



DFP-106DH

UHF SATCOM DIPLEXER

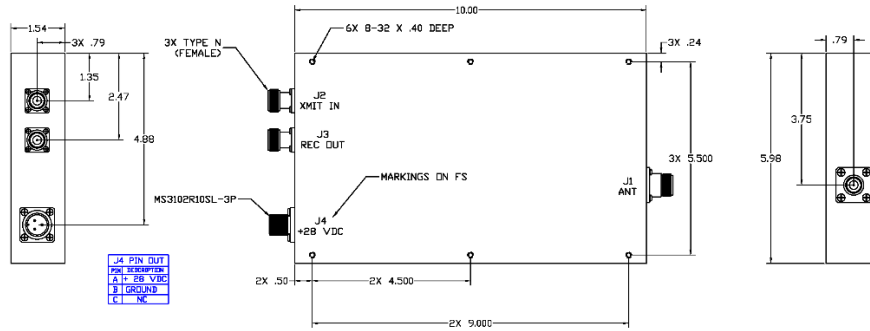


DESCRIPTION

The DFP-106DH integrates a high selectivity UHF SATCOM diplexer and a low noise figure preamplifier into a single unit. This configuration allows a single antenna to be operated with a UHF SATCOM transmitter (291-318.3 MHz) and a SATCOM receiver (243-270 MHz), in a full duplex mode. Locating the DFP-106DH as close as possible to the antenna will provide a low receiver noise figure as the preamplifier gain will compensate for the cable loss. The diplexer protects the preamplifier from the transmitter signal, thereby eliminating the need for external filters, isolators and switches.

FEATURES

- Low Noise Figure LNA
- High Selectivity – Allows Full Duplex Operation
- DAMA/ Mini-DAMA Compatible
- Full Duplex Capable
- 200Watt CW INPUT



ELECTRICAL SPECIFICATIONS

RECEIVE CHARACTERISTICS, J1 to J3

Gain, 243-270 MHz	30 dB min./35 dB max.
Gain roll off, 243-270 MHz	1.5 dB max.
Stopband, 0-180 MHz	90 dB min.
Stopband, 180-218 MHz	60 dB min.
Stopband, 291-512 MHz	90 dB min.
Stopband 512-1000 MHz	60 dB min.
VSWR, 243-270 MHz	1.5:1 max.
Noise Figure, 243-270 MHz	2.5 dB max.
Input@ 1dB gain compression	-18 dBm min.
Input signal, max.**, 243-270 MHz	1W, CW
Intercept, third order	+22 dBm nom.
Isolation, J2 to J3, 0-228 MHz*	95 dB min.
Isolation, J2 to J3, 240-270 MHz*	30 dB min.
Isolation, J2 to J3, 291-512 MHz*	75 dB min.

*Includes Gain of Preamplifier

** Protection Level, higher beyond passband

TRANSMIT CHARACTERISTICS, J2 to J1

Passband	291-318.3 MHz
Insertion Loss, 295-315 MHz	0.8 dB max.
Insertion Loss, Passband	1.0 dB max.
VSWR, 291-318.3 MHz	1.4:1 max.
RF Input Power, CW	200 W max.
Stopband, 0-250 MHz	90 dB min.
Stopband, 250-270 MHz	60 dB min.
Stopband, 355-400 MHz	60 dB min.
Stopband, 400-1000 MHz	90 dB min.

GENERAL CHARACTERISTICS

Environment	Airborne/ Shipboard
TEMPERATURE	
Operating	-55°C to +70°C
Storage	-57°C to +85°C
Size, excluding connectors	10.00" x 5.98" x 1.54"
Weight	5 lbs. max.
DC POWER	
Voltage	+21 to +32 VDC
Current, steady state	100 mA max.
CONNECTORS:	
J1 – ANTENNA	Type N (Female)
J2 – TRANSMIT IN	Type N (Female)
J3 – RECEIVE OUT	Type N (Female)
J4 - +28 VDC	MS3102R-10SL-3P
Finish	Black Texture

REV 9/15/17