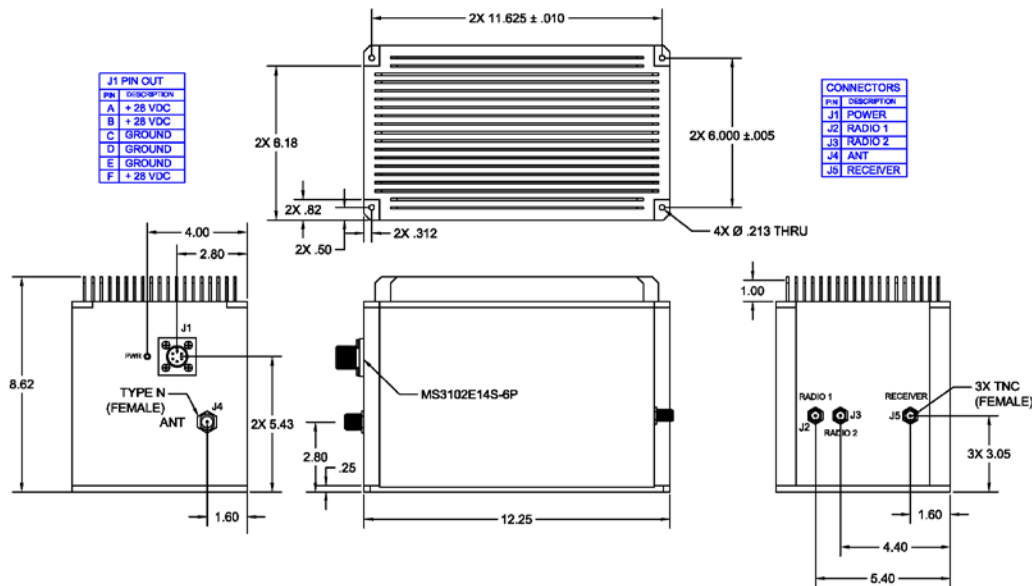




# FAM-142A-2

# DUAL BIDIRECTIONAL AMPLIFIER

## UHF SATCOM DUAL RADIO INDEPENDENT OPERATION



## ELECTRICAL SPECIFICATIONS

### TRANSMIT MODE (Note 1)

Frequency Range (Passband)	291-318.3 MHz
Gain	14 dB max. (Note 3)
VSWR	2.0:1 max.
RF Power Output	100 W CW nom. (Note 4)
Stopband	
0-235 MHz	85 dB min.
235-270 MHz	60 dB min.
350-400 MHz	80 dB min.
400-3000 MHz	90 dB min.
Isolation, 291-318.3 MHz: J2 to J3	35 dB min.

### NOTES:

- RADIO 1 (J2) to ANT (J4) and RADIO 2 (J3) to ANT (J4)
- ANT (J4) to RADIO 1 (J2) and/or ANT (J4) to RADIO 2 (J3)
- Dependent on the input drive level, see Note 4
- 100 W CW OUTPUT per radio, @ 10W INPUT

### RECEIVE MODE (Note 2)

Frequency Range (Passband)	243-270 MHz
Gain	22 dB min.
Noise Figure	2.5 dB max.
VSWR	2.0:1 max.
Max. Input Signal (protection level)	1 W CW
Rejection	
0-218 MHz	90 dB min.
218-228 MHz	80 dB min.
281-290 MHz	80 dB min.
290-3000 MHz	90 dB min.
Isolation, 243-270 MHz: J2 to J3	30 dB min.
Input @ -1 dBm compression	-15 dBm min.

\* J5 (Receiver) to J2 (Radio 1) or J3 (Radio 2)

### RADIO 1 or RADIO 2

Frequency Range (Passband)	243-270 MHz
Gain	22 dB min.
Noise Figure	2.5 dB max.
VSWR	2.0:1 max.
Max. Input Signal (protection level)	1 W CW
Rejection	
0-218 MHz	90 dB min.
218-228 MHz	80 dB min.
281-290 MHz	80 dB min.
290-3000 MHz	90 dB min.
Isolation, 243-270 MHz: J2 to J3	30 dB min.
Input @ -1 dBm compression	-15 dBm min.

### RECEIVER PORT J4 to J5

Frequency Range (Passband)	243-270 MHz
Gain	27 dB min.
Noise Figure	2.5 dB max.
VSWR	1.5:1 max.
Max. Input Signal (protection level)	1 W CW
Rejection	
0-218 MHz	80 dB min.
218-228 MHz	50 dB min.
281-290 MHz	53 dB min.
290-3000 MHz	85 dB min.
Isolation, 243-270 MHz: J2 to J3	30 dB min.*
Input @ -1 dBm compression	-15 dBm min.

## GENERAL CHARACTERISTICS

Size (excluding connectors)	12.25" x 7.0" x 8.5"
Weight	24 pounds
Power Specifications	
Voltage	24-32 VDC
Current (2 Radios TX)	36A max.
Current (1 Radio TX)	18A max.
Current (2 Radios RX)	0.5A max.

REV: 9/19/16