

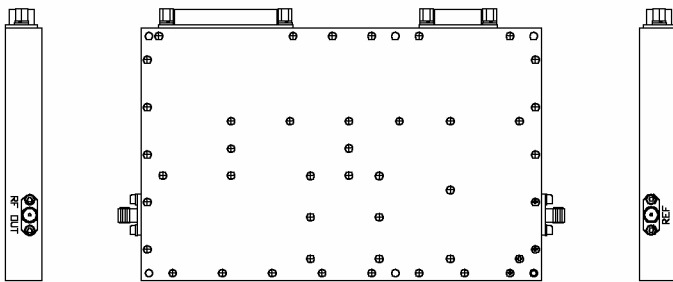
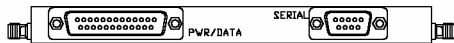
**features**

- Low phase noise
- 10kHz stepsize
- Computer Controlled (RS-232C)
- 0 °C to 50°C operating range
- Shielded design
- External 10MHz reference

**description**

This programmable signal source requires an external 10.000MHz TCXO reference. The synthesizer frequency is serially loaded through the RS-232C control port and has a tuning speed of less than 25mSec. This source is configured with a digital lock detect output.

**dimensions and connections**



6.25" W x 3.94" L x 0.57" H  
 J4 - 9-pin D-sub Jack  
 J5-25-pin D-sub Plug

**PIN CONNECTIONS**

RF OUT	J2 (SMA Jack)
RS-232 Data Out	J4(2)
RS-232 Data In	J4(3)
RS-232 GND	J4(5)
+12 VDC	PWR/DATA (J5)
+12 V RTN	J5(1)
LOCK DETECT	J5(2)
Digital GND	J5(5) locked (high, TTL)
	J5(15)

NOTE: All other pins are no connects

**typical specifications**

RF Out Freq (MHz)	800 - 990
Ref Osc (MHz)	EXTERNAL 10.0 MHz
	-10 to +10dBm
Freq Step Size (kHz)	10
Pout (dBm over freq)	14.0 +/- 2.0
Spurious (dBc)	-40
Frequency Stability (ppm)	+/- 2.5
SSB Phase Noise	dBc/Hz
1 kHz offset	60
10 kHz offset	85
100 kHz offset	115
Harmonics (dBc)	-30

**DC Power:** +10.5 to +15.0V @ 225 mA maximum

**absolute maximum ratings**

Temp, Case Operating: -10 to 60°C  
 Temp, Storage: -35 to 120°C  
 DC Volts: +15.5V

**Part Number:** 310-010028-008

# SYNTHESIZER 800 - 990 MHz

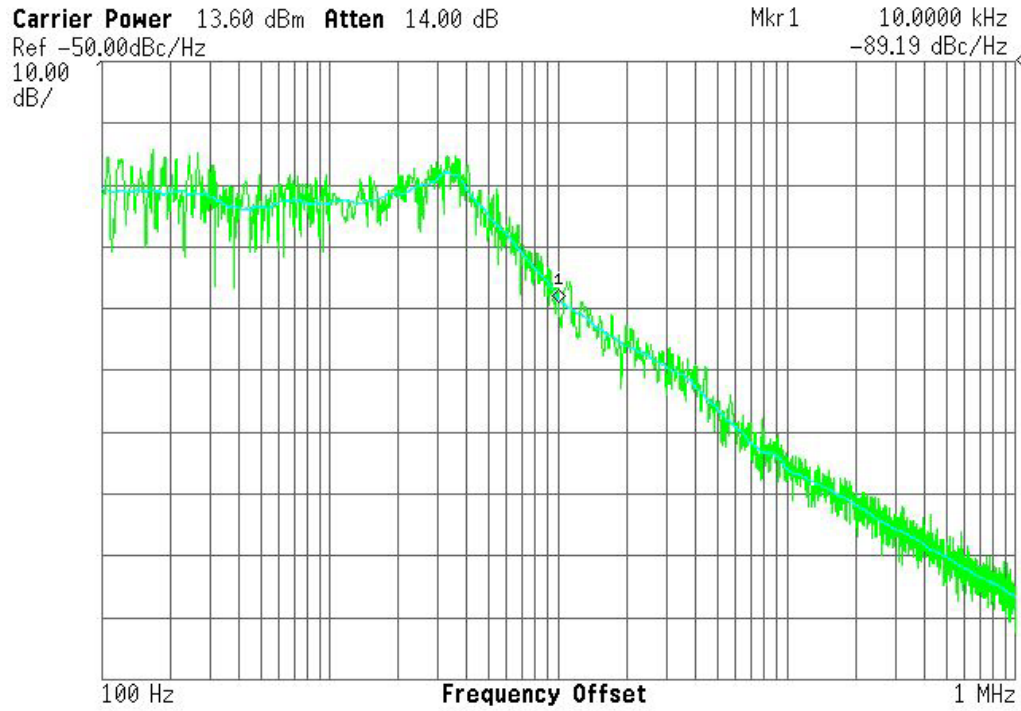


Figure 1 - Output Spectrum - Phase Noise

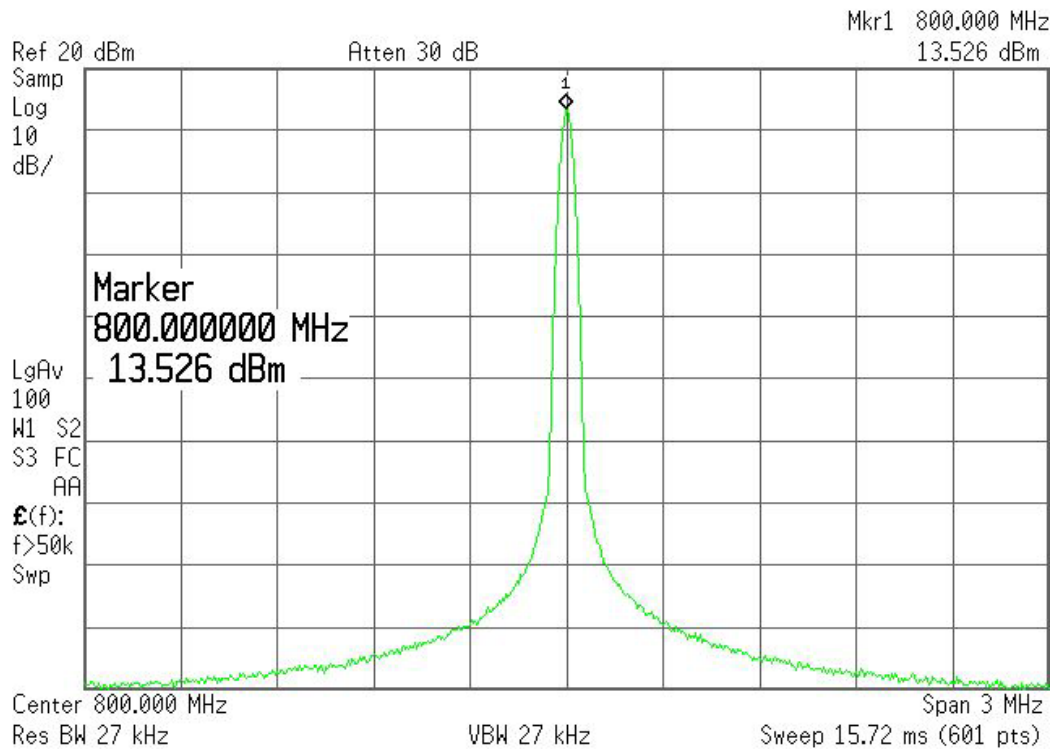


Figure 2 - Output Spectrum - Spurious