

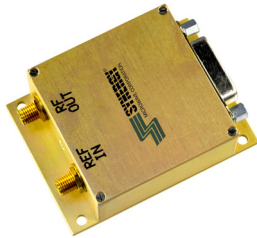
REFERENCE PHASE LOCKED TRANSLATOR CONNECTORIZED MODEL: KFSA1000-100

FIXED FREQUENCY

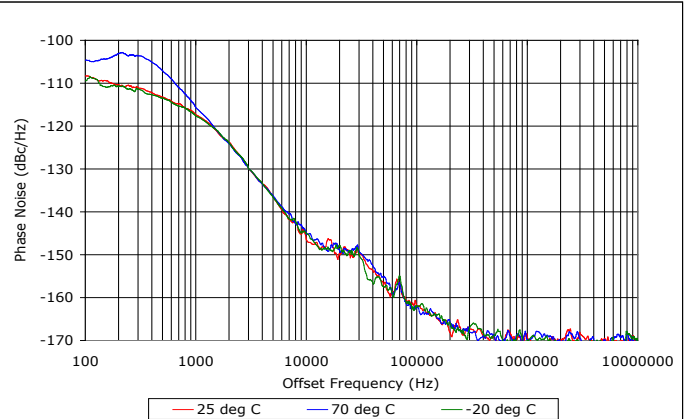
1000 MHz

FEATURES:

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



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



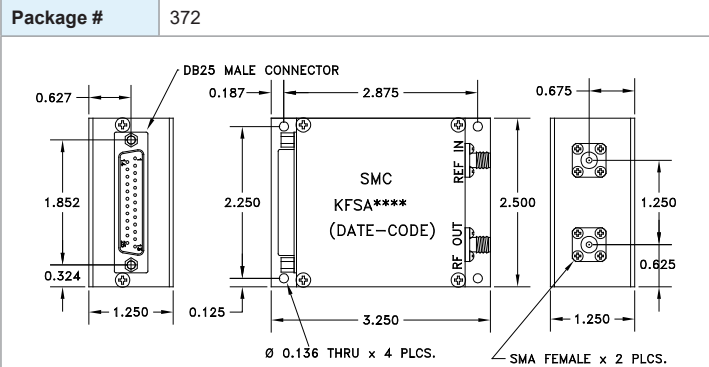
SPECIFICATIONS (Rev A 01/02/12)

Frequency	1000 MHz	
Reference Input Frequency	100 MHz ¹	
Reference Input Voltage	1.0 to 3.3 V p-p	
Bias Voltage	+12 V @ 250 mA (Max.)	
Output Power	+5 dBm (Min.)	
Spurious Suppression	80 dB (Typ.)	
Harmonic Suppression	15 dB (Typ.)	
Output Impedance	50 Ohms (Nom.)	
Lock Detect Indicator	CMOS 3.3 V	
Typical Phase Noise	Offset	Phase Noise
	@ 100 Hz	-105 dBc/Hz
	@ 1 kHz	-115 dBc/Hz
	@ 10 kHz	-145 dBc/Hz
@ 100 kHz	-160 dBc/Hz	
Operating Temperature Range	-20 to +70 °C	

¹ External 100 MHz reference sources should have phase noise better than -138 dBc/Hz @ 50 Hz offset to achieve published specifications.

Absolute Maximum Ratings

Storage Temp. Range	-40 to +85 °C
Bias Voltage	+13 V



PORT CONFIGURATION

Pin 1 - VCC 1 (+12 Vdc)	Pin 15 - VEE (Ground)
Pin 2 - VCC 2 (+12 Vdc)	Pin 16 - VEE (Ground)
Pin 3 - VEE (GND)	Pin 17 - NC
Pin 4 - NC	Pin 18 - NC
Pin 5 - NC	Pin 19 - NC
Pin 6 - NC	Pin 20 - NC
Pin 7 - NC	Pin 21 - NC
Pin 8 - NC	Pin 22 - LD OUTPUT (Lock detect/+3.3 V CMOS)
Pin 9 - NC	Pin 23 - NC
Pin 10 - NC	Pin 24 - NC
Pin 11 - NC	Pin 25 - NC
Pin 12 - NC	
Pin 13 - NC	
Pin 14 - VCC 3 (+12 Vdc)	NC - No connection

* Reset is open or logic high (+3.3 Vdc) for normal operation. Logic low for >10 mSec will reset.

REFERENCE PHASE LOCKED TRANSLATOR CONNECTORIZED MODEL: KFS A1000-100

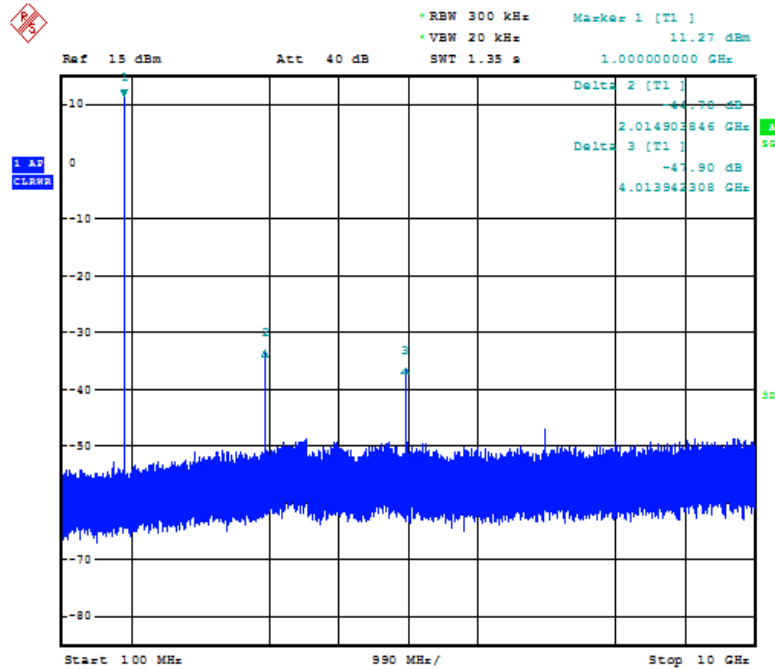
FIXED FREQUENCY

1000 MHz

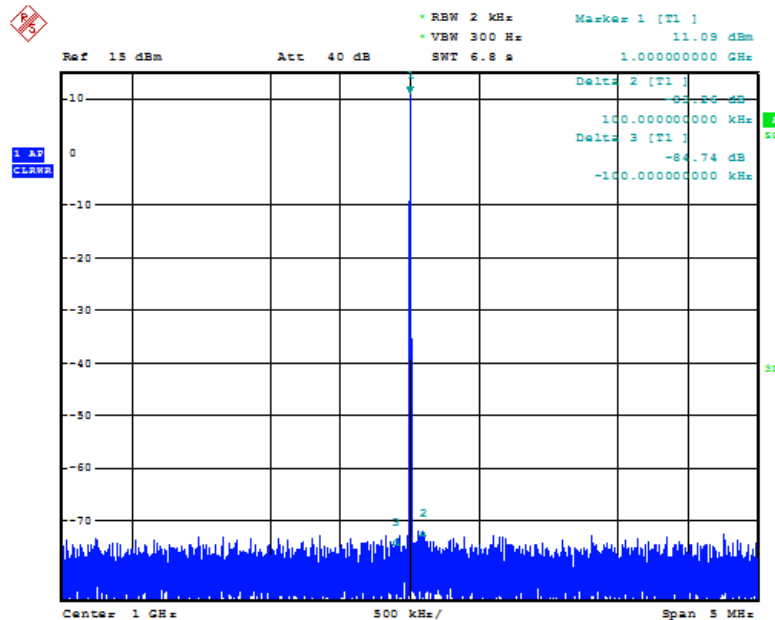
@ 25 °C

PERFORMANCE PLOTS

HARMONIC SUPPRESSION



REFERENCE SIDEBAND SUPPRESSION



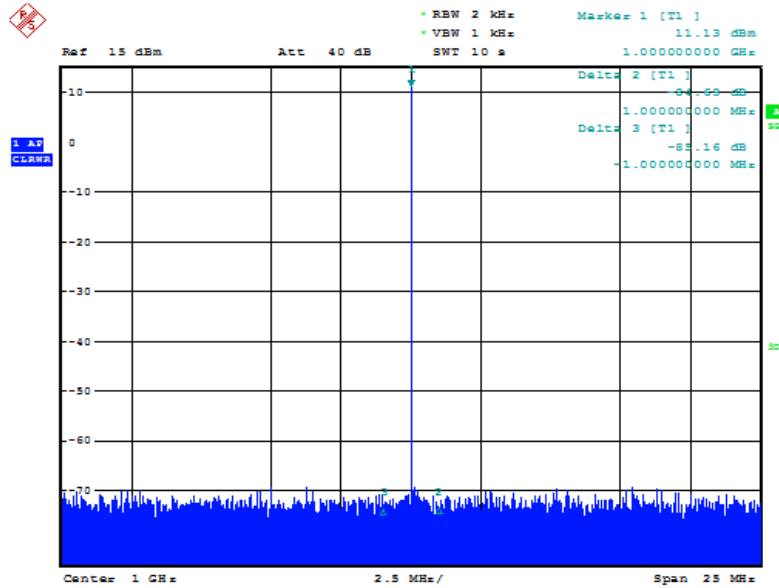
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@ 25 °C



PERFORMANCE PLOTS