

MAIN FEATURES

- ❖ Low phase noise
- ❖ Easy programming
- ❖ Fine step
- ❖ Compact design



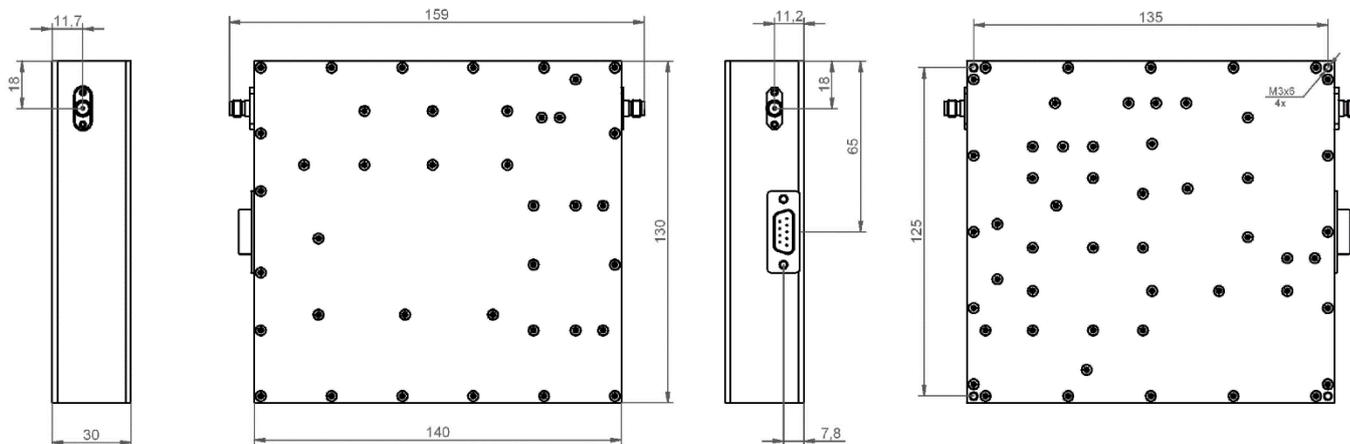
DESCRIPTION

This synthesizer is intended for use in professional applications as programmable local oscillator, where clean output signal, compact size, easy handling and modest price are important factors. Main applications are in satellite and telecommunications systems, instrumentation.

SPECIFICATIONS

GENERAL			
Frequency Range	9.5 - 11.5 GHz		
Frequency Accuracy	better than +/-0.5 ppm @full temperature range		
Tuning Range	2 GHz		
Step Size	10 kHz		
Switching Speed	30 ms typ. (50 ms max.)		
Output Power	+15 dBm (+/-3dB)		
VSWR	1.5 : 1		
Load Impedance	50 Ohm		
Spurious	<-60 dBc typ. (-55 dBc max.)		
Harmonics	<-30 dBc typ. (-20 dBc max.)		
SSB Phase Noise	@ offset	10 kHz	Output <-90 dBc/Hz
		100 kHz	<-110 dBc/Hz
Phase Lock Alarm	3V CMOS "Hi" locked, 3V CMOS "Low" out of lock		
Frequency Control	Serial BCD (3V CMOS) with Clock, Data, Latch		
Reference Frequency (internal and external)	10MHz (automatic change over)		
External Reference Level Range	-3 dBm to +6 dBm		
Connectors	SMA-F for RF Output and Ext.Ref., D-SUB9 male for DC & Control		
Operating Temperature Range	-40 to +70 °C		
DC Supply	+15V DC +/- 1V @ 600mA typ.		
Outline Dimension	140 x 130 x 30 mm (without connectors)		
Weight	cca. 900g		

OUTLINE DRAWING (mm)



TYPICAL PERFORMANCE CHARACTERISTICS

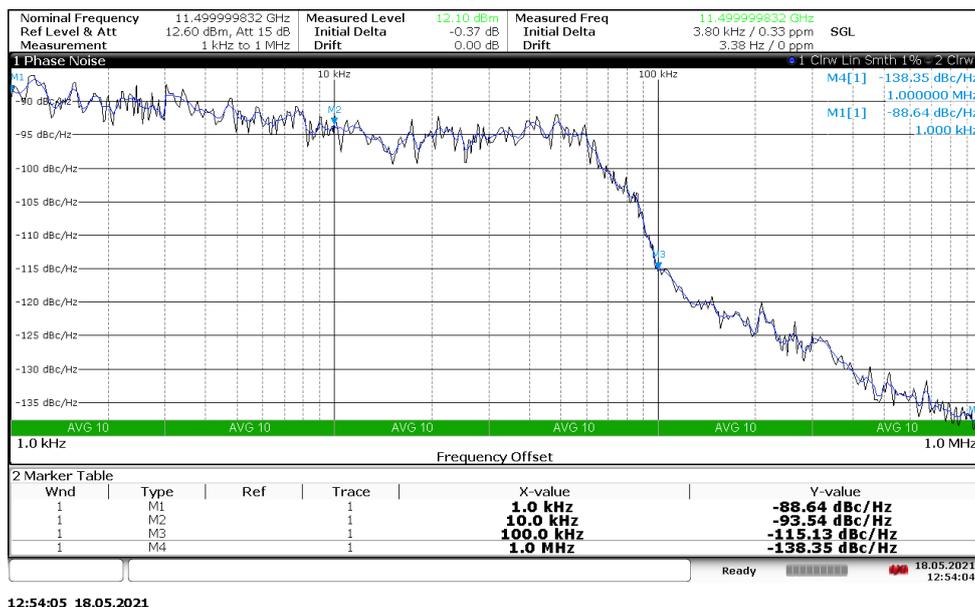


Figure 1. Typical phase noise @ Fout=11.5GHz



BSVX20 9.5-11.5 GHz Low Phase Noise Synthesizer

ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BSVX20K00036	BSVX20 X-band low phase noise synthesizer, 9500-11500MHz

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BSVX20-LM-K00036	V01	29/03/2023