



**MODELS**  
**AM-105/108**

**GENERAL PURPOSE AMPLIFIERS**  
**5-300 MHz GAIN: 19/28 dB**

5.2 dB Typical Midband Noise Figure  
+ 17 dBm Typical Compression Level

### Guaranteed Specifications\*

(From -55°C to +85°C Case Temp)

| MODEL                           | AM-105     | AM-108        |
|---------------------------------|------------|---------------|
| Frequency Range                 | 5-300      | 5-300 MHz     |
| Gain (+25°C) @ 50 MHz           | 19 ± 0.5   | 28.5 ± 0.5 dB |
| Frequency Response              | ±1.5       | ±2.5 dB Max   |
| Gain Variation with Temperature | +1.0, -1.5 | ±1.5 dB Max   |
| Output Power (1 dB Compression) | +15        | +15 dBm Min   |
| Noise Figure                    |            |               |
| 5-300 MHz                       | 14         | 14 dB Max     |
| 10-100 MHz                      | 9          | 9 dB Max      |
| Reverse Transmission            | -29        | -42 dB Max    |
|                                 | -30        | -44 dB Typ    |
| VSWR                            |            |               |
| Input (5-300 MHz)               | 1.5:1      | 2.0:1 Max     |
| Input (10-100 MHz)              |            | 1.5:1 Max     |
| Output (5-300 MHz)              | 2.5:1      | 2.5:1 Max     |
| Output (10-100 MHz)             | 1.5:1      | 1.5:1 Max     |

### Intermodulation Intercept Point (for two-tone output power to +5 dBm)

|                           |             |
|---------------------------|-------------|
| Second Order (5-300 MHz)  | +28 dBm Min |
| Second Order (10-100 MHz) | +36 dBm Min |
| Third Order (5-300 MHz)   | +23 dBm Min |
| Third Order (10-100 MHz)  | +27 dBm Min |

### Bias Power

|        |                                                |
|--------|------------------------------------------------|
| AM-105 | -20 VDC @ 130 mA Max<br>(105 mA, 2.1W Typical) |
| AM-108 | -20 VDC @ 180 mA Max<br>(105 mA, 2.6W Typical) |

## Operating Characteristics

**Impedance** 50 Ohms Nominal

**Maximum Rating**  
RF Input +19 dBm

**Package Type** Connectorized (C-16)  
(See page 483 for physical dimensions.)

### Environmental

These units are designed to meet the environmental and screening requirements of Table 1B, page 497 of the Adams-Russell catalog.

\*All specifications apply when operated at -20 VDC, with 50 ohm source and impedance.

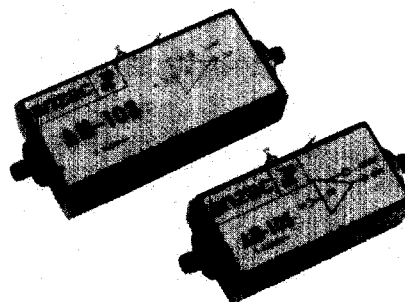
**Heat Sinking:** Operation at case temperature above 95°C is not recommended. Heat sinking adequate to dissipate 2.6 W. Must be provided in use.

**S-Parameters:** For typical S-Parameter data, see page 96.

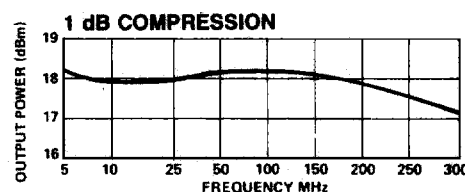
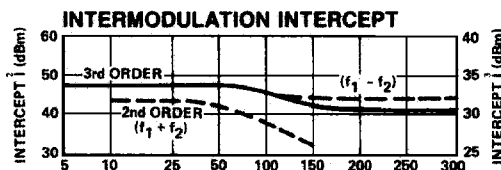
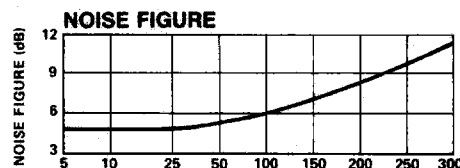
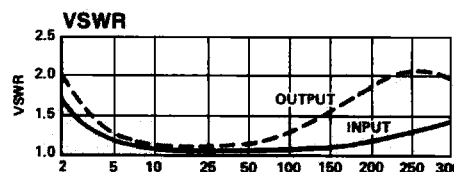
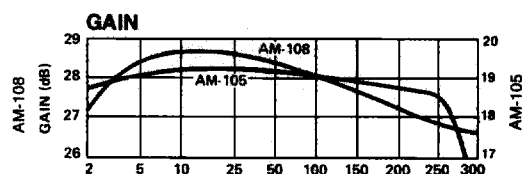
## Ordering Information

| Model No. | Part No. | Connectors | Unit Price (5-9 Units) |
|-----------|----------|------------|------------------------|
| AM-105    | 8391     | BNC        | \$189                  |
| AM-105    | 8394     | SMA        | 194                    |
| AM-108    | 8411     | BNC        | 198                    |
| AM-108    | 8414     | SMA        | 203                    |

Delivery is from stock.



## Typical Performance



**ANZAC**

**Make the Connection...**

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**Adams Russell**

COMPONENTS GROUP

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