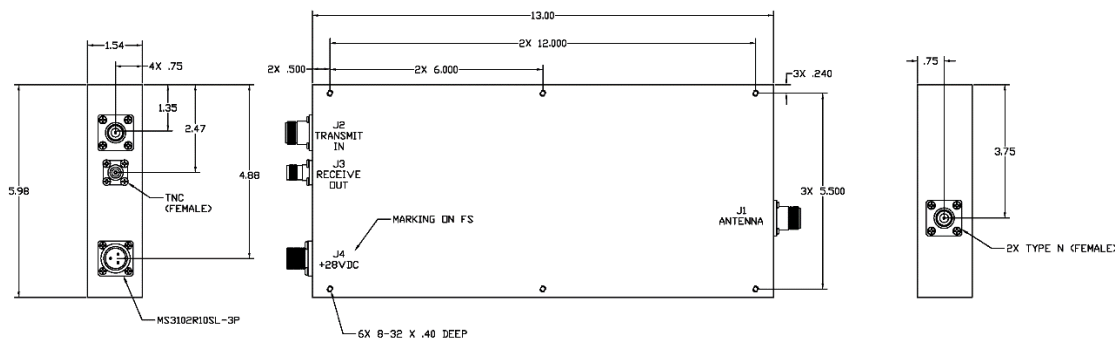




# DFP-106G DIPLEXER – PREAMPLIFIER

# UHF SATCOM FULL DUPLEX OPERATION



## ELECTRICAL SPECIFICATIONS

### TRANSMIT CHARACTERISTICS, J2 to J1 (Note 3)

Passband	291-318.3 MHz
Insertion Loss	
295-315 MHz	0.8 dB max.
Over full passband	1.0 dB max.
VSWR, 291-318.3 MHz	1.4:1 max.
RF Input Power, CW	+23 dBW max.
Stopband	
0-250 MHz	90 dB min.
250-270 MHz	80 dB min.
350-400 MHz	80 dB min.
400-1000 MHz	90 dB min.

### GENERAL CHARACTERISTICS

Environmental Capability	Airborne/Shipboard
Weight	6.5 lbs. max.
Operating Power	
Voltage	+22 - +32 VDC
Current	90 mA nom.
Size, excluding connectors	13.00" x 5.98" x 1.54"
CONNECTORS	
J1 and J2	Type N (Female)
J3	TNC (Female)
J4	MS3102R10SL-3P

### RECEIVE CHARACTERISTICS, J1 to J3 (Note 1)

Passband Rolloff, 243- 270 MHz	1.5 dB max.
VSWR, 243-270MHz	1.6:1 max.
Stopband	
0-180 MHz	95 dB min.
180-210 MHz	90 dB min.
291-400 MHz	90 dB min.
400-1000 MHz	95 dB min.
Gain, 243-270 MHz	30 dB min./ 33 dB max.
Peak to Peak gain ripple (Note 4)	0.2 dB max.
Noise Figure, 243-270 MHz	2.5 dB max.
Input @ 1 dB gain compression	-18 dBm nom.
Intercept Point, third order	+22 dBm nom.
Input Signal, Protection Level, 243-270 MHz	1W, CW
Reverse Isolation (J3 to J1), 0.3 to 1000 MHz	55 dB min.

### TRANSMIT TO RECEIVE ISOLATION (Note 2)

Rejection	
0.3-228 MHz	95 dB min.
243-270 MHz	55 dB min.
291-512 MHz	85 dB min.

### 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) terminated with 50 Ohms.
- 2) Measured from J2 (TRAN) to J3 (RCVR) with 50 Ohm load on J1 (ANT). Values include the gain of the preamplifier.
- 3) Measured from J2 (TRAN) to J1 (ANT), 291-318.3 MHz, with preamp ON and J3 terminated with 50 Ohms.
- 4) Exclusive of passband rolloff.

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