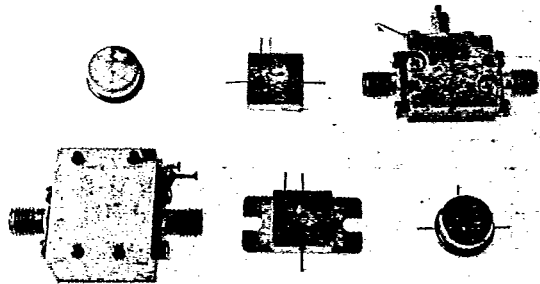


AH-64



10 to 1200 MHz TO-8 Cascadable Amplifier

- Two Stage Gain: +26.0dB
- Low Noise: +3.2dB
- Medium Output: +8.0dBm
- Various Package Options (see photo)
Surface Mounted (SMT-8), Flatpack with flange (FPF),
Connectorized (CAH), Connectorized Flatpack (CFP),
Flatpack (FP), and TO-8 (AH)

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.)	10-1200	10-1200	10-1200
Small Signal Gain (dB Min.)	+26.0	+24.0	+23.0
Gain Flatness (dB Max.)	±0.3	±0.8	±1.0
Noise Figure (dB Max.)	+3.2	+4.3	+4.8
Power Output @ 1 dB Compression (dBm Min.)	+8.0	+7.0	+6.5
Two Tone 3rd Order Intercept Point (dBm Min.)	+20.0	+18.0	+17.0
Two Tone 2nd Order Intercept Point (dBm Min.)	+43.0	+41.0	+35.0
One Tone 2nd Harmonic Intercept Point (dBm Min.)	+45.0	+43.0	+40.0
Input/Output VSWR (Max.)	<1.7:1	2.0:1	2.0:1
DC Current at 15 V (mA Max.)	+39.0	+40.0	+45.0

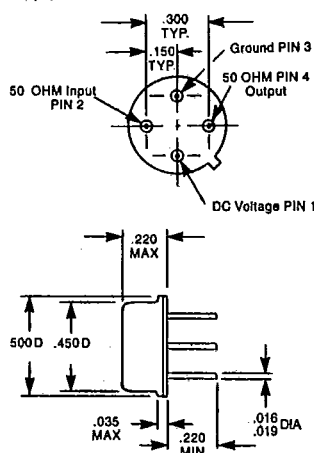
Maximum Ratings

Ambient Operating Temperature	-54°C to +100°C
Storage Temperature ...	-62°C to +125°C
Maximum Case Temperature	+125°C
Maximum DC Voltage	+18.0V
Maximum Continuous RF Input Power	+6.0dBm
Maximum Short Term RF Input Power	+50.0 mW (1 minute Max.)
Maximum Peak Power	+0.5W (3μseconds Max.)
"X" Series Burn-In Temperature	+125°C
Weight	+2.5 grams Max.

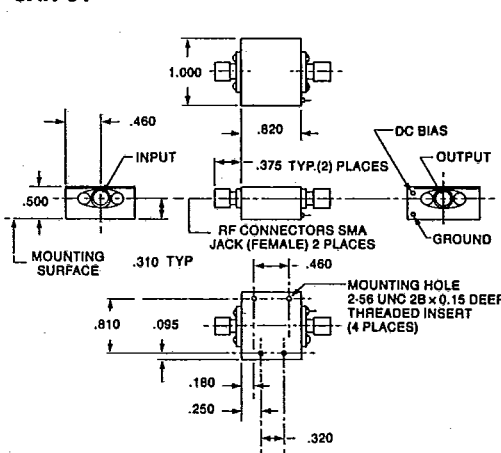
Outline Drawings

(For additional package configurations, see Section 9)

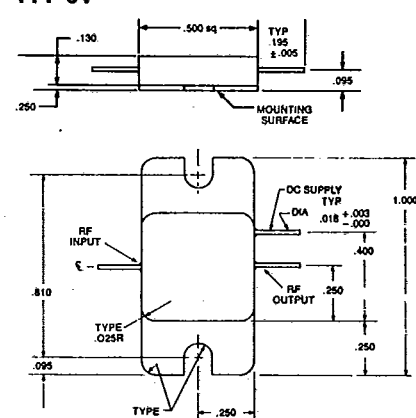
AH-64



CAH-64

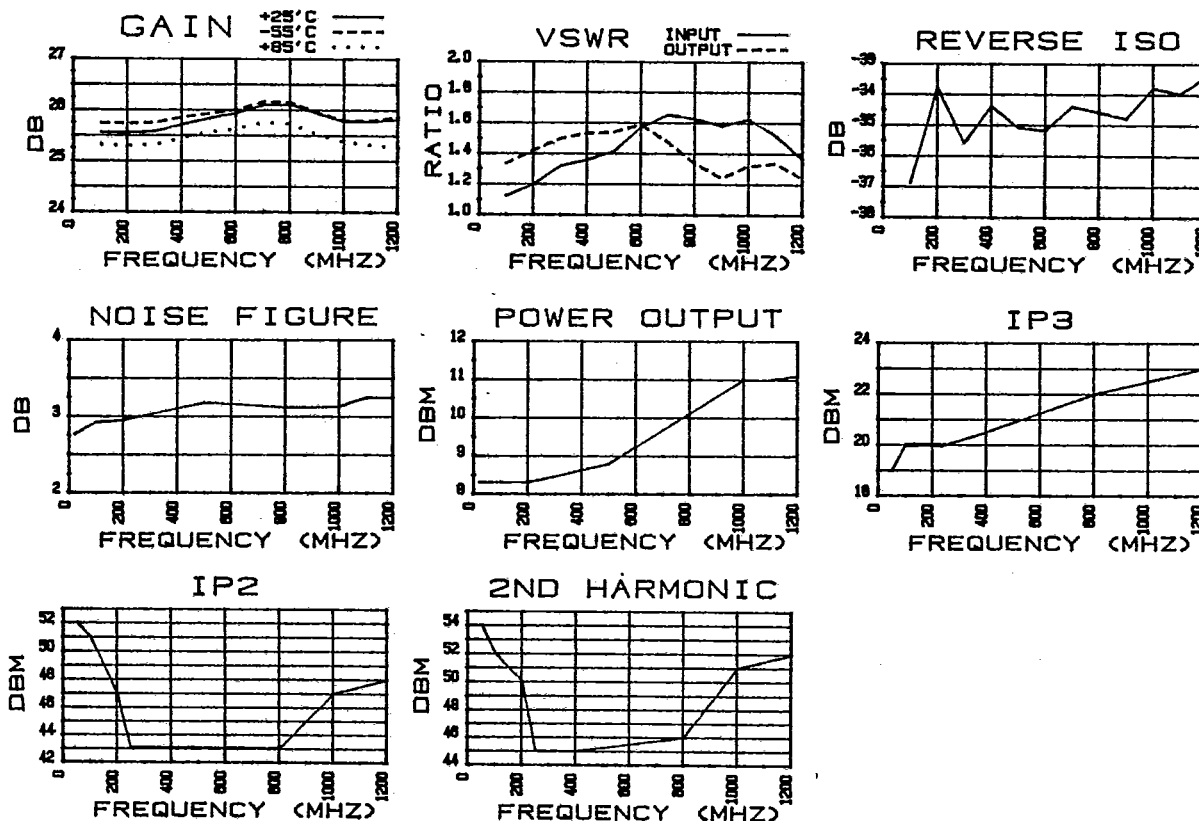


FPF-64



AH-64

Typical Performance



AH-64 38.9 mA @ 15.0Vdc Linear S-Parameters

FREQUENCY MHz	RETURN LOSS INPUT (S11)		TRANS. GAIN FORWARD (S21)		TRANS. GAIN REVERSE (S12)		RETURN LOSS OUTPUT (S22)	
	dB	ANG	dB	ANG	dB	ANG	dB	ANG
100.000	-24.9	97.8	25.55	-21.8	-36.90	146.8	-17.0	108.0
200.000	-21.0	52.5	25.55	-41.0	-33.80	-14.2	-15.3	55.8
300.000	-17.3	-8.7	25.58	-60.0	-35.60	27.3	-14.1	-0.8
400.000	-16.4	-100.5	25.72	-80.8	-34.40	-6.2	-13.6	-74.5
500.000	-15.3	-176.0	25.84	-101.3	-35.10	22.5	-13.5	-150.3
600.000	-13.1	108.3	25.94	-120.8	-35.20	-67.8	-12.9	136.3
700.000	-12.2	33.0	26.11	-142.3	-34.40	-3.0	-14.4	68.5
800.000	-12.5	-55.5	26.11	-164.3	-34.60	132.2	-16.9	-4.5
900.000	-13.0	-135.5	25.93	173.0	-34.80	-9.2	-19.5	-100.5
1000.000	-12.5	151.3	25.77	152.0	-33.80	16.3	-17.3	47.0
1100.000	-13.8	99.8	25.78	129.5	-34.00	-24.0	-16.9	128.5
1200.000	-16.3	46.3	25.82	107.5	-33.40	-0.8	-19.5	64.0

Deviation from Linear Phase, Gain, Group Delay, and VSWR

FREQUENCY (MHz)	VSWR INPUT	DEV. LIN. 0 (DEG.)	GAIN DEV. (dB)	GROUP DELAY (n-SEC)	VSWR OUTPUT
100.000	1.121	-3.381	-0.258	0.000	1.329
200.000	1.196	-1.577	-0.258	0.535	1.415
300.000	1.316	0.477	-0.228	0.528	1.491
400.000	1.357	0.781	-0.088	0.576	1.528
500.000	1.415	1.335	0.032	0.569	1.536
600.000	1.568	2.890	0.132	0.542	1.586
700.000	1.651	2.444	0.302	0.597	1.471
800.000	1.622	1.498	0.302	0.611	1.333
900.000	1.577	-0.198	0.122	0.632	1.237
1000.000	1.622	-0.144	-0.038	0.583	1.316
1100.000	1.513	-1.589	-0.028	0.625	1.333
1200.000	1.362	-2.535	0.012	0.611	1.237