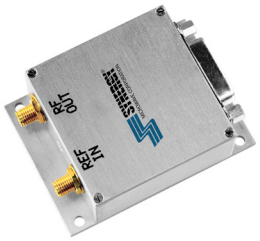
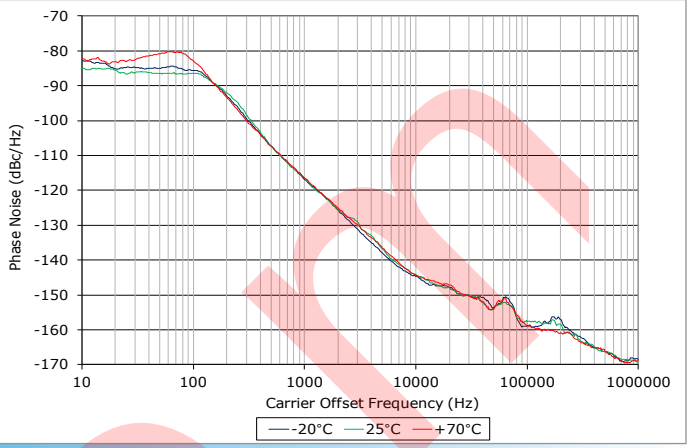
REFERENCE PHASE LOCKED TRANSLATOR
CONNECTORIZED MODEL: KFCTS1000-10-5

FIXED FREQUENCY — 1000 MHz

FEATURES:
- Ultra-Low Phase Noise
- No Programming Required



Phase Noise (Measured with Agilent E5052A or R&S FSUP-26/27)

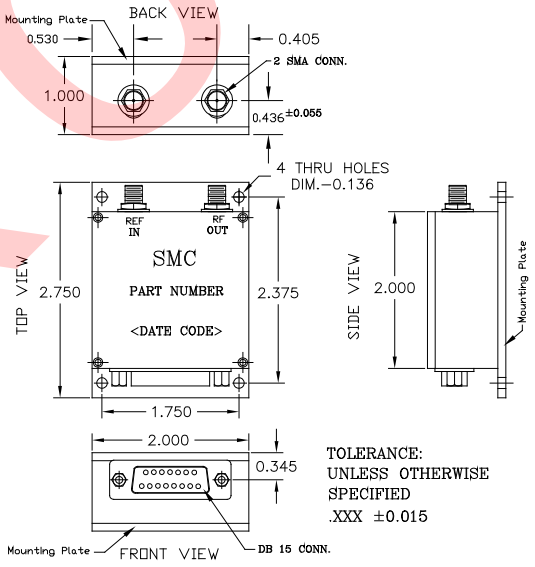


SPECIFICATIONS (Rev. B 11/30/23)

Frequency	1000 MHz
Reference Input Frequency	10 MHz [1]
Reference Input Voltage	1.0 to 3.3 V p-p
Bias Voltage	Vcc: Digital — V (Vdc): +5 — I (mA Max.): 25 Tune — +12 — 10 VCO — +5 — 35
Output Power	+5 dBm (Min.)
Spurious Suppression	80 dB (Typ.)
Harmonic Suppression	25 dB (Typ.)
Output Impedance	50 Ohms (Nom.)
Lock Detect Indicator	CMOS 3.3 V
Typical Phase Noise	@ 100 Hz: -80 dBc/Hz @ 1 kHz: -115 dBc/Hz @ 10 kHz: -141 dBc/Hz @ 100 kHz: -158 dBc/Hz
Operating Temperature Range	-20 to +70 °C

[1] External 10 MHz reference sources should have phase noise better than -138 dBc/Hz @ 50 Hz offset to achieve published specifications.

Package # 337



PORT CONFIGURATION

Pin 1 - Vcc (Digital)	Pin 8 - Lock Detect *	NC - No Connection
Pin 2 - Vcc (Tune)	Pin 9 - Vcc (VCO)	
Pin 3,4,5,6 - NC	Pin 11,12,13,14 - NC	
Pin 7 - NC	Pin 10,15 - Ground	

** High when locked (source/sink 500 uA)*

Absolute Maximum Ratings

Storage Temp. Range	-40 to +85 ºC
Bias Voltage (Digital)	+5.25 V
Bias Voltage (Tune)	+13.0 V
Bias Voltage (VCO)	+5.5 V

Patent : http://www.synergymwave.com/patents

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SYNERGY® MICROWAVE CORPORATION

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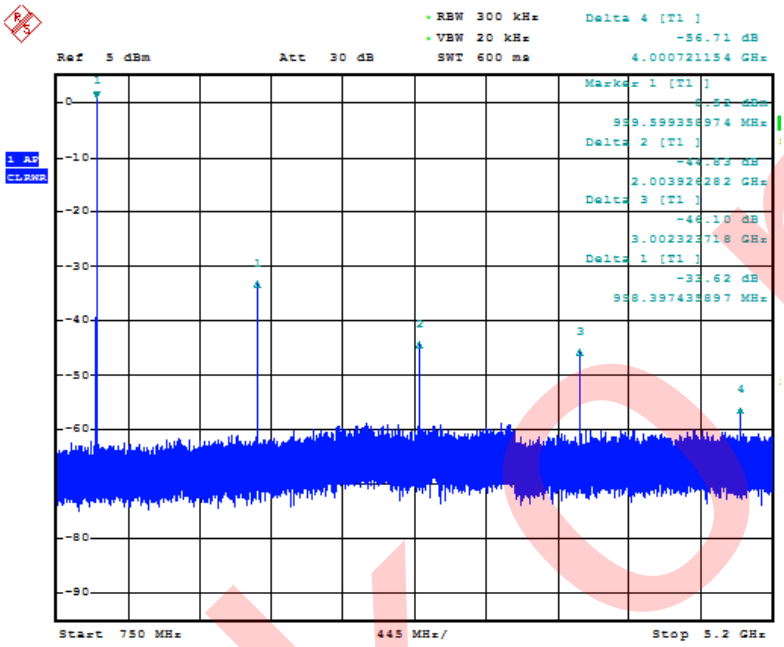
FIXED FREQUENCY 1000 MHz

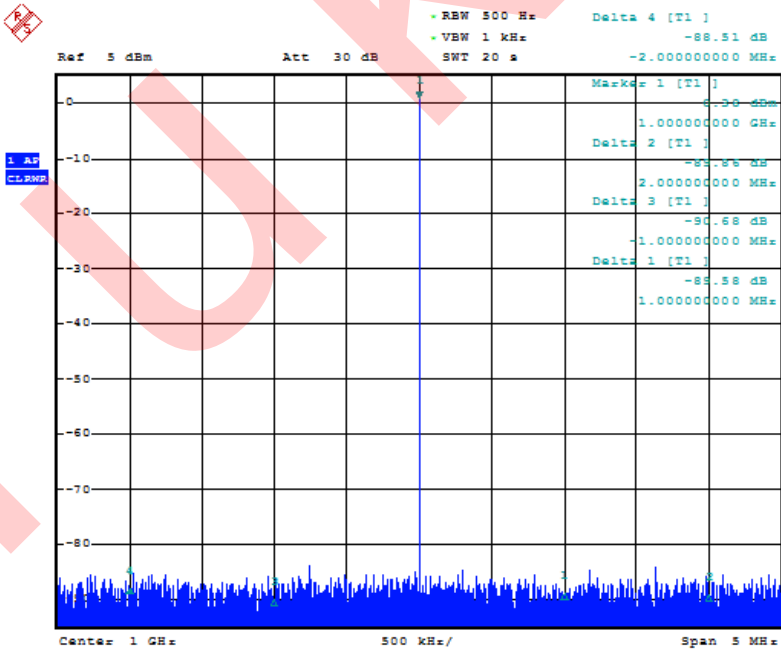
PERFORMANCE PLOTS

@ -20 ºC

HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



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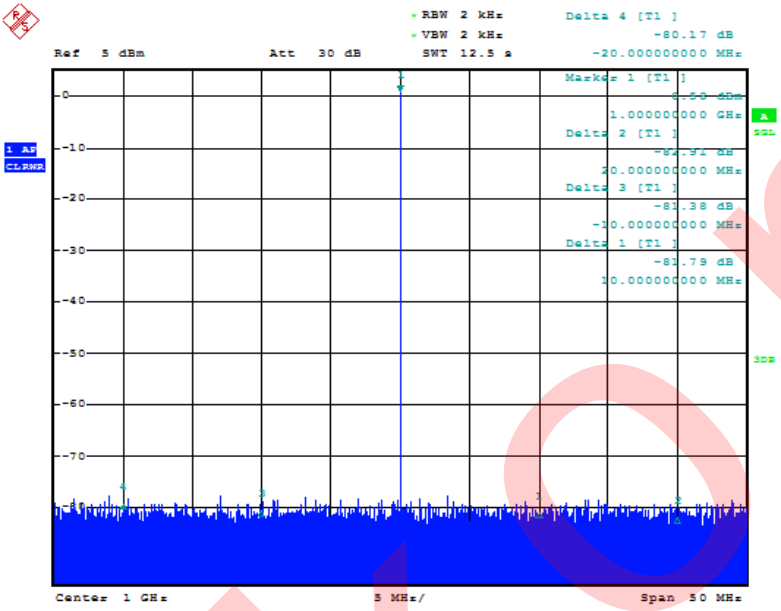

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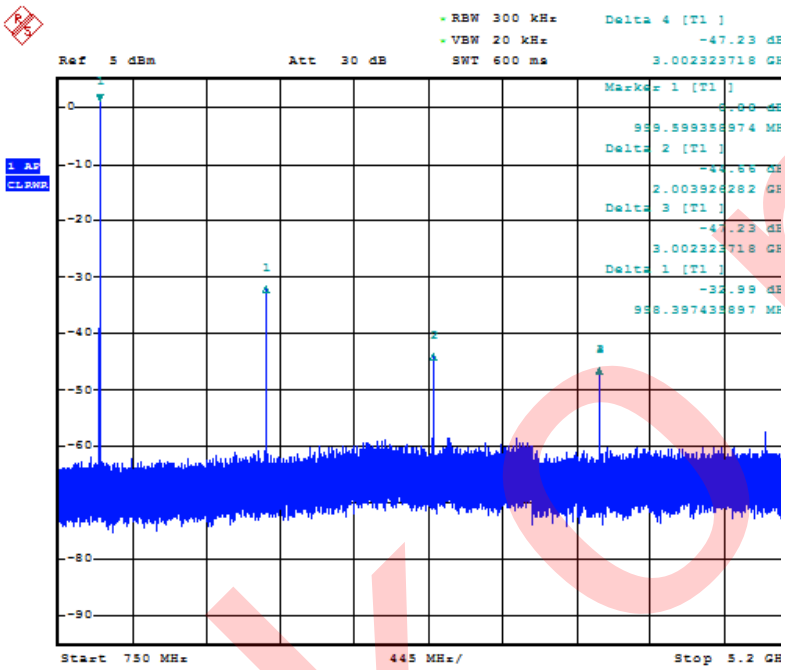

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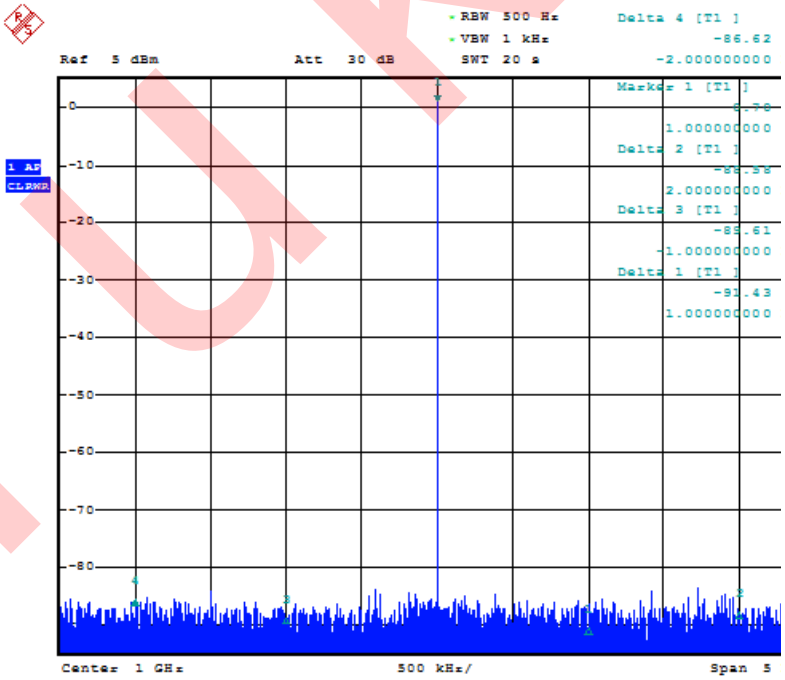

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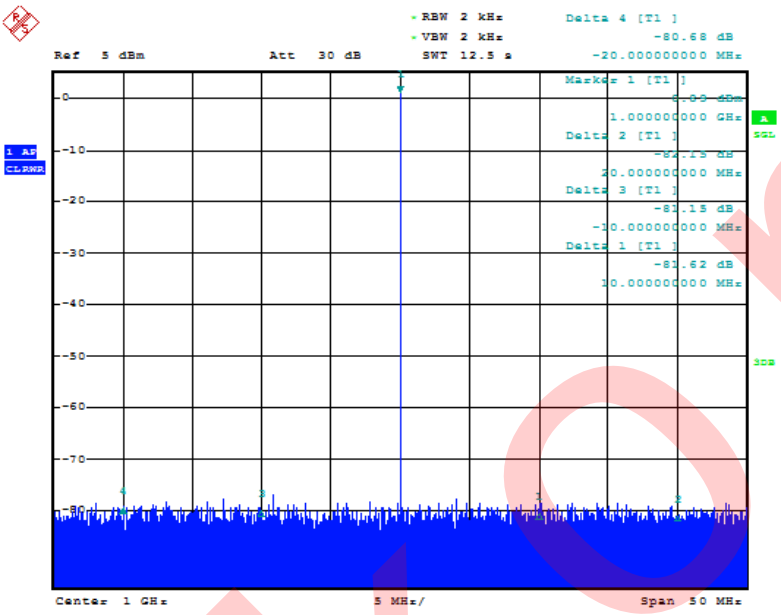

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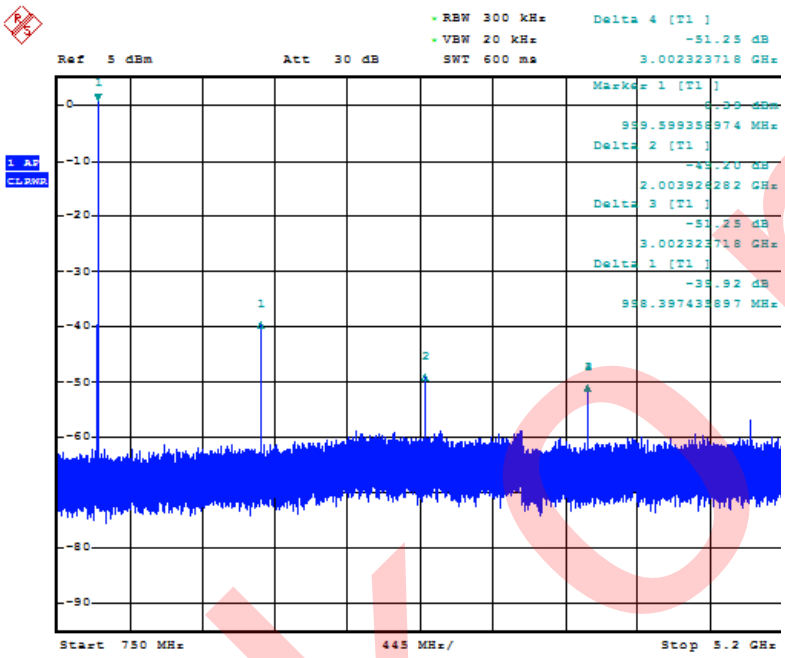
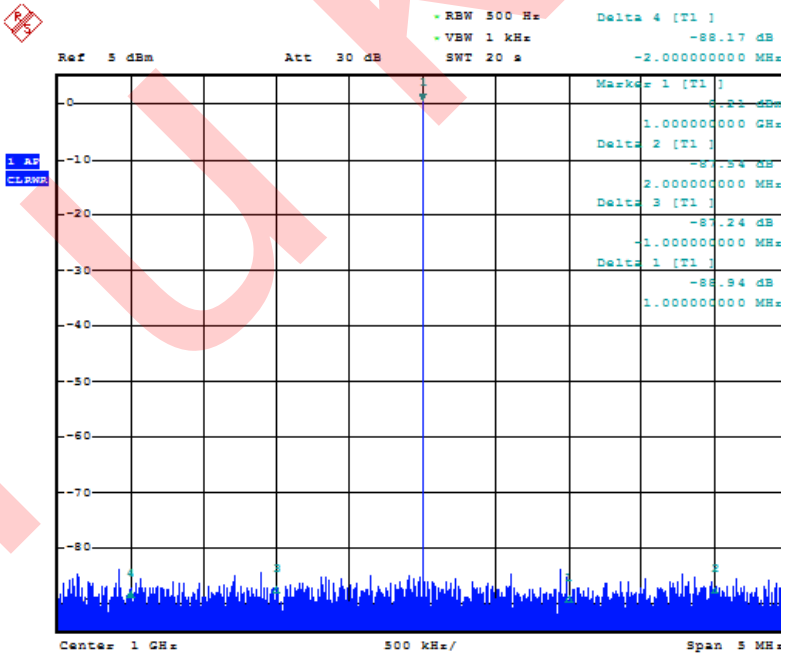


REFERENCE SIDEBAND SUPPRESSION



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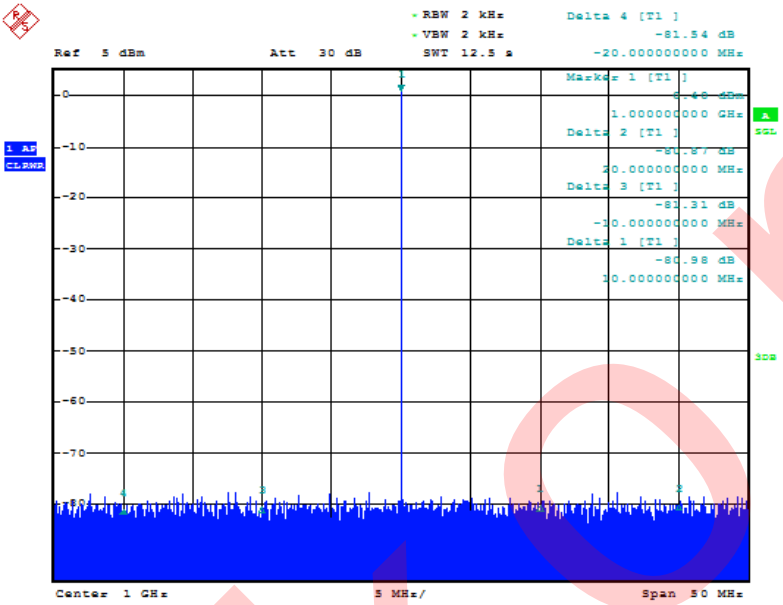

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