

low phase noise, low spurious

70MHz IF / 805-894MHz SYNTHESIZER



description

This programmable signal source is completely self-contained with an internal TCXO reference. The synthesizer always powers up with RF OUTPUT #1 at 845MHz and RF OUTPUT #2 at 70MHz. The synthesizer can be serially loaded through the RS-232C control port to set the frequency of RF OUTPUT #1 (Reference the interface control document 010058-002.DOC). Output level of RF OUTPUT #2 is 0dBm. This source is suitable for use in dedicated test setups or as a component of a production system. Typical applications include:

- Local oscillator (LO) source for single or dual conversion up/down converters
- Stimulus for CW transmitter
- Signal generator for bench testing or production test setup.

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 (-65 dBc max)
- Computer Controlled (RS-232C)
- Dual output
- Always powers up to 845MHz
- -10° to 60°C operating range
- Shielded design
- Internal frequency reference

typical specifications

RF OUTPUT #1:	
RF Out Freq (MHz)	805-894Hz
Ref Osc (MHz)	INTERNAL 14.4 MHz
Freq Step Size (kHz)	100
Pout (dBm over freq)	7.0 +/- 1.0
Spurious (dBc)	-65
Frequency Stability (ppm)	+/- 2.5
SSB Phase Noise (dBc/Hz)	
1 kHz offset	65
10 kHz offset	80
100 kHz offset	105

DC Power: 9 -13.0 V @ 150 mA maximum

dimensions and connections

2.76" W x 4.42" L x 0.56" H

PIN CONNECTIONS

RF OUT #1	J1 (SMA Jack)
RF OUT #2	J2 (SMA Jack)
RS-232 Data Out	J3(6)
RS-232 Data In	J3(5)
RS-232 GND	J3(14)
+12 VDC	J3(15)
+12 V RTN	J3(8)
LOCK DETECT	J3(7)
Digital GND	J3(9)

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