

# RF HYBRID AMPLIFIER GA-3, GA-4 Series



**AYDIN VECTOR DIVISION**



- Guaranteed Specifications
- Quality Product
- Wide Bandwidth kHz - 400 MHz
- External Low Frequency Cutoff Adjust.
- Temperature Stability -55 to 100°C
- Versatile 4 Pin TO-12
- +15 Vdc
- MIL-STD-883B

**GENERAL DESCRIPTION:**

The GA Series of modular amplifiers consists of a single stage of amplification of an alumina thick film substrate. The entire assembly is mounted in a hermetically sealed 4 Pin TO-12 package for direct insertion into a microstrip circuit board. The use of external input/output coupling capacitors provides the flexibility of adjusting the low frequency roll-off.

**QUALITY ASSURANCE:**

The Quality system is approved to MIL-Q-9858A. Units are designed to meet environmental requirements of MIL-STD-883B.

**APPLICATIONS:**

RF Preamplifiers, IF Gain Building Blocks, Isolation Amplifier, LO Buffer Amplifiers. Used in Phased Arrays, ECM Receivers, Satellite Communications IF's, Direction Finding Systems, Instrumentation, Radar Receivers, Transceivers.

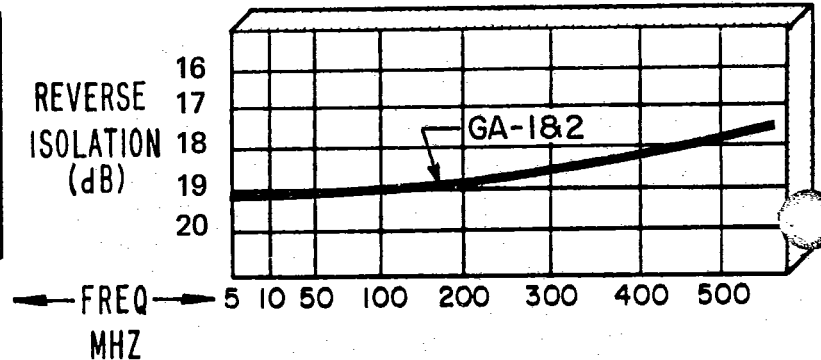
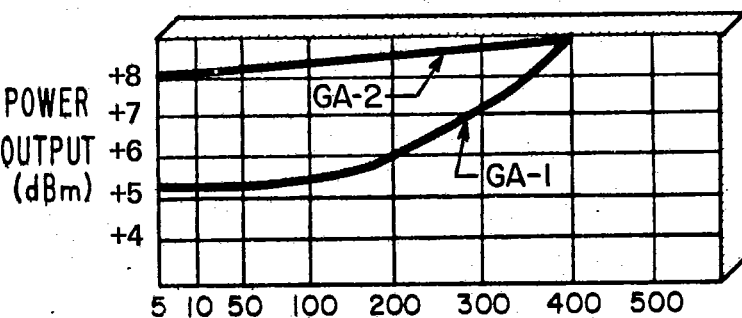
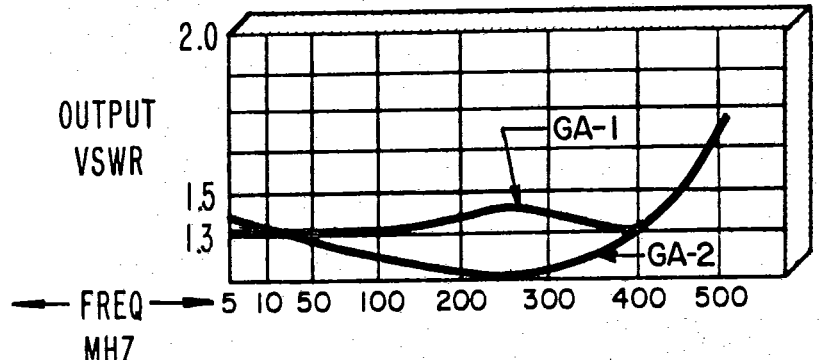
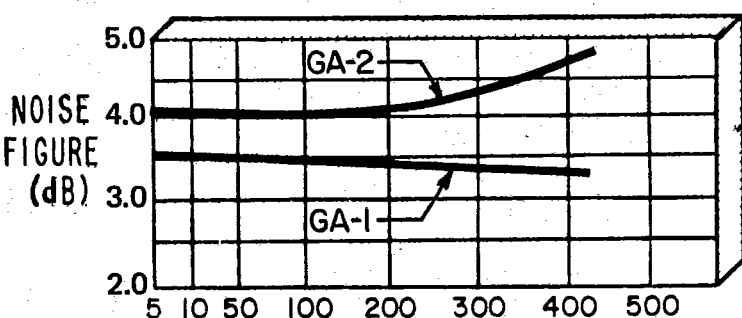
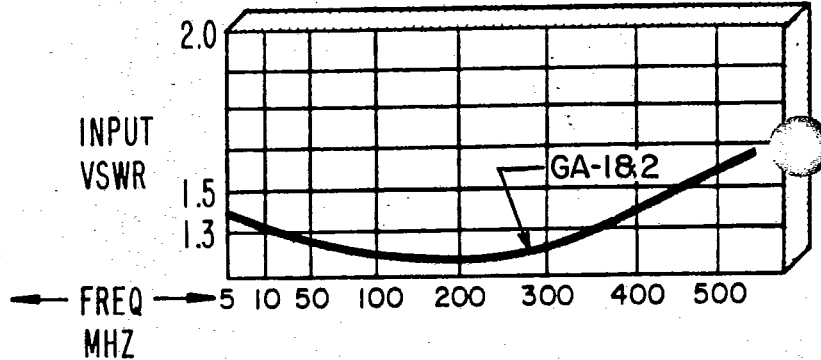
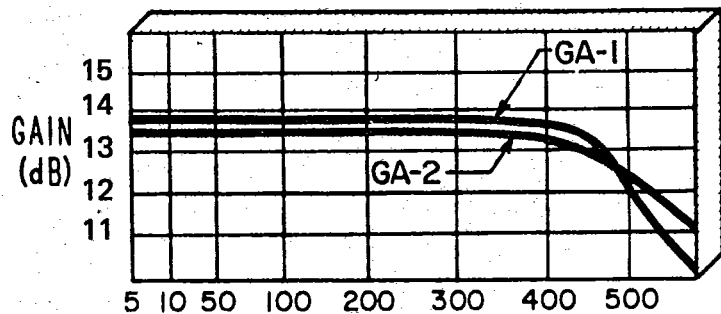
**ENVIRONMENTAL:**

All standard products are screened to MIL-STD-883B, Class B with the exception of burn-in. Tests such as, Temperature Cycling, Acceleration, Hermeticity Centrifuge and Fine/Gross Leak. Burn-in (168 hrs.) will be performed upon request.

GUARANTEED:							kHz to 400 MHz		
ELECTRICAL SPECIFICATIONS	GAIN dB	FLATNESS ±dB	NOISE FIGURE (dB)	IMP <sup>3</sup> dBm	POWER OUTPUT dBm	INPUT/OUTPUT VSWR	REVERSE ISOLATION (dB)	VDC IM	
Maximum	14.5	±1.0	5.0			2.0			
Typical	13.5	±0.5	4.5	17	+6	1.8	18	15	
Minimum	13			16	+5		17	25	

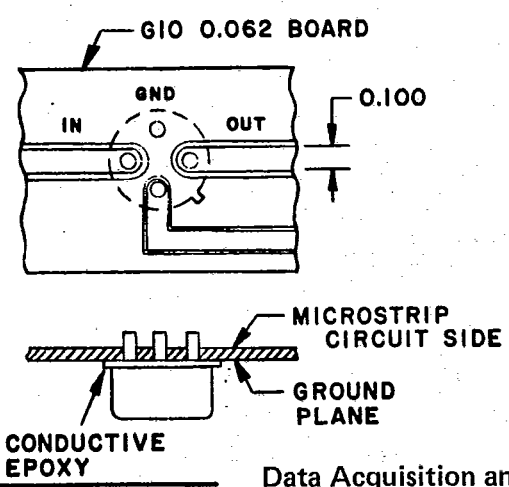
**AYDIN VECTOR division / P.O. Box 328, Newtown, PA 18940**

Main Offices & Plant: Newtown Industrial Commons, Newtown, PA

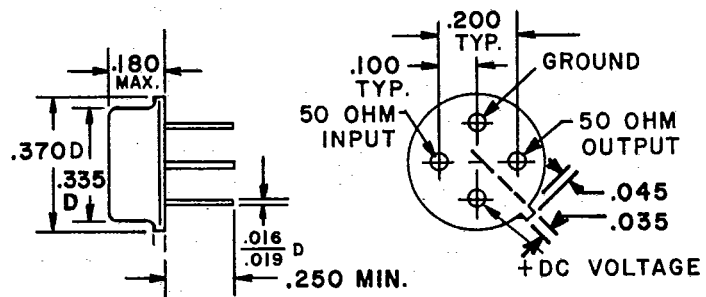


ALL DATA AT +15 Vdc

**INSTALLATION INSTRUCTIONS**



**OUTLINE DRAWING OF GA-SERIES**



NOTE: 1. CASE IS RF GROUND CONNECTION  
 2. MODIFIED TO-12

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Data Acquisition and Reduction Systems and Components

**AYDIN VECTOR division**

Friends Lane, P.O. Box 328 Phone: (215) 968-4271  
 Newtown, Pa. 18940 TWX: 510-667-2320

Ruggedized Airborne Components & Systems  
 Transmitters....Commutators....PCM Encoders  
 Subcarrier Oscillators....Telemetry Systems

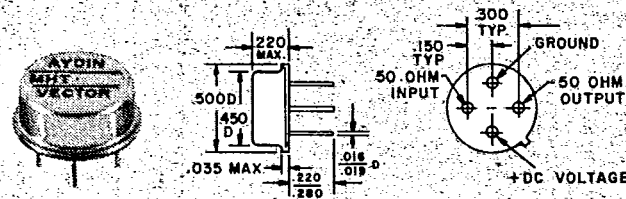
**AYDIN MONITOR systems**

401 Commerce Drive Phone: (215) 646-8100  
 Fort Washington, Pa. 19034 TWX: 510-661-1520

Ground Based Components & Systems  
 PAM/PDM/PCM Simulators & Synchronizers  
 PCM Decommunators...Computer Interface

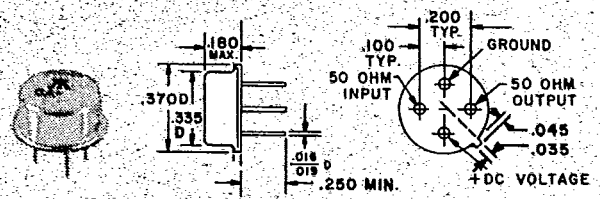
# AMPLIFIER OUTLINE DRAWINGS

## MHT and GHT Series: TO-8 Packaged Single and Multi-Stage Amplifiers

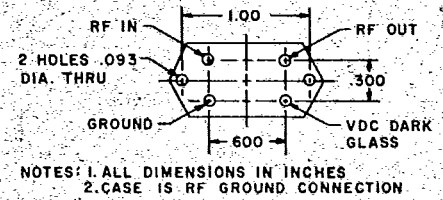
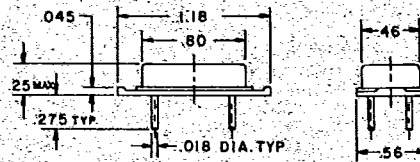


NOTE: 1. CASE IS RF GROUND CONNECTION

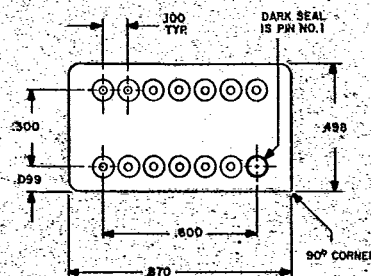
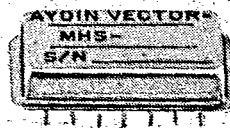
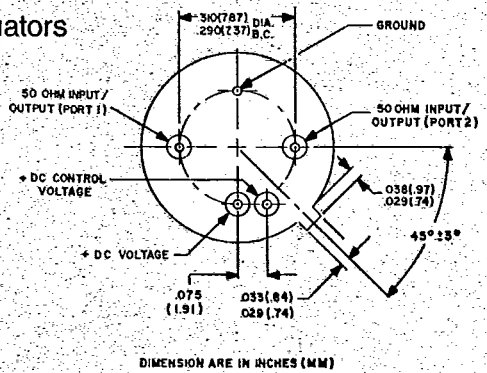
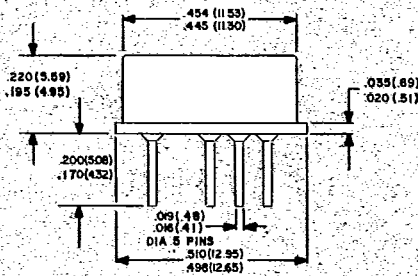
## GA Series: TO-12 Packaged Single Stage Amplifiers



## MHD Series: 4-Pin DIP Packaged Multi-Packaged Amplifiers



## MHA Series: TO-8 5 Pin or 14 Pin DIP Packaged Voltage Controlled Attenuators



NOTES:  
1. PINS ARE NUMBERED CLOCKWISE FROM PIN 1 (DARK SEAL - 90° CORNER)

PIN	FUNCTION
1	SUPPLY VOLTAGE (+15VDC)
2	CONTROL VOLTAGE (0 TO +15VDC)
3	GND
4	N/C
5	GND
6	N/C
7	GND
8	RF INPUT
9	N/C
10	GND
11	N/C
12	GND
13	N/C
14	RF OUTPUT