

low phase noise, low spurious

## 100-112MHz SYNTHESIZER



### description

This programmable signal source is completely self-contained with an internal TCXO reference. The synthesizer output frequency is serially loaded through the RS-232C control port. This source is suitable for use in dedicated test setups or as a component of a production system.

The synthesizer has an open drain Lock Detect output to indicate when the output is stable. An input is also provided to disable the RF output.

For detailed information on controlling this synthesizer using the RS-232 serial port, see the Synthesizer User's Manual.

310-010105-002

### absolute maximum ratings

Temp, Case Operating: -20 to 70°C  
Temp, Storage: -55 to 150°C  
DC Volts: +15.0V

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### features

- Low phase noise
- Low spurious (-60 dBc max)
- Computer Controlled (RS-232C)
- 100-112MHz
- -10° to 60°C operating range
- Shielded design
- Internal frequency reference

### typical specifications

RF OUTPUT:	
RF Out Freq (MHz)	100-112MHz
Ref Osc (MHz)	INTERNAL 14.4 MHz
Freq Step Size (kHz)	25
Pout (dBm over freq)	-10 +/- 1.0
Spurious (dBc)	-60
Frequency Stability (ppm)	+/- 2.5
SSB Phase Noise (dBc/Hz)	
1 kHz offset	75
10 kHz offset	105
100 kHz offset	125
DC Power:	8.0V-13.5V @ 80 mA maximum

### dimensions and connections

2.76" W x 4.42" L x 0.55" H

#### PIN CONNECTIONS

PIN CONNECTIONS	
RF OUT	J2 (SMA Jack)
RS-232 Data Out	J1(6)
RS-232 Data In	J1(5)
RS-232 GND	J1(14)
+12 VDC	J1(15)
+12V Return (GND)	J1(8)
RF enable	J1(3)
Lock detect (open drain)	J1(7)
Digital GND	J1(9)
Vext (5.5V max)	J1(2)
Vcc output	J1(1)

# Dimensional Drawing

