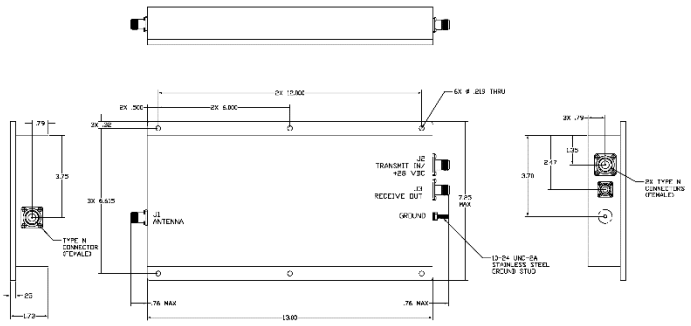
# DFP-106G-1B

## UHF SATCOM DIPLEXER/LNA

FULL DUPLEX OPERATION




## ELECTRICAL SPECIFICATIONS

### RECEIVE CHARACTERISTICS, J1- J3, Note 1,4

| | |
|---|---|
| Passband | 243-270 MHz |
| VSWR over passband | 1.5:1 max. |
| Stopband | |
| 0-180 MHz | 90 dB min. |
| 180-210 MHz | 70 dB min. |
| 291-400 MHz | 90 dB min. |
| 400-1100 MHz | 90 dB min. |
| 1100-1600 MHz | 50 dB min. |
| Gain | 28.5 dB min./ 31.5 dB max. |
| Noise Figure | 2.5 dB max. |
| Input @ 1 dB gain compression | 0 dBm nom. |
| Input Signal, Protection Level, 243-270 MHz | 1W, CW |
| Intercept Point, third order | +43 dBm nom. |
| Reverse Isolation (J3-J1), 0.3-1000 MHz | 50 dB min. |

### TRANSMIT TO RECEIVE ISOLATION, J2-J3, Note 2

| | |
|---|---|
| Rejection | |
| 0.3-228 MHz | 95 dB min. |
| 243-270 MHz | 55 dB min. |
| 291-400 MHz | 85 dB min. |

### TRANSMIT CHARACTERISTICS, J2- J1, Note 3

| | |
|---|---|
| Passband | 291-318.3 MHz |
| Insertion Loss, 295-315 MHz | 0.8 dB max. |
| Insertion Loss over passband | 1.0 dB max. |
| VSWR over 291-318.3 MHz | 1.4:1 max. |
| Input Power, max. | +23 dBW |
| Stopband | |
| 0-250 MHz | 90 dB min. |
| 250-270 MHz | 80 dB min. |
| 350-400 MHz | 75 dB min. |
| 400-820 MHz | 90 dB min. |
| 820-1150 MHz | 60 dB min. |

## GENERAL CHARACTERISTICS

| | |
|---|---|
| Environment | Shipboard/Airborne Weather Resistant |
| Weight | 9 lbs. max. |
| Size, excluding connectors | 13.00” X 7.25” X 1.73” |
| Operating Current, 24-32 VDC Note 4 | 0.52 A max. |
| Connectors | |
| J1 Antenna | Type N (Female) |
| J2 TX In, +28 VDC In | Type N (Female) |
| J3 Receive Out | Type N (Female) |

Notes:

1 Unless otherwise listed, applicable over 243-270 MHz, J1 (ANT) to J3 (RCVR). Stopband values are relative from the maximum passband gain. J2 (TRAN/+28 VDC) terminated with 50 Ohms.

2. Measured from J2 (TRAN/ +28 VDC) to J3 (RCVR) with 50 Ohm load on J1 (ANT). Values include the gain of the preamplifier

3. Measured from J2 (TRAN/+28 VDC) to J1 (ANT), 291-318.3 MHz, with preamp ON and J3 terminated with 50 Ohms.

4. LNA Operating power supplied through an integral bias-tee at J2 (TRAN/ +28 VDC).

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