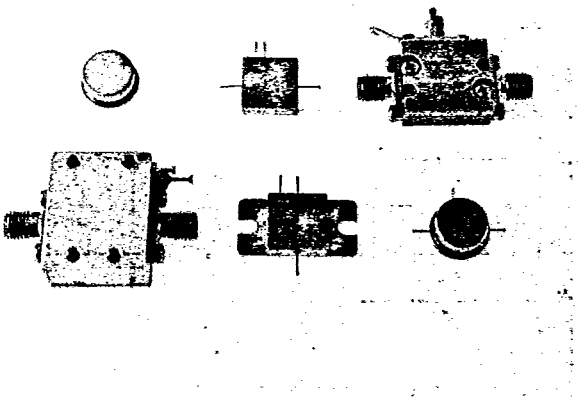
AH-5836



10 to 100 MHz TO-8 Cascadable Amplifier

- High Dynamic Range
- High Reverse Isolation

Electrical Specifications

Measured in a 50-ohm system at + 15 Vdc nominal

Characteristic	Typical 25° C	Guaranteed 0° C to + 50° C	Specifications -54° C to + 85° C
Frequency (MHz Min.)	5-125	10-100	10-100
Small Signal Gain (dB Min.)	+15.5	+15.0	+14.75
Gain Flatness (dB Max.)	±0.15	±0.25	±0.4
Noise Figure (dB Max.)	+2.1	+2.7	+3.0
Power Output @ 1dB Compression (dBm Min.)	+14.7	+14.0	+13.5
Two Tone 3rd Order Intercept Point (dBm Min.)	+29.0	+26.0	+25.0
Two Tone 2nd Order Intercept Point (dBm Min.)	+40.0	+37.0	+36.0
Rev Isolation 100 MHz	+33.0	+28.0	+27.0
Input/Output VSWR (Max.)	1.3/1.5	1.9:1	2.0:1
DC Current at 15 V (mA Max.)	+24.0	+27.0	+28.0

Maximum Ratings

Ambient Operating Temperature.. -54° C to +100° C

Storage Temperature.....-62° C to +125° C

Maximum Case Temperature..... +125° C

Maximum DC Voltage..... +17.0V

Maximum Continuous RF Input Power ..... +13dBm

Maximum Short Term RF Input Power ..... +50.0 mW (1 minute Max.)

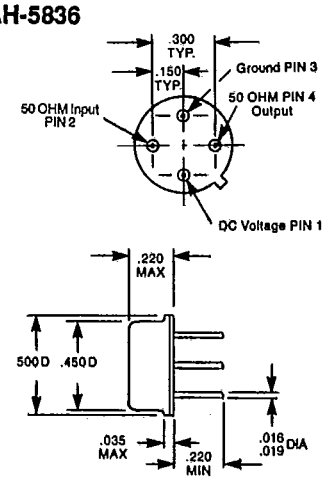
Maximum Peak Power ..... +0.5W (3 useconds Max.)

"X" Series Burn-In Temperature .....Tc=+125° C

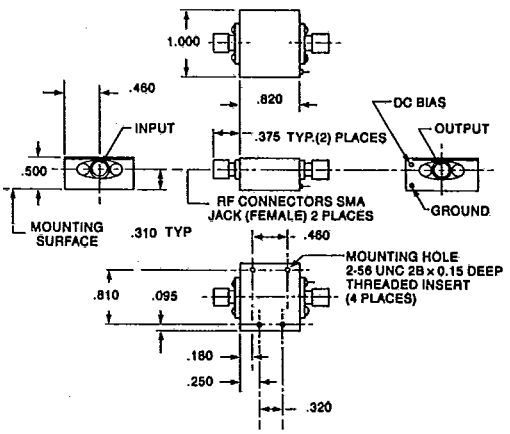
Weight ..... +2.5 grams Max.

Outline Drawings

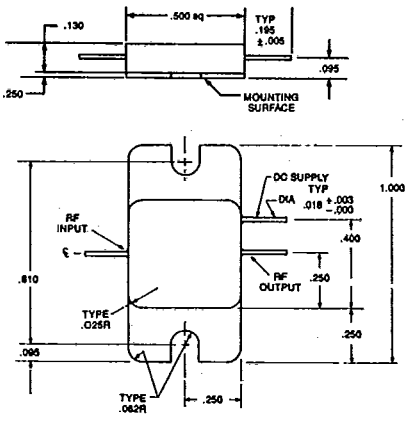
AH-5836



CAH-5836

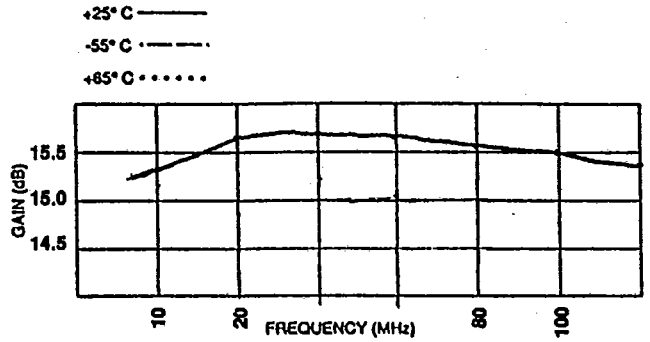


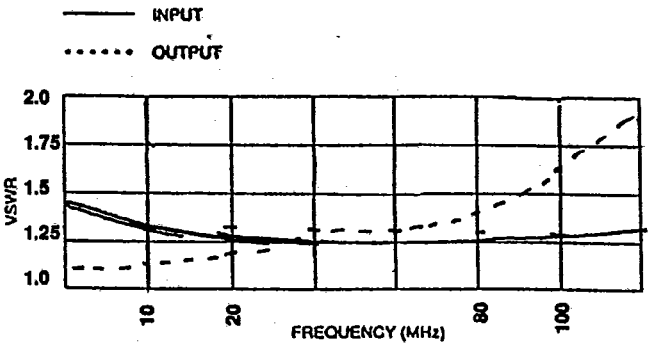
FPF-5836

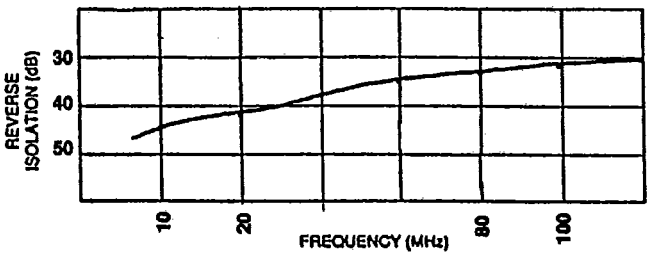


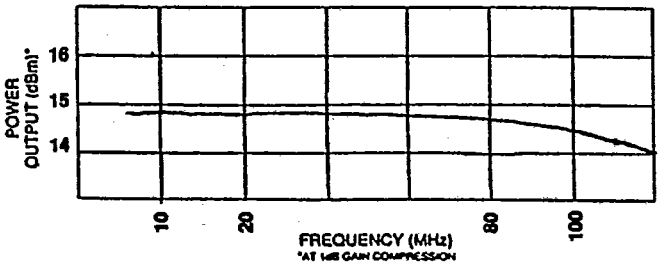
AH-5836

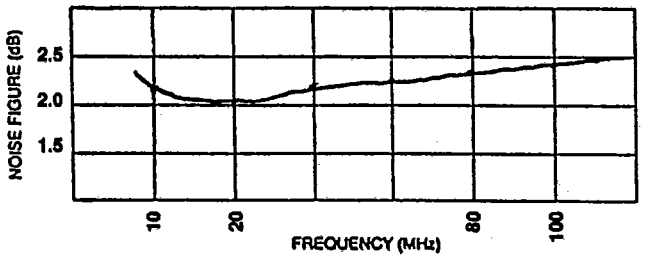
Typical Performance

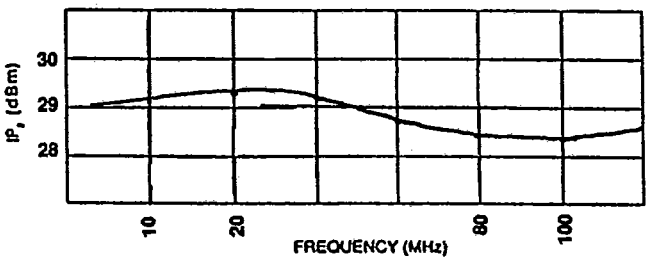


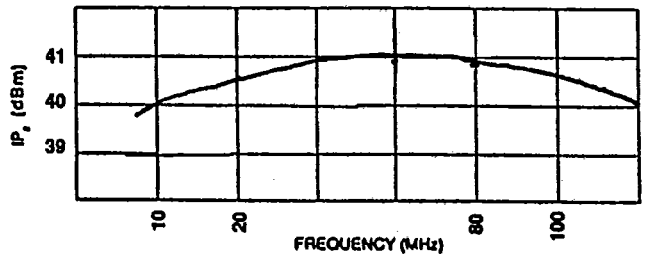


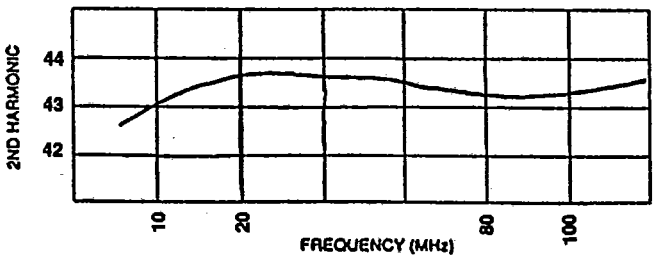












Linear S-Parameters

FREQUENCY	RETURN LOSS INPUT (S11)		TRANS. GAIN FORWARD (S21)		TRANS. GAIN REVERSE (S12)		RETURN LOSS OUTPUT (S22)	
MHz	dB	DEG	dB	DEG	dB	DEG	dB	DEG
5.00	-14.80	-29.8	15.37	-165.5	-43.40	- 2.8	-18.10	27.8
10.00	-17.30	-10.5	15.70	-179.3	-43.50	11.3	-24.90	-161.0
20.00	-17.10	- 5.5	15.79	175.5	-42.00	28.3	-24.20	147.8
40.00	-17.20	- 8.8	15.71	168.5	-39.00	47.0	-20.10	113.8
50.00	-17.40	-10.8	15.70	165.3	-37.60	51.3	-18.50	105.0
60.00	-17.40	-12.8	15.68	162.3	-36.40	56.0	-17.00	97.5
70.00	-17.50	-17.0	15.65	159.0	-35.30	58.5	-15.80	91.3
80.00	-17.60	-19.3	15.62	155.8	-34.20	60.3	-14.70	85.3
90.00	-17.70	-21.8	15.58	152.8	-33.40	61.3	-13.90	80.0
100.00	-17.80	-24.0	15.52	149.3	-32.40	62.0	-13.10	75.5