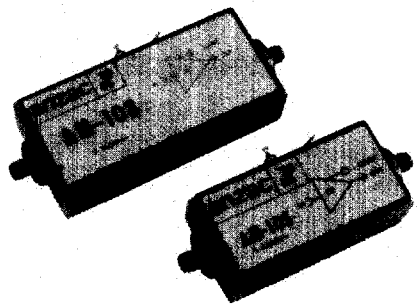
MODELS AM-105/108

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 (105 mA, 2.1W Typical)
AM-108		−20 VDC @ 180 mA Max (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