

INTELLIGENT INTERACTIVE SYNTHESIZER

CONNECTORIZED MODEL: KFSW300600-100

WIDE BANDWIDTH

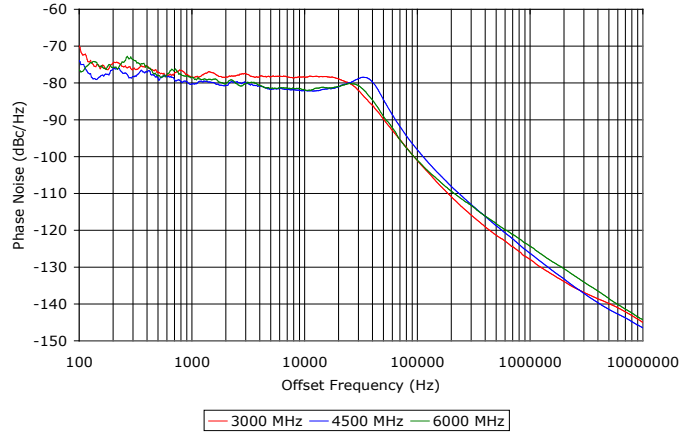
3000 - 6000 MHz

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ Interactive Communication
- ▶ Standard Programming Interface
- ▶ Ultra Wide Tuning Range



Phase Noise



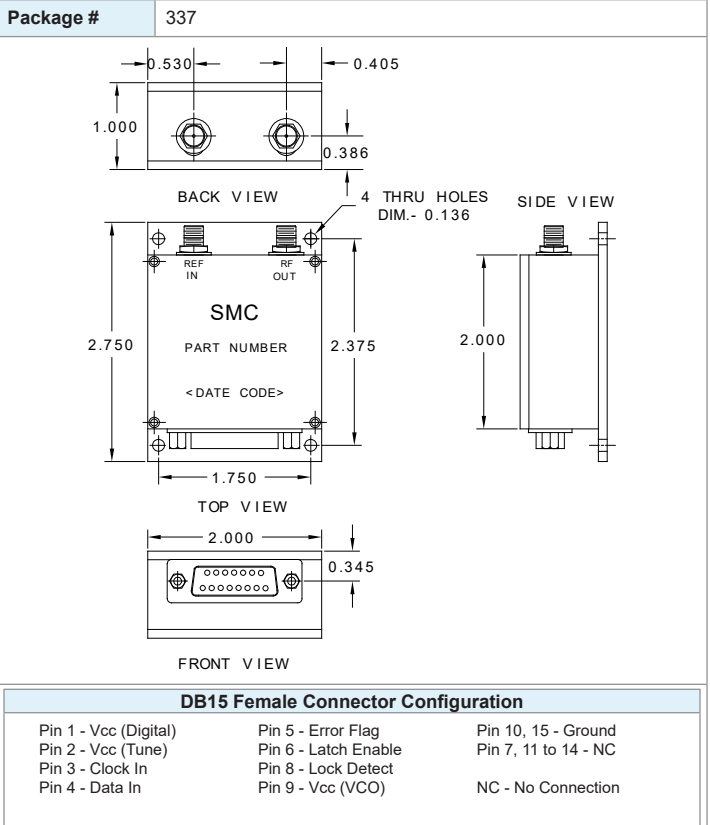
SPECIFICATIONS

Frequency	3000 - 6000 MHz		
Step Size	1000 kHz		
Reference Input Frequency	10 MHz ¹		
Reference Input Voltage	1 V p-p to 3.3 V p-p		
Bias Voltage	Vcc	V (Vdc)	I (mA Max.)
	Digital	+5	15
	VCO	+5	50
	Tune	+20	10
Lock Detect Indicator	CMOS 3.3 V		
Output Power	-3 dBm (Min.)		
Spurious Suppression	90 dB (Typ.)		
Harmonic Suppression	20 dB (Typ.)		
Settling Time	3 mSec (Typ.) ²		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 1 kHz	-78 dBc/Hz	
	@ 10 kHz	-80 dBc/Hz	
	@ 100 kHz	-100 dBc/Hz	
Operating Temperature Range	-40 to +85 °C		
Programming	See Application Note: AN7100		

¹ Reference input frequency is programmable (See AN7100) in multiples of the step size, 10 MHz is the factory default setting. 150 MHz (Max.)
² From the rising edge of LE to stable lock detect

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (Digital)	+5.25 V
Bias Voltage (VCO)	+5.5 V
Bias Voltage (Tune)	+22 V
DC Voltage Applied to RF Out	±25 V



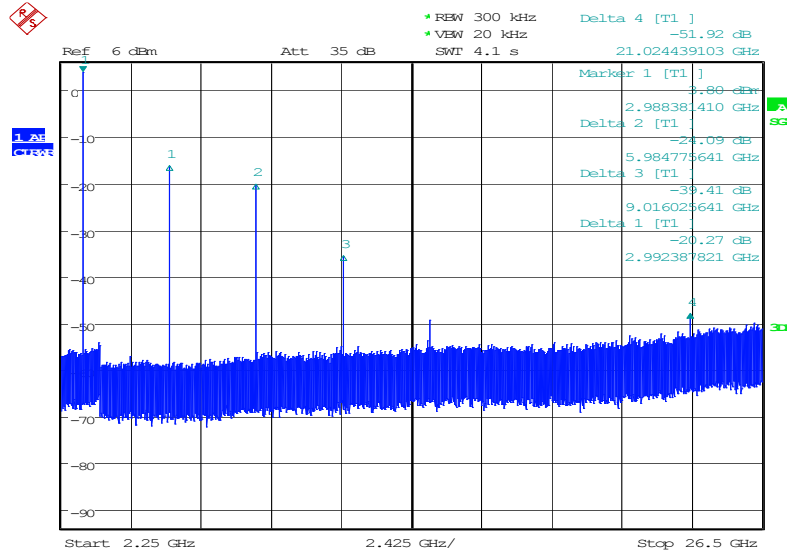
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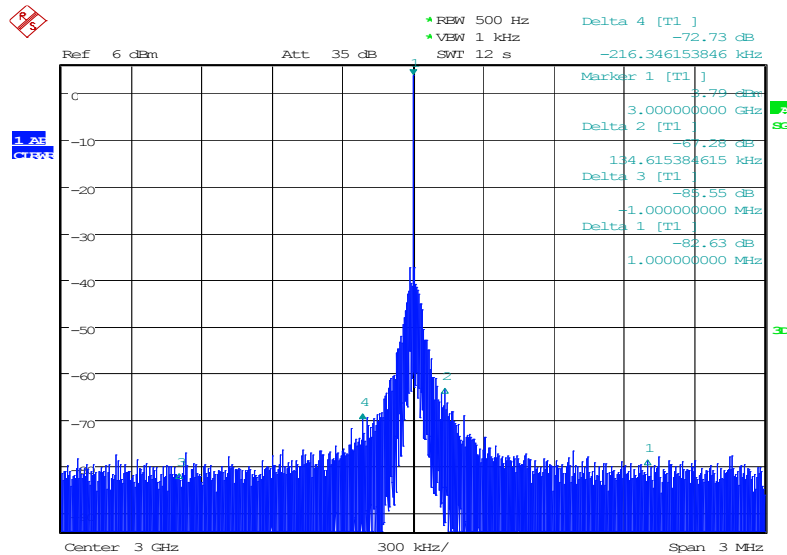
3000 - 6000 MHz

PERFORMANCE PLOTS

HARMONIC SUPPRESSION



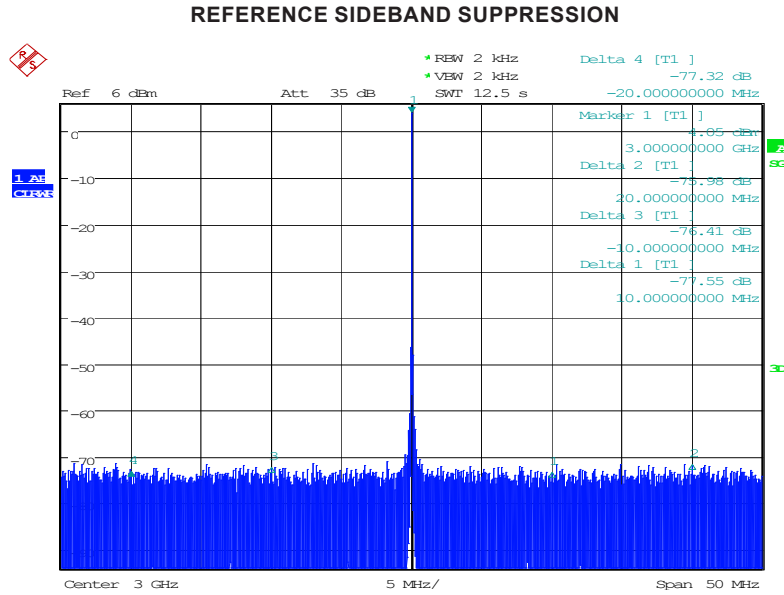
REFERENCE SIDEBAND SUPPRESSION



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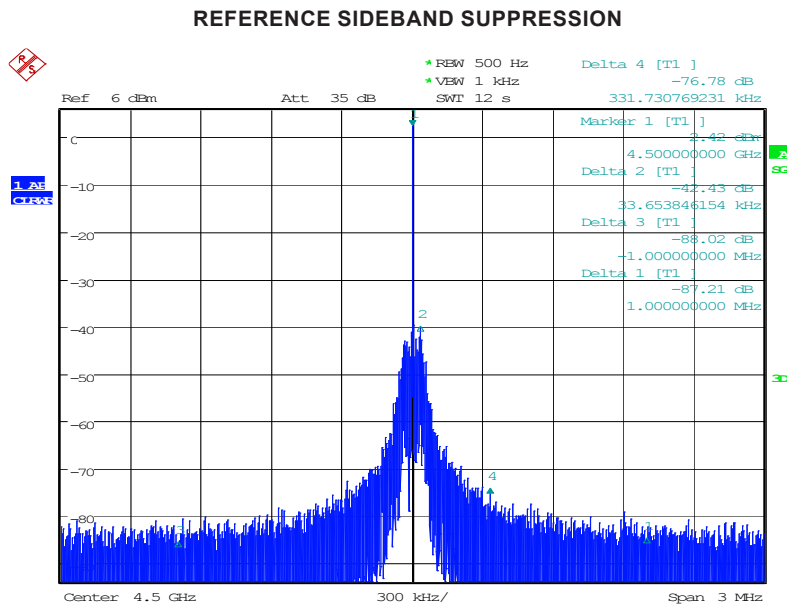
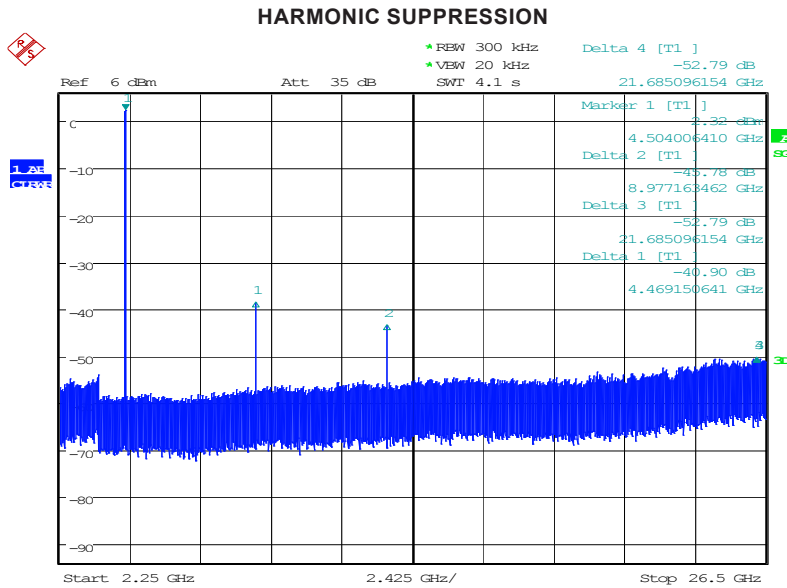
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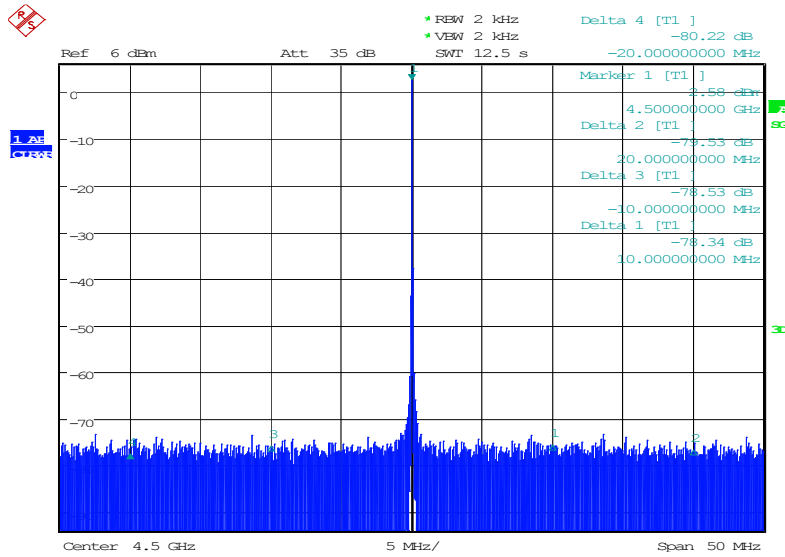


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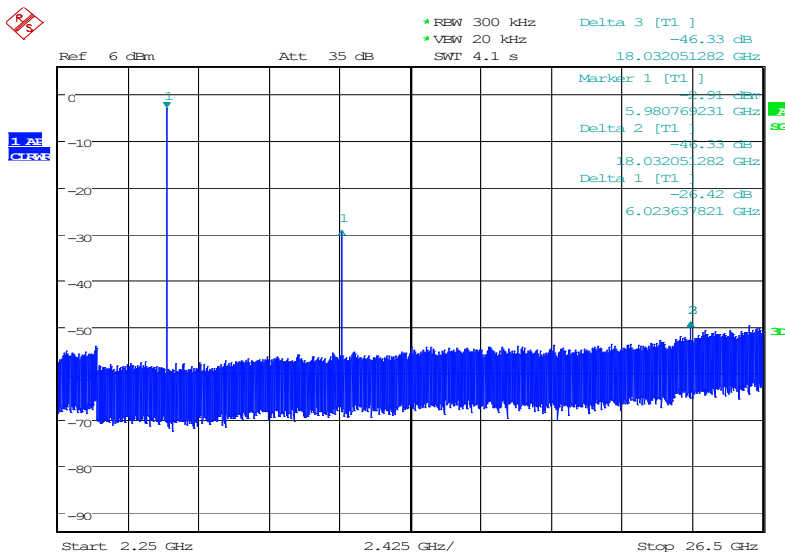
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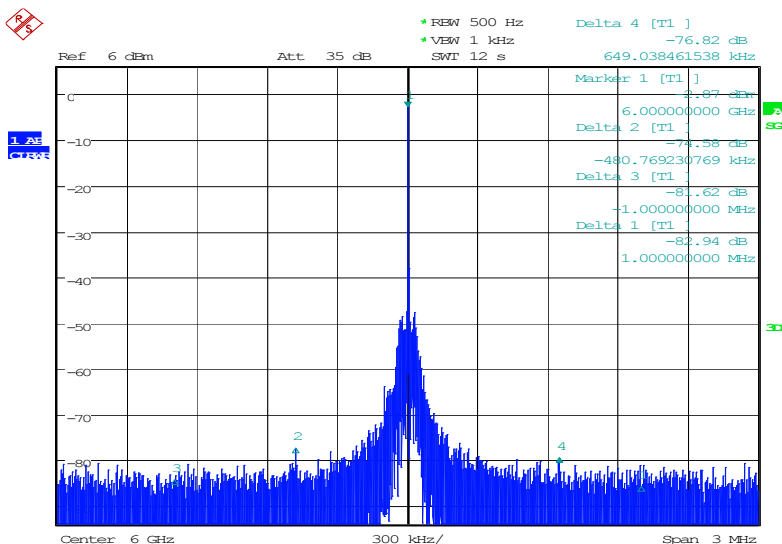
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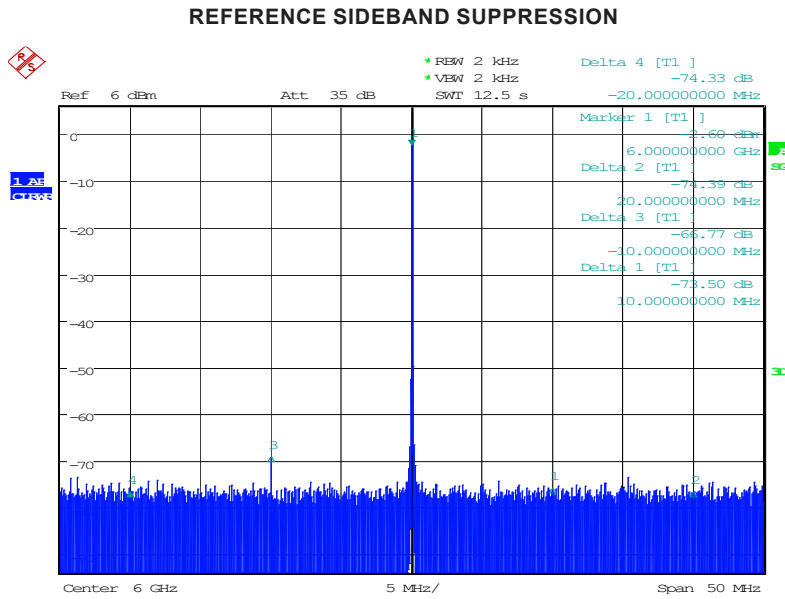
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