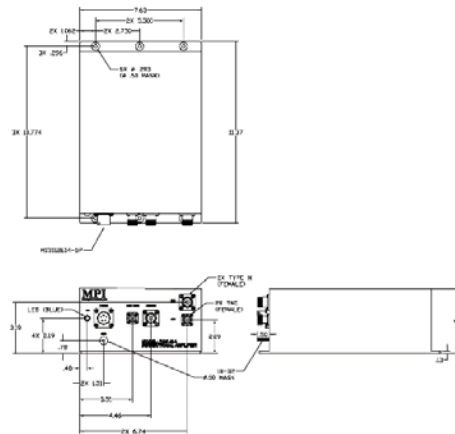




# FAM-48A BIDIRECTIONAL AMPLIFIER

# UHF SATCOM (DAMA) LNA/HPA



## ELECTRICAL SPECIFICATIONS

### RECEIVE CHANNEL CHARACTERISTICS, (Notes 2, 3)

|  |                          |
|--|--------------------------|
| Frequency Range                          | 243-270 MHz              |
| Gain, @ -25 dBm Input (Note 2)           | 25 dB min.<br>28 dB max. |
| Gain, @ -25 dBm Input (Note 3)           | 26 dB min.<br>29 dB max. |
| Gain Variation, 243-270 MHz              | 1.5 dB max.              |
| Noise Figure                             | 0.9 dB max.              |
| VSWR                                     | 1.5:1 max.               |
| Input @ 1dB gain compression             | 0 dBm +/- 1 dBm          |
| Input Signal                             | 100 mW CW max.           |
| Intercept Point, third order             | +43 dBm nom.             |
| Rejection, (Note2)                       |                          |
| 0-130 MHz                                | 60 dB min.               |
| 130-190 MHz                              | 40 dB min.               |
| 291-300 MHz                              | 60 dB min.               |
| 300-520 MHz                              | 80 dB min.               |
| Reverse Isolation, XMT/RCVR to RCV       | 55 dB min.               |
| Radio to Receiver Isolation, 200-291 MHz | 20 dB min.               |
| 291-520 MHz                              | 80 dB min.               |

### TRANSMIT CHANNEL CHARACTERISTICS, (Note1)

|  |                 |
|--|-----------------|
| Passband                                 | 291-318.3 MHz   |
| Gain, (Note 4)                           | 7 to 10 dB nom. |
| VSWR, 291-318.3 MHz                      | 1.5:1 max.      |
| Output Power (50K feet max.), 15 W Input | 100 W CW min.   |
| Stopband                                 |                 |
| 0-270 MHz                                | 70 dB min.      |
| 360-400 MHz                              | 60 dB min.      |
| 400-1000 MHz                             | 80 dB min.      |

## GENERAL CHARACTERISTICS

|                               |                        |
|-------------------------------|------------------------|
| Environment                   | Airborne               |
| Weight                        | 8.5 lbs. nom.          |
| Size, Excluding connectors    | 11.37" x 7.63" x 4.03" |
| DC Operating Current, +28 VDC |                        |
| Receive                       | 0.6A max.              |
| Transmit                      | 14A max.               |
| Connectors                    |                        |
| XMT/RCV, XMT                  | Type N (Female)        |
| AUX/RCVR, RCV                 | TNC (Female)           |
| POWER                         | MS3112E14-5P           |

**NOTES:**

1. XMT/RCV port to XMT port.
2. RCV port to XMT/RCV port.
3. RCV port to AUX RCVR port
4. The gain is a function of the transmit signal drive level.

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