

REFERENCE PHASE LOCKED TRANSLATOR

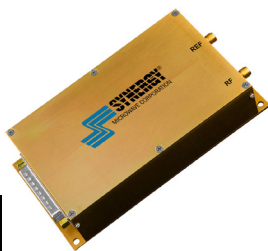
CONNECTORIZED MODEL: KFXLNS-1000

FIXED FREQUENCY

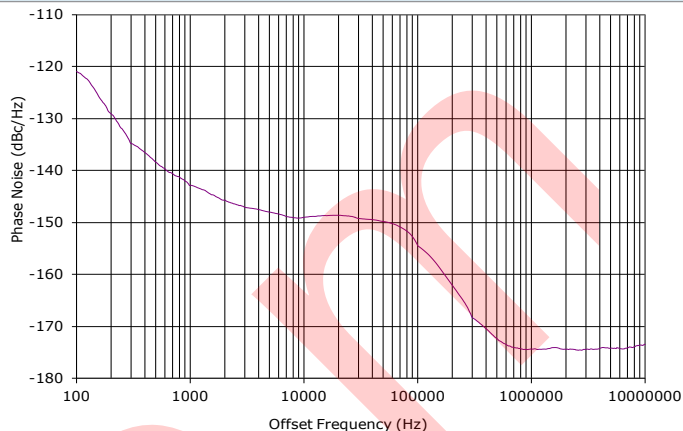
1000 MHz

FEATURES:

- ▶ Ultra-Low Phase Noise
- ▶ No Programming Required



Phase Noise (Measured with Agilent E5052A or R&S FSUP-26/50)



SPECIFICATIONS (Rev. A 02/24/15)

Frequency	1000 MHz
Reference Input Frequency	100 MHz ¹
Reference Input Power	13 dBm $\pm$ 3 dB
Bias Voltage	+12 VDC @ 250 mA (Max.)
Output Power	-5 dBm (Min.)
Spurious Suppression	80 dB (Typ.)
Harmonic Suppression	35 dB (Typ.)
Output Impedance	50 Ohms (Nom.)
Lock Detect Indicator	CMOS 3.3 V

¹ External 100 MHz reference sources should have phase noise better than -143 dBc/Hz @ 100 Hz offset to achieve published specifications.

Typical Phase Noise

Offset	Phase Noise
@ 100 Hz	-120 dBc/Hz
@ 1 kHz	-140 dBc/Hz
@ 10 kHz	-149 dBc/Hz
@ 100 kHz	-154 dBc/Hz
@ 1 MHz	-174 dBc/Hz

Operating Temperature Range

-20 to +70 °C

Absolute Maximum Ratings

Storage Temp. Range	-40 to +85 °C
Bias Voltage VCC (+12 V)	+13.0 V
DC Bias Voltage applied to RF output	$\pm$ 25 V

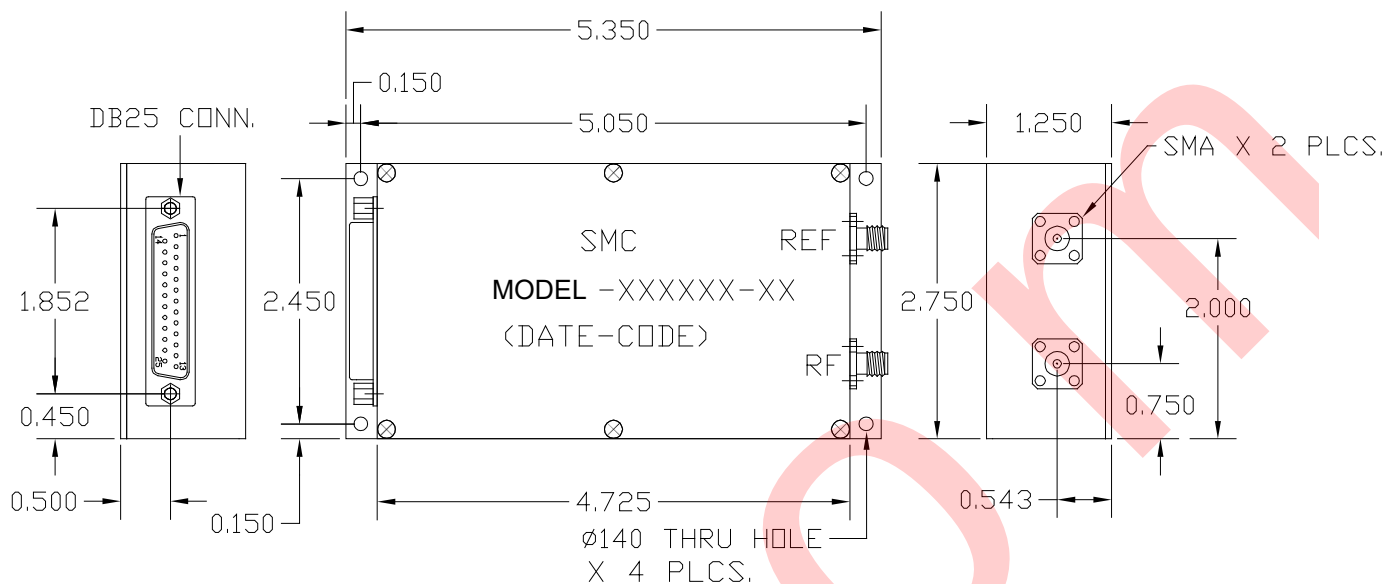
REFERENCE PHASE LOCKED TRANSLATOR

CONNECTORIZED MODEL: KFXLNS-1000

FIXED FREQUENCY

1000 MHz

Package # 347



PORT CONFIGURATION (DB-25 CONNECTOR)

Pin 1,2,14 - VCC (+12 VDC)
Pin 3 - VEE (GND)
Pin 15,16 - VEE (GND)

Pin 22 - LD (Lock Detect / +3.3 V CMOS)
All Others - No Connection

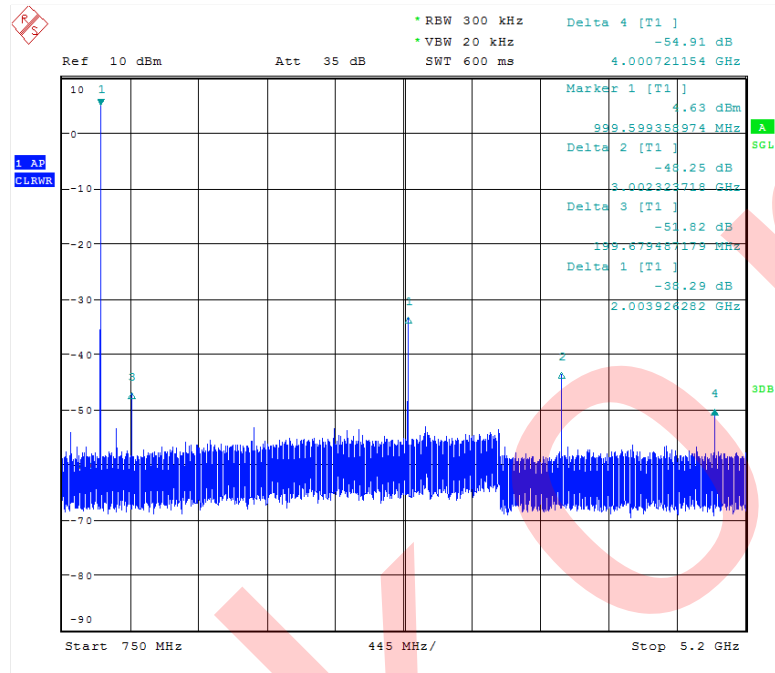
REFERENCE PHASE LOCKED TRANSLATOR CONNECTORIZED MODEL: KFXLNS-1000

FIXED FREQUENCY

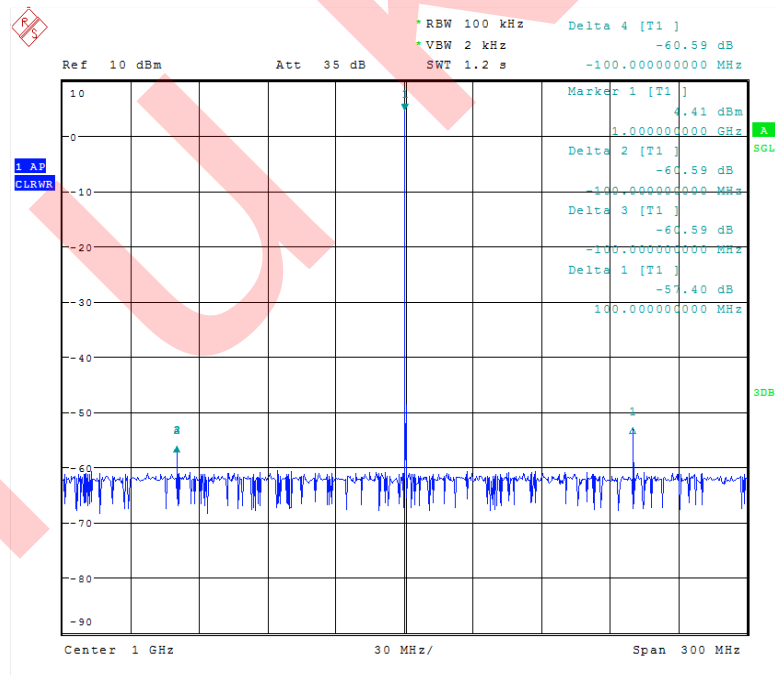
1000 MHz

HARMONIC SUPPRESSION

@ 25 °C



WIDE BAND SFDR



PERFORMANCE PLOTS

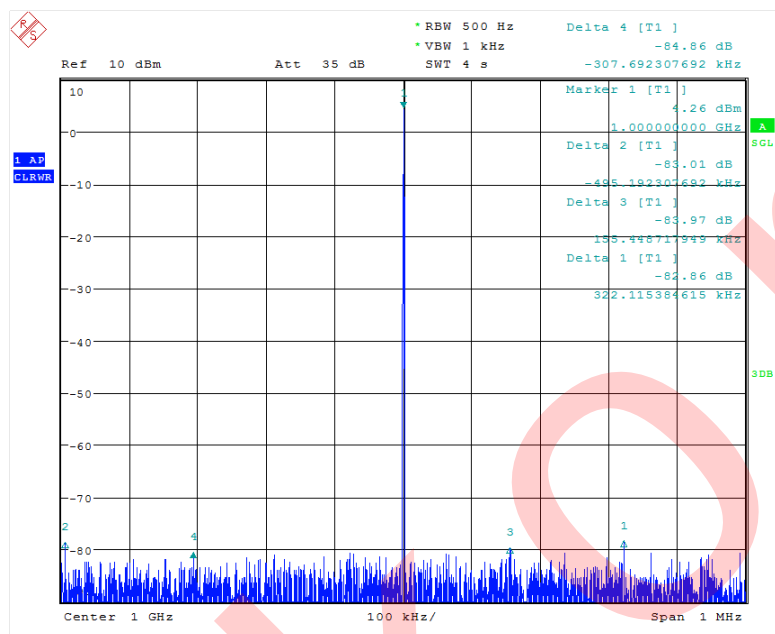
REFERENCE PHASE LOCKED TRANSLATOR CONNECTORIZED MODEL: KFXLNS-1000

FIXED FREQUENCY

1000 MHz

NARROW BAND SFDR

@ 25 °C



PERFORMANCE PLOTS

Copyright © Synergy Microwave Corporation
201 McLean Boulevard • Paterson, New Jersey 07504 USA
Tel: (973) 881-8800 • Fax: (973) 881-8361

E-Mail: sales@synergymicrowave.com • Website: <http://www.synergymicrowave.com>

Patents : <http://www.synergymicrowave.com/patents>

SYNERGY
MICROWAVE CORPORATION
[4 of 4]