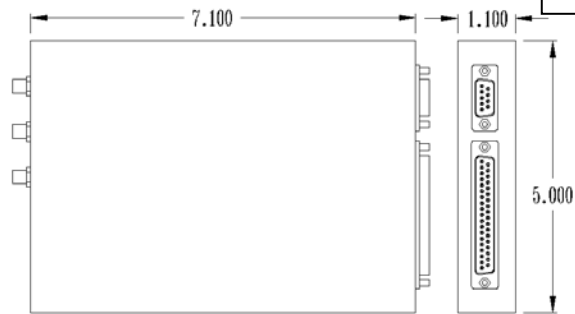


DS-120B DDS-Based Synthesizer



Outline Drawing



All dimensions in inches

Features:

- Custom Designs to Your Specifications
- Small to Medium Production Quantities

Overview

Mid-Atlantic RF Systems manufactures a complete DDS-based frequency synthesizer with a self-contained clock and reference TCXO. It operates from 5 MHz to 120 MHz, TTL controlled through a 37 pin D-sub connector. A 9 pin D-Sub connector provides power and reference select lines.

Electrical Specifications:

Frequency Range:	5.00 to 120.00 MHz
Accuracy:	1.0 ppm
Frequency Resolution:	24 Hz
Switching Speed:	<10 msec
Spectral Purity	
Harmonics:	-20 dBc
Spurious:	5 to 60 MHz, -48 dBc; -27 dBc @ 120 MHz
Phase Noise	
100 Hz Offset:	-90 dBc/Hz
1 kHz Offset:	-90 dBc/Hz
10 kHz Offset:	-90 dBc/Hz
100 kHz Offset:	-90 dBc/Hz
Main Output:	+6 dBm \pm 2 dBm
Aux. Output:	AC coupled differential Nominal 1.0 Vp-p Square Wave, ECL Compatible
Frequency Reference	
Internal:	10 MHz, 1 ppm
External:	10 MHz, Tracking \approx +50
Reference Output:	10 MHz, -15 dBm min.
DC Power:	-5.2 VDC/1.3A nom.; +15 VDC; 0.5A nom.
Control:	TTL Positive Logic

Mechanical Specifications:

Dimensions:	7.1" x 5.0" x 1.1"
Connectors:	SMA(f) x3, 9P D-Sub(m), 37p D-Sub(m)

Environmental Specifications:

Temperature Range:	0 to +50°C
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