

INTELLIGENT INTERACTIVE SYNTHESIZER

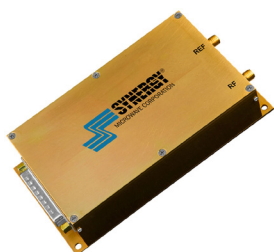
SURFACE MOUNT MODEL: KMTS2500-300600-10

WIDE BANDWIDTH

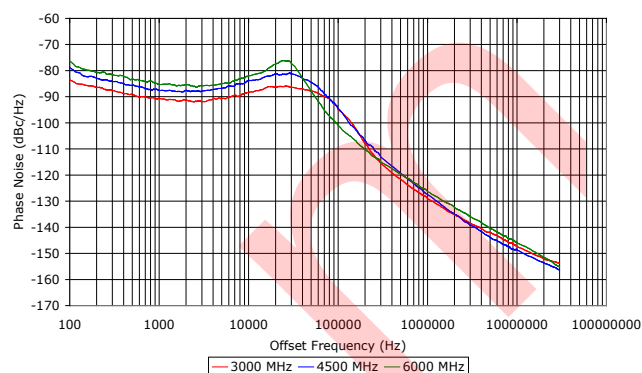
3000 - 6000 MHz

FEATURES:

- ▶ Octave bandwidth tuning
- ▶ Small step size resolution
- ▶ Outstanding spectral purity
- ▶ High spurious rejection
- ▶ Fast lock settling time
- ▶ Easy programmable format
- ▶ Buffered Output



Phase Noise



SPECIFICATIONS (Rev. A 08/16/16)

Output Frequency	3000 - 6000 MHz
Bandwidth	3000 MHz
External Reference ¹	10 MHz
External Reference Input	1 V p-p to 3.3 V p-p
Step Size	Programmable to 1 Hz
Bias Voltage	
VCC1	+12 VDC
VCC2	+12 VDC
VCC3	+12 VDC
Bias Power Consumption	
Output Power	+4 dBm (Min.)
Spurious Suppression	50 dB (Typ.)
Harmonic Suppression	18 dB (Typ.)

Typical Phase Noise

Offset	dBc/Hz.
1 kHz	-87
10 kHz	-83
100 kHz	-93

Settling Time²

Within 1 kHz	<6 mSec
Within 10 Hz	<12 mSec

Output Impedance

50 Ohms (Nom.)

Operating Temperature Range

-20 to +70 °C

Non-Operating Temperature Range

-40 to +85 °C

Programming

See Application Note: AN7400

Programming Bus ³

Specify SPI or RS-232

Absolute Maximum Ratings

Storage Temp. Range	-55 to +125 °C
Bias Voltage (+12.0 V)	+15 V
DC Voltage Applied to RF Out	± 25 V

¹ Reference input frequency can be factory programmed for requested common reference frequencies from 10 - 25 MHz. Unless otherwise specified, the reference frequency is factory programmed for 10 MHz.

² Time between latch enable (LE) high (after user command) and final output frequency.

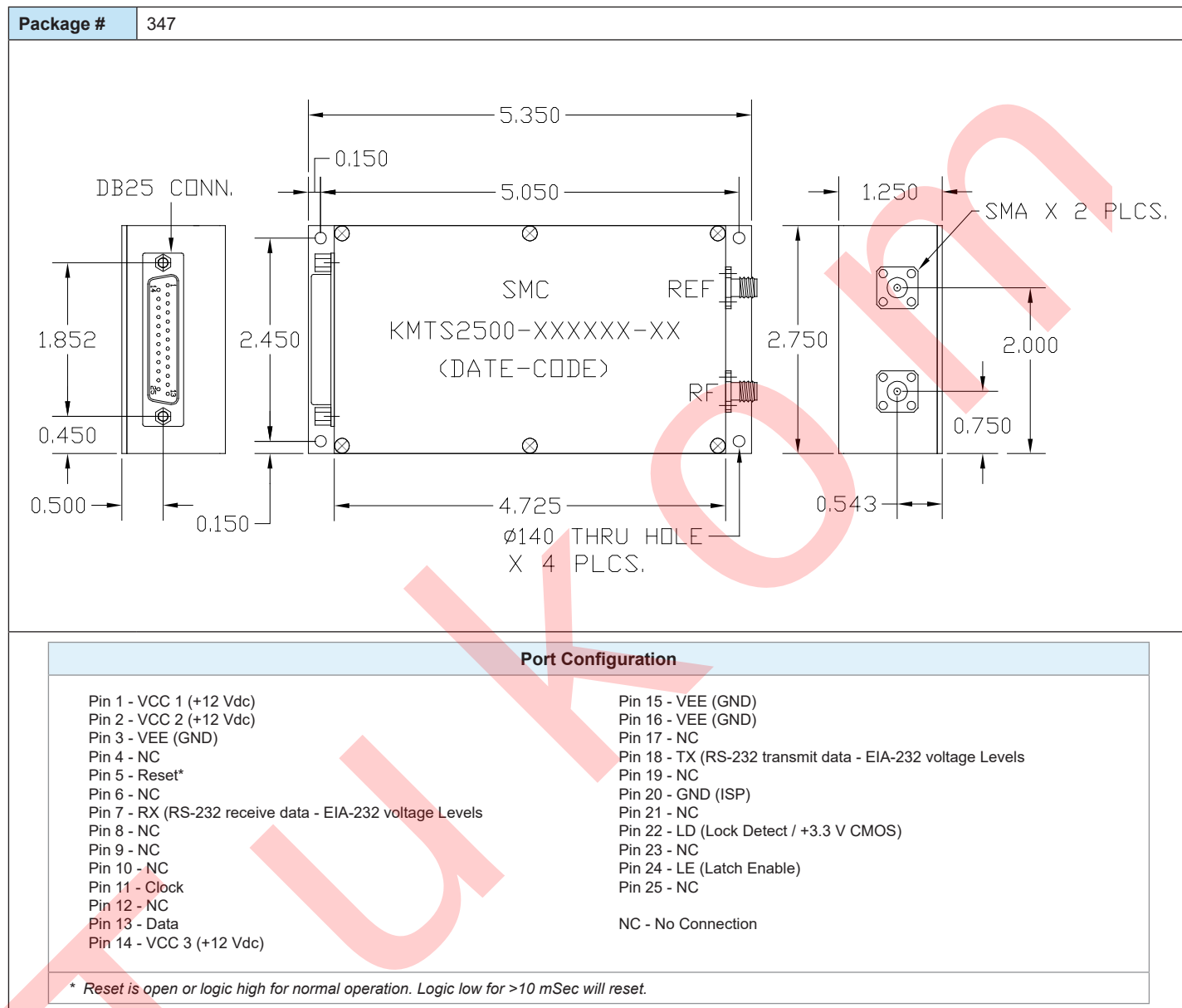
³ Default bus (if unspecified) is SPI.

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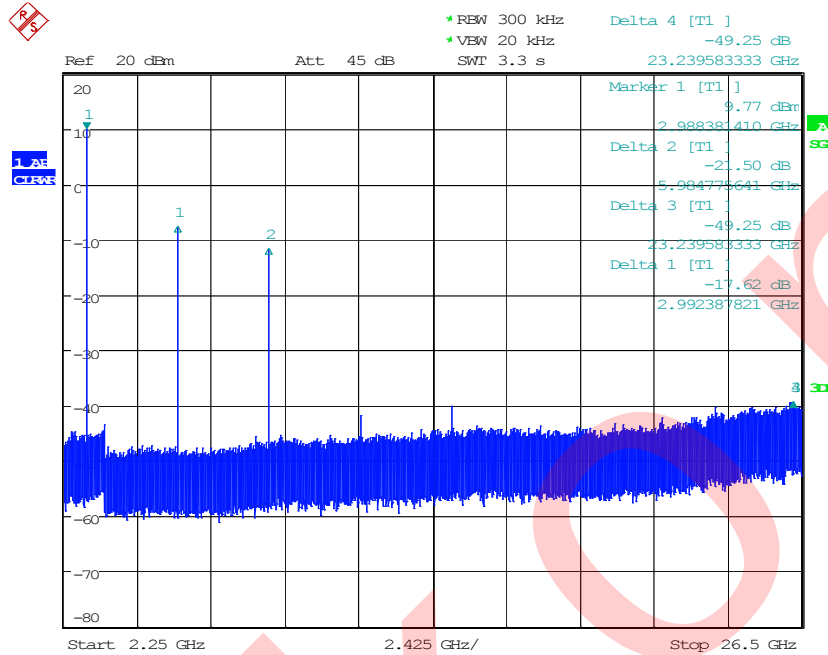
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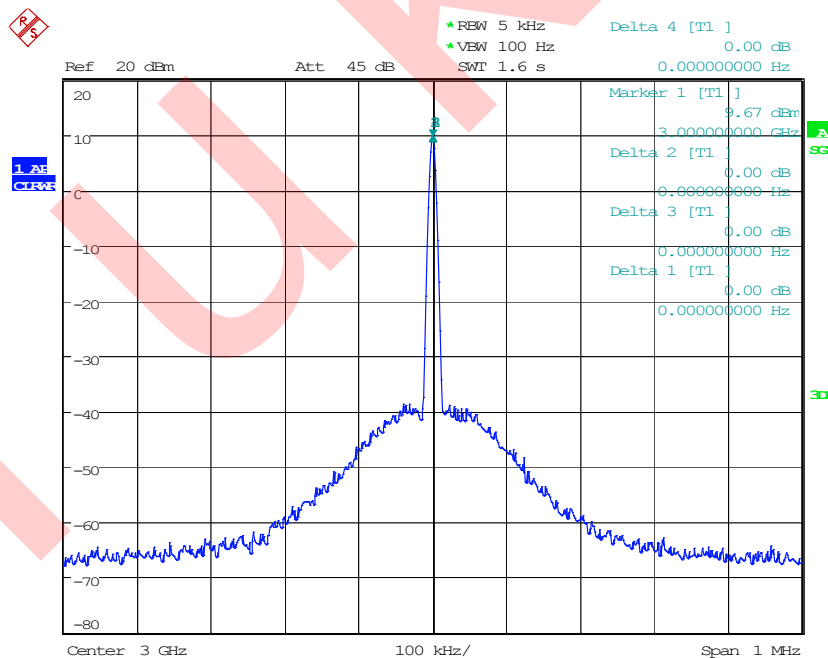
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HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



PERFORMANCE PLOTS

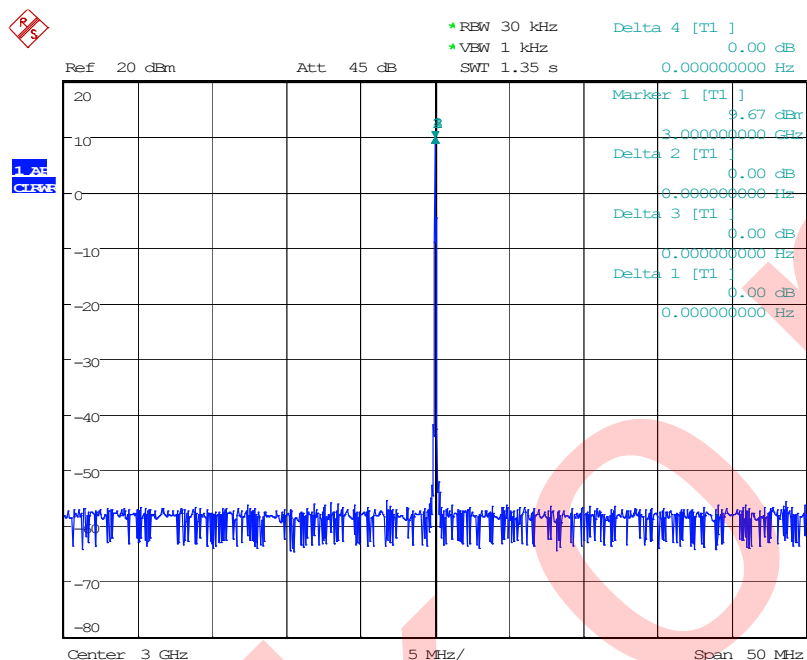
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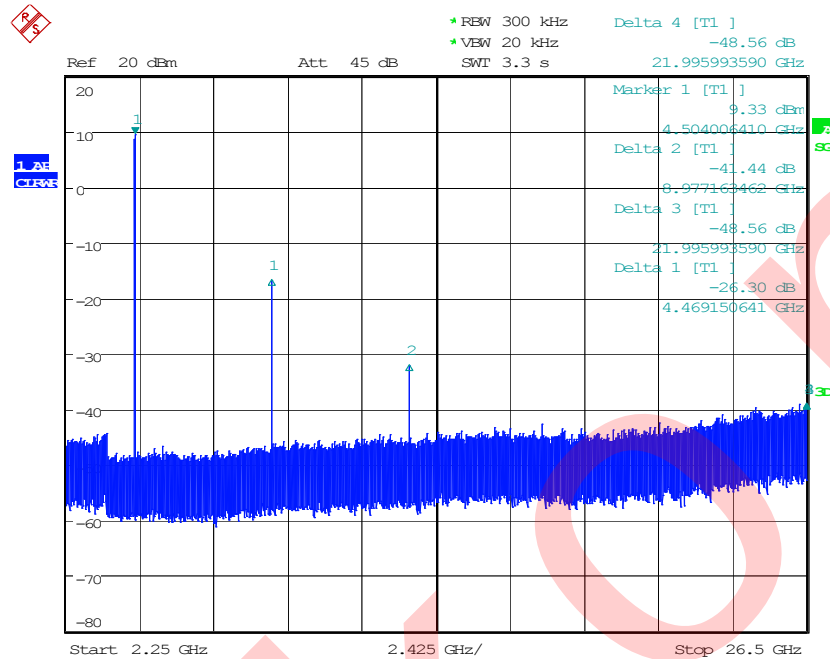
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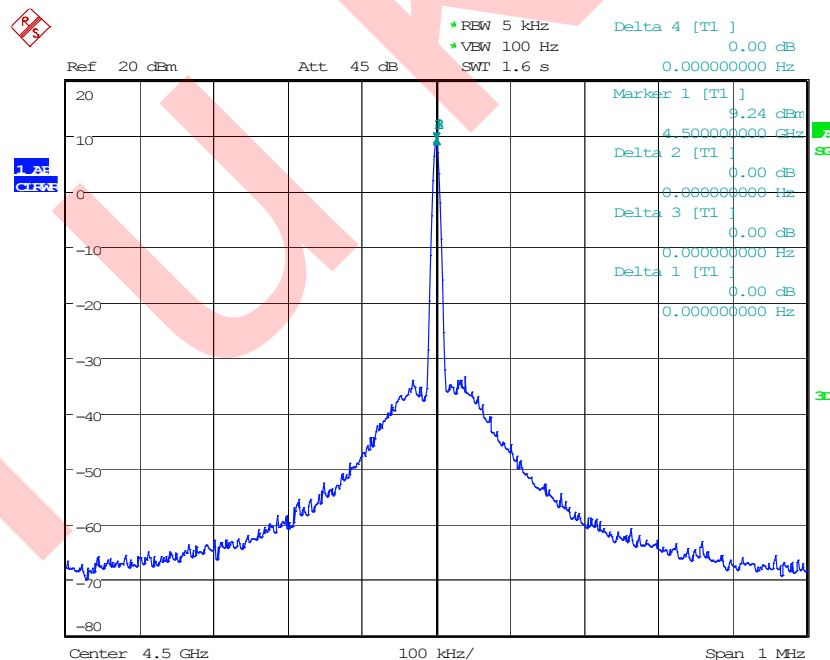
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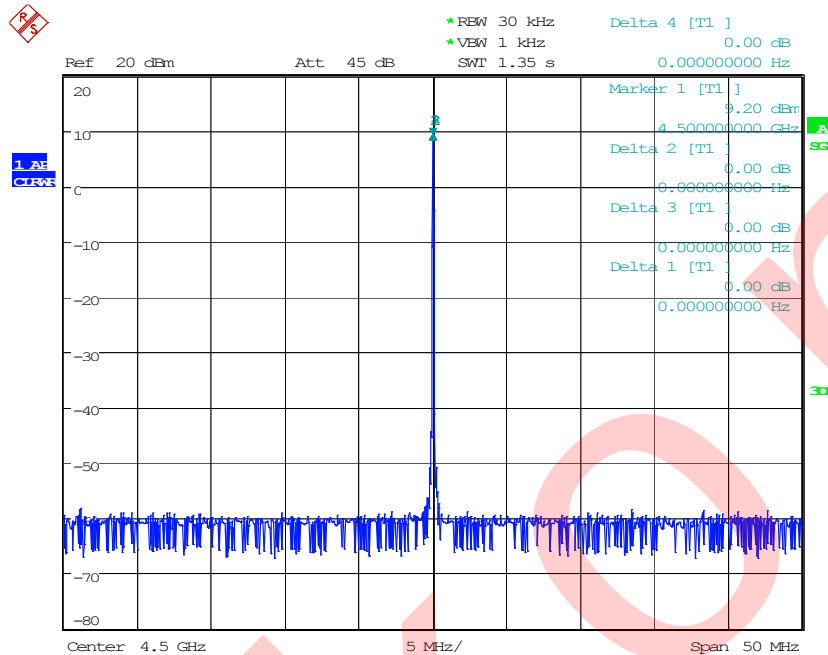
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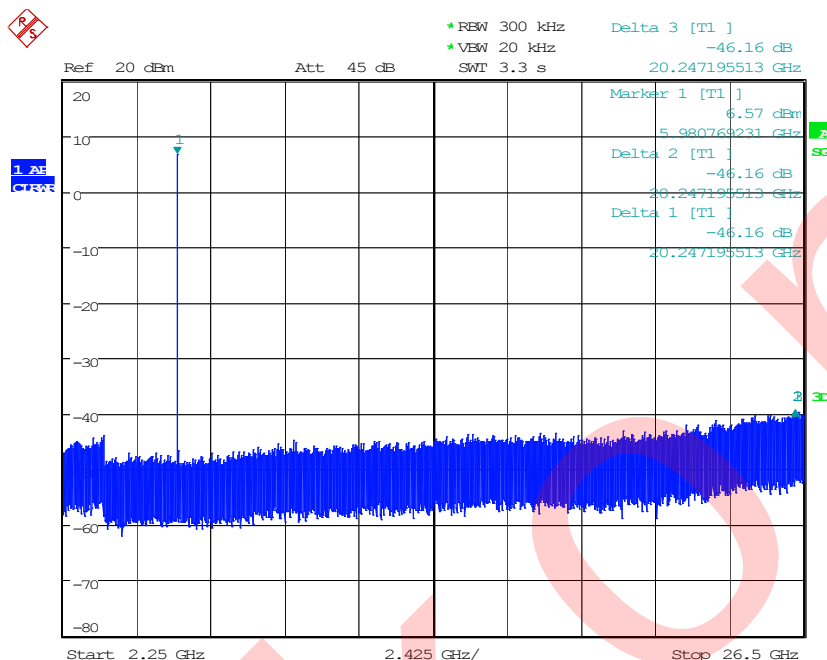
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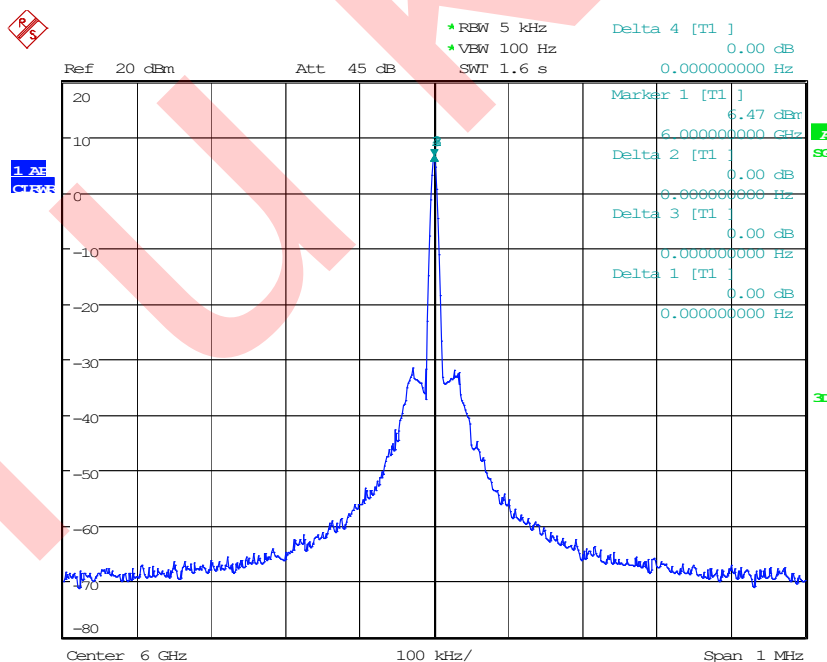
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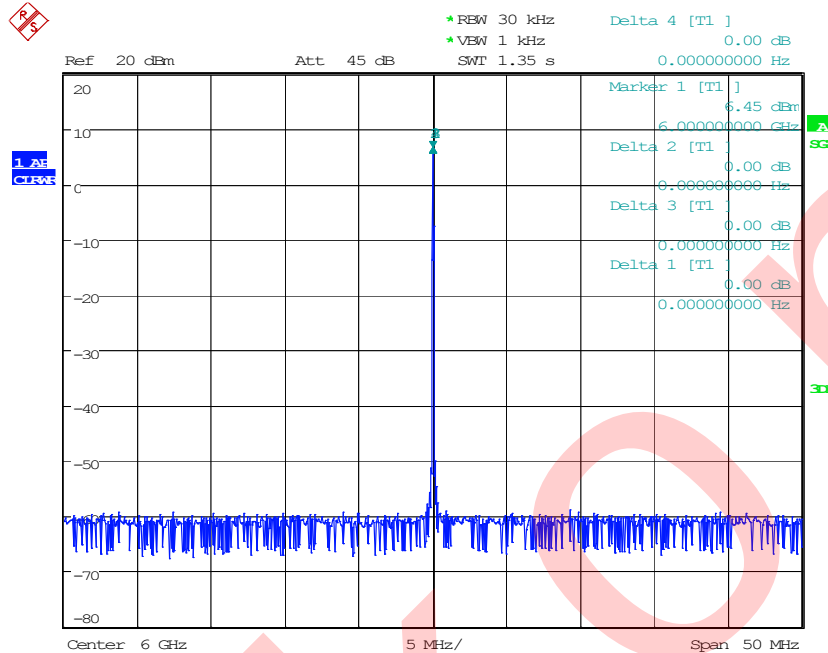
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