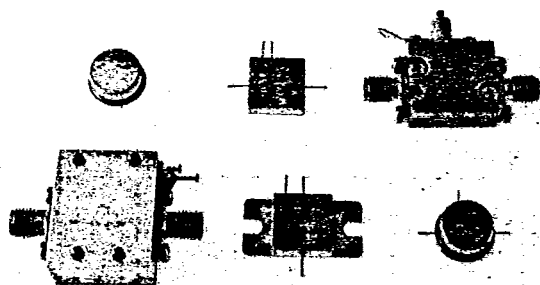


AH-5309

B-74-09-51



1 to 500 MHz TO-8 Cascadable Amplifier

- Low Noise: +1.75dB
- Wide Bandwidth: 1-500 MHz
- High Gain: +17.0dB
- Various Package Options (see photo)
Surface Mounted (SMTO-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.)	1-500	1-500	1-500
Small Signal Gain (dB Min.)	+17.0	+16.0	+15.0
Gain Flatness (dB Max.)	±0.5	±0.7	±1.0
Noise Figure (dB Max.)	+1.75	+2.0	+2.5
Power Output @ 1 dB Compression (dBm Min.)	-0.5	-1.5	-3.0
Two Tone 3rd Order Intercept Point (dBm Min.)	+10.0	+8.5	+7.0
Two Tone 2nd Order Intercept Point (dBm Min.)	+20.0	+19.0	+17.0
One Tone 2nd Harmonic Intercept Point (dBm Min.)	+25.0	+24.0	+22.0
Input/Output VSWR (Max.) (1-400 MHz) < 1.5:1 (400-500 MHz) < 2.0:1		2.0:1 2.3:1	2.0:1 2.5:1
DC Current at 15 V (mA Max.)	+9.0	+10.0	+15.0

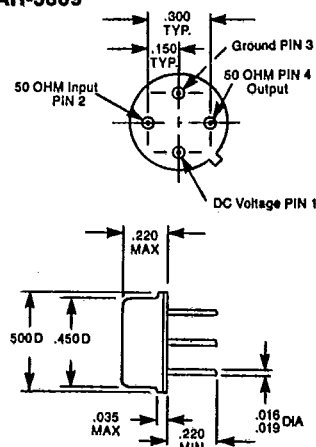
Maximum Ratings

Ambient Operating
Temperature -54°C to +100°C
Storage Temperature ... -62°C to +125°C
Maximum Case Temperature +125°C
Maximum DC Voltage +15.0V
Maximum Continuous RF Input
Power +13.0dBm
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.

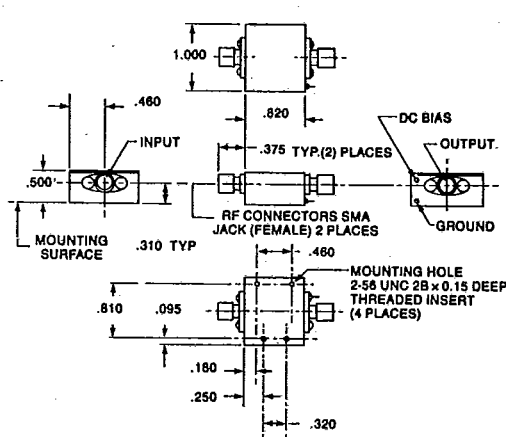
Outline Drawings

(For additional package configurations, see Section 9)

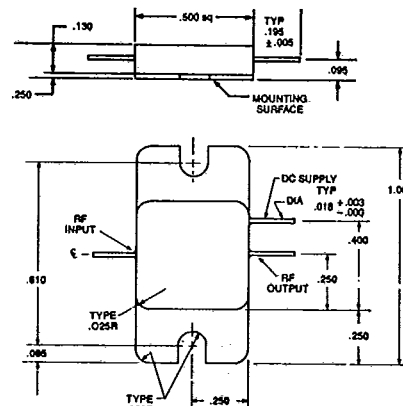
AH-5309



CAH-5309



FPF-5309



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Typical Performance

