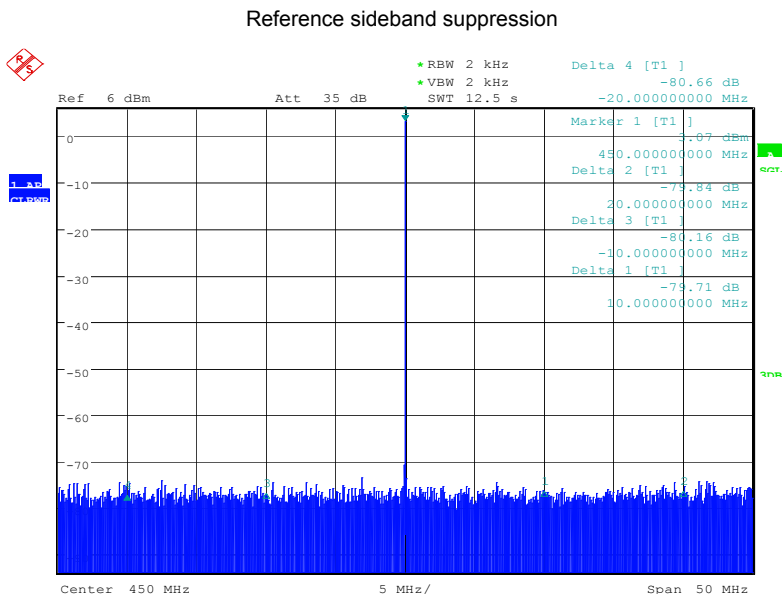


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