

SELECTABLE FREQUENCY SYNTHESIZER

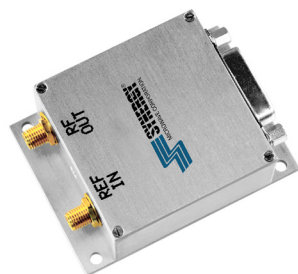
CONNECTORIZED MODEL: KFCPH110175-10

WIDE BANDWIDTH

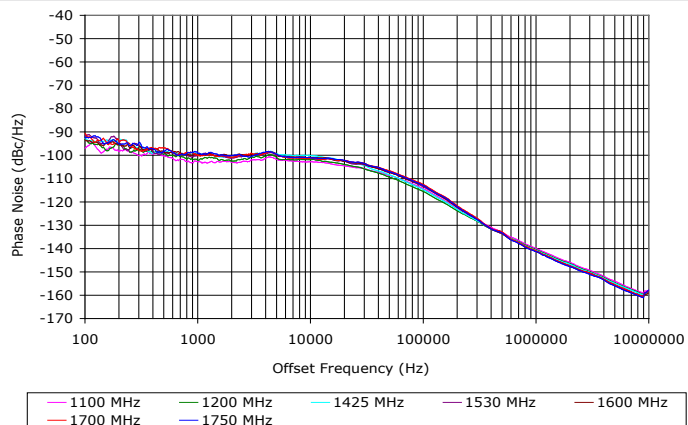
1100 - 1750 MHz

FEATURES:

- ▶ Exceptionally Low Phase Noise
- ▶ No Programming Required
- ▶ Buffered Output



Phase Noise



SPECIFICATIONS (Rev. B 06/05/25)

Frequency	1100 - 1750 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.)
	Digital	+5	55
	Tune	+12	10
	VCO	+5	55
Lock Detect Indicator	CMOS 3.3 V		
Output Power	+13 dBm (Min.)		
Spurious Suppression	82 dB (Typ.)		
Harmonic Suppression	15 dB (Typ.)		
Power Up Time	90 mSec (Typ.) ¹		
Output Impedance	50 Ohms (Nom.)		
Typical Phase Noise	Offset	Phase Noise	
	@ 10 kHz	-101 dBc/Hz	
	@ 100 kHz	-112 dBc/Hz	
Operating Temperature Range	-40 to +85 °C		

¹ From stable power on to stable lock detect.

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (Digital)	+5.25 V
Bias Voltage (Tune)	+16 V
Bias Voltage (VCO)	+5.5 V
DC Voltage Applied to RF Out	± 25 V

Binary Frequency Selection Table

D3 *	D2 *	D1 *	D0 *	Freq. (MHz)
0	0	0	0	1530
0	0	0	1	1600
0	0	1	0	1770
0	0	1	1	1750
0	1	0	0	1160
0	1	0	1	1400
0	1	1	0	1500
0	1	1	1	1700
1	0	0	0	1640
1	0	0	1	1480
1	0	1	0	--
1	0	1	1	--
1	1	0	0	--
1	1	0	1	--
1	1	1	0	--
1	1	1	1	1250

-- Reserved for future use.

* Voltage levels: 0V or gnd. / +5V or open.

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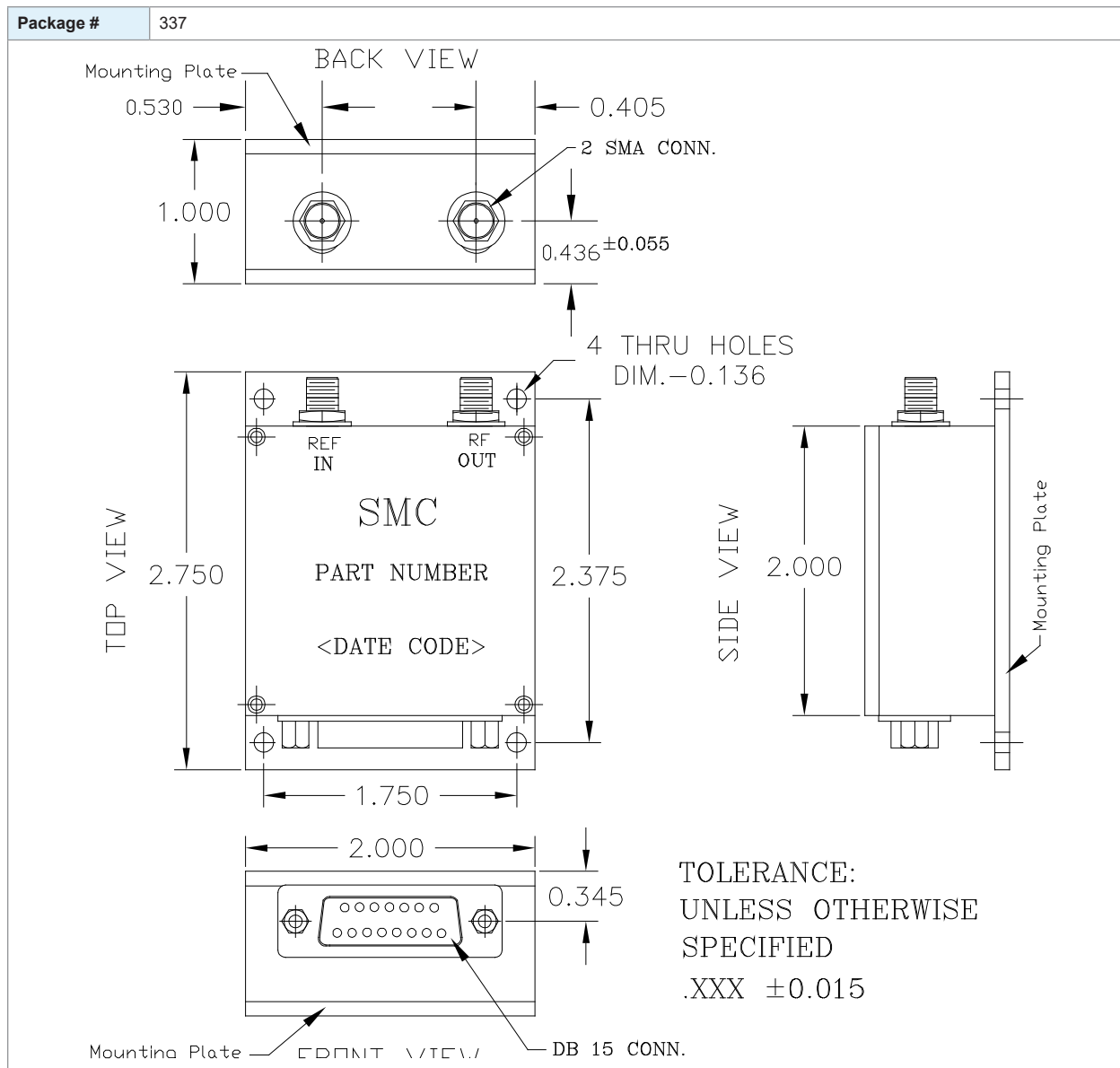
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PERFORMANCE PLOTS



Port Configuration

Pin 1 - VCC1 (Digital)
Pin 2 - VCC2 (Vtune)
Pin 3 - NC
Pin 4 - NC

Pin 5 - NC
Pin 6 - NC
Pin 7 - NC
Pin 8 - Lock Detect

Pin 9 - VCC3 (VCO)
Pin 10 - Ground
Pin 11 - D0
Pin 12 - D1

Pin 13 - D2
Pin 14 - D3
Pin 15 - Ground

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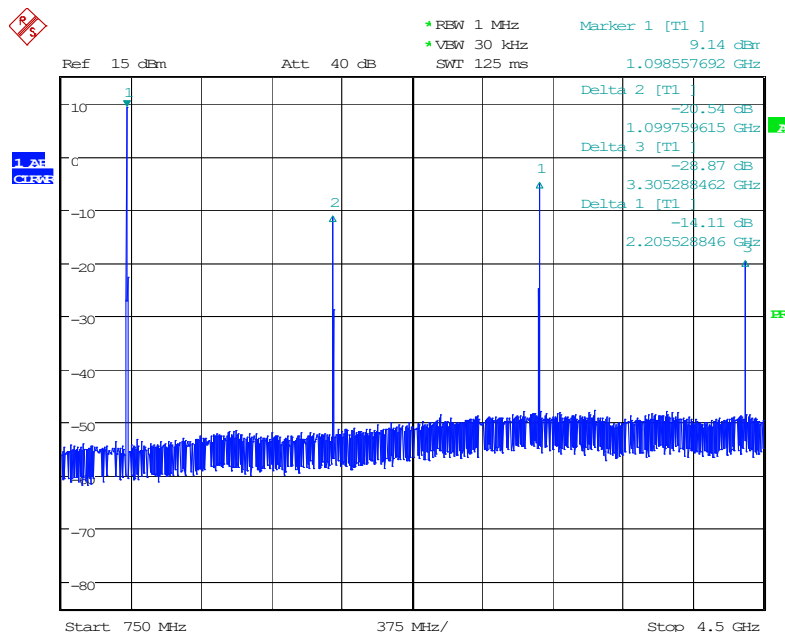
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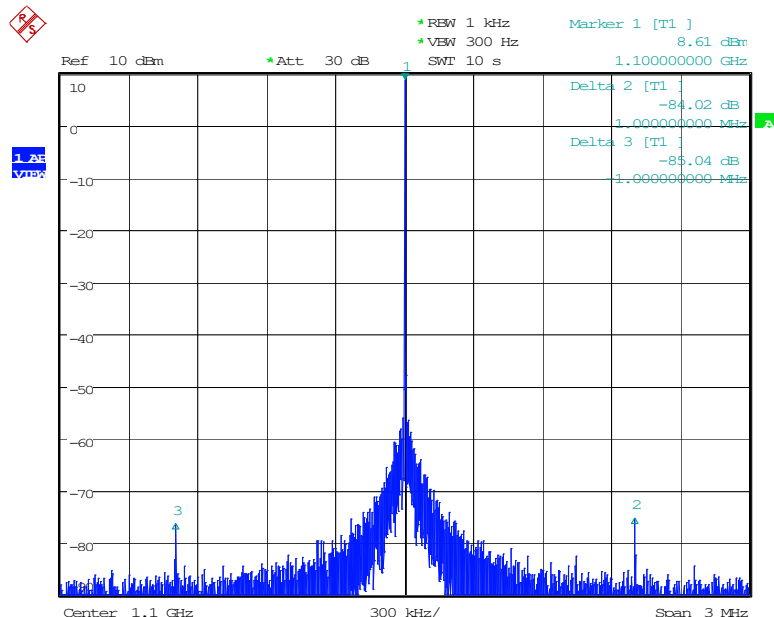
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION

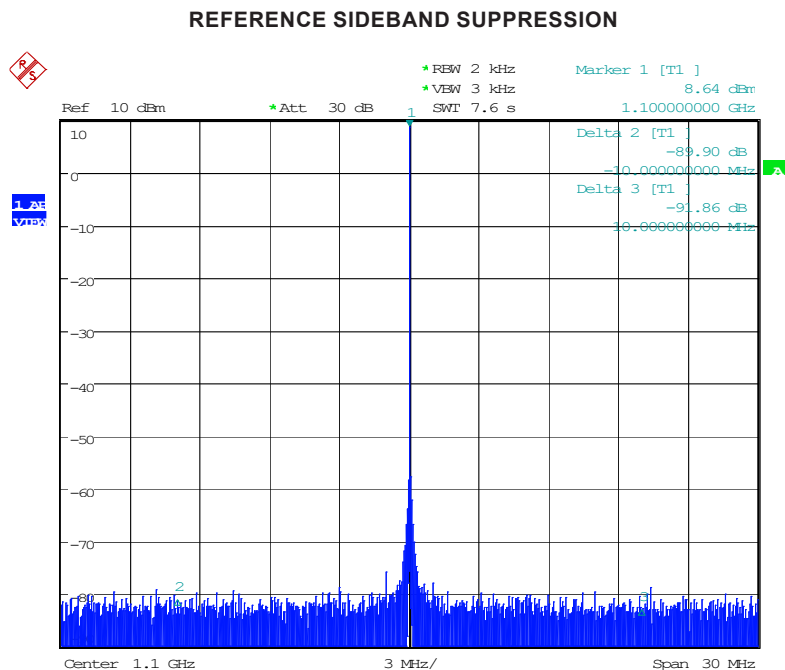


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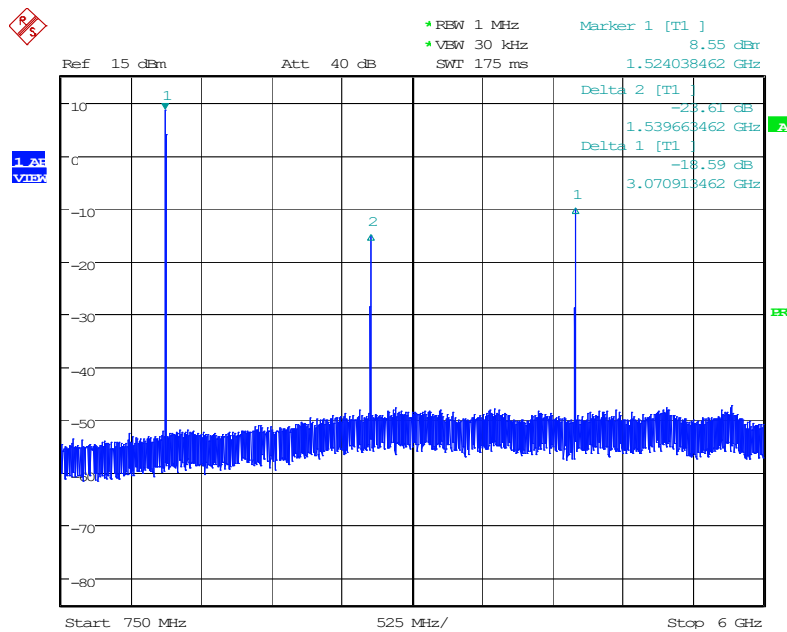
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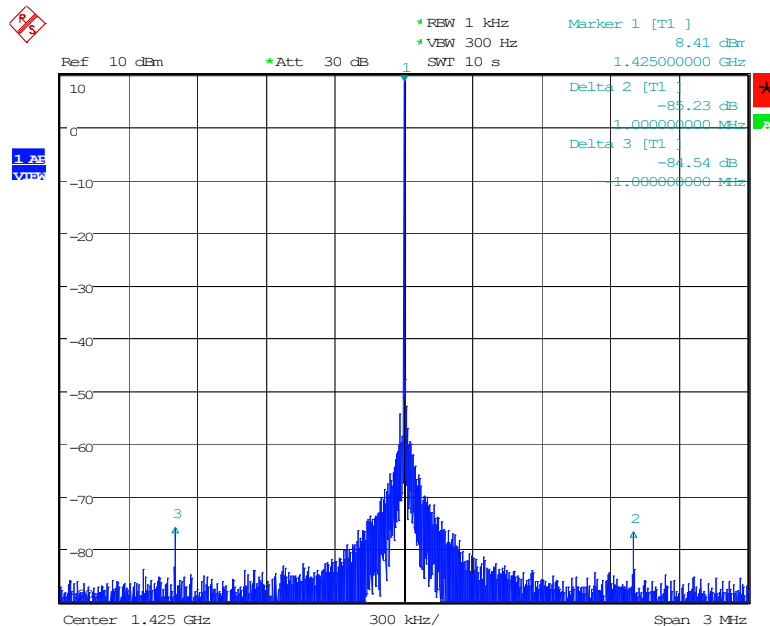
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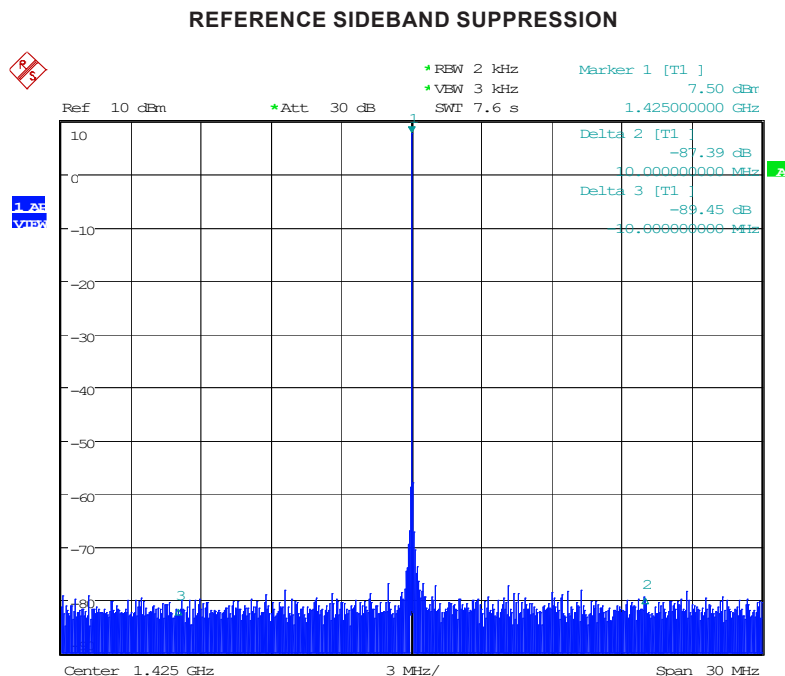


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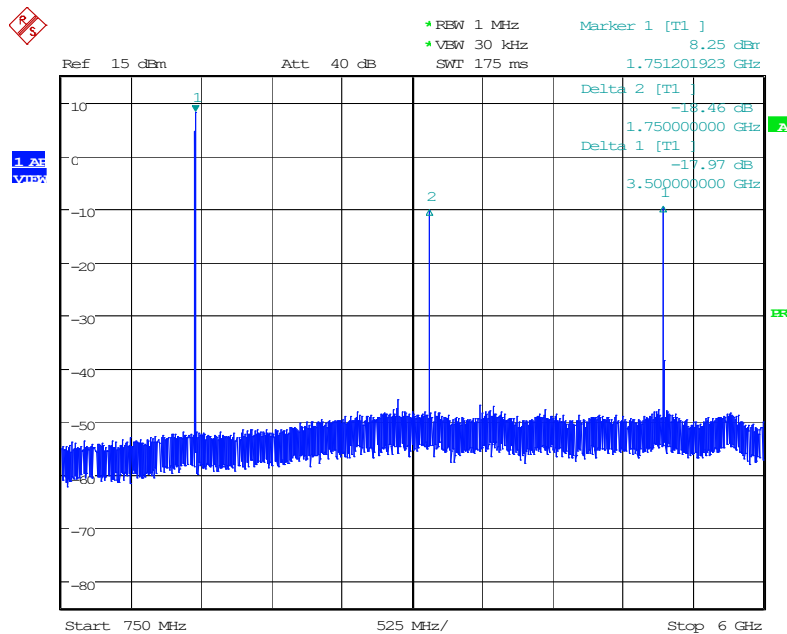
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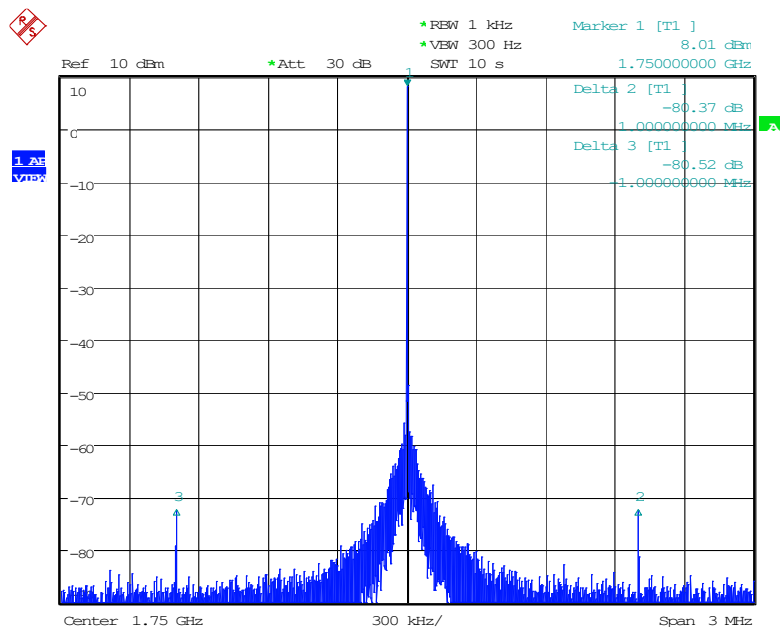
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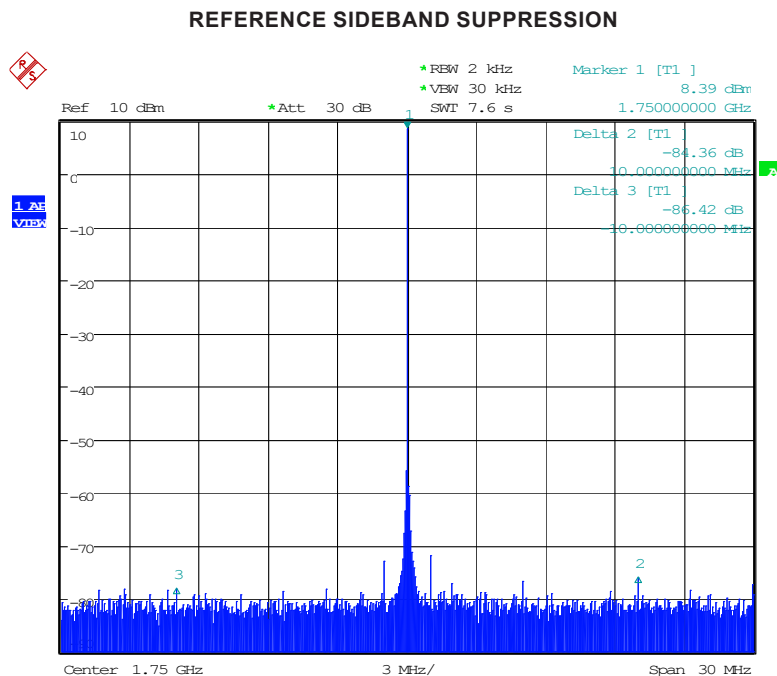


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