

# Cascadable Thin Film Amplifier, 12 dB Gain

## 5 - 500 MHz

# AM-/AMC-151

V2.00

### Features

- 5 dB Typical Midband Noise Figure
- +38 dBm Typical Midband Third Order Intercept
- +21 dBm Typical Midband 1 dB Compression

### Guaranteed Specifications\* (From -55°C to +85°C Case Temp)

<b>Frequency Range</b>	5-500 MHz
<b>Gain (+25°C) @ 50 MHz</b>	12 ± 0.5 dB
<b>Frequency Response</b>	± 1 dB
<b>Gain Variation with Temperature</b>	± 0.8 dB
<b>Output Power (1 dB Compression)</b>	
5-500 MHz	+ 19 dBm Min
10-500 MHz	+ 20 dBm Min
<b>Noise Figure</b>	
5-500 MHz	7 dB Max
<b>Reverse Transmission</b>	
	- 13 dB Max
	- 16 dB Typ
<b>VSWR</b>	
	2:1 Max
<b>Intermodulation Intercept Point (for two-tone output power up to + 10 dBm)</b>	
Second Order	+ 48 dBm Min
Third Order	+ 34 dBm Min
<b>Bias Power</b>	
	+15 VDC @ 100 mA Max (85 mA, 1275 mW Typical)

### Operating Characteristics

<b>Impedance</b>	50 Ohms Nominal
<b>Maximum Rating</b>	
RF Input	+ 20 dBm
<b>Environmental</b>	

MIL-STD-883 screening available.

\*All specifications apply when operated at +15 VDC, with 50 ohm source and load impedance.

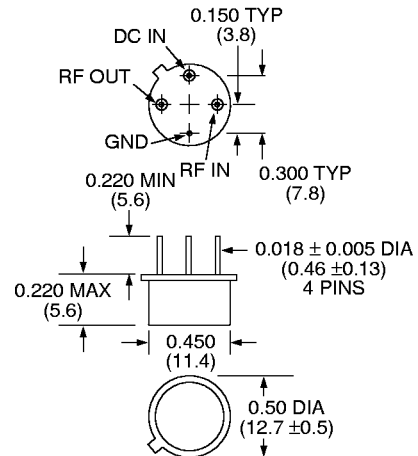
Heat Sinking: Operation at case temperature above 95°C is not recommended. Heat sinking adequate to dissipate 1.3 W. Must be provided in use.

### Ordering Information

Model No.	Package
AM-151* PIN	TO-8-1
AMC-151 SMA	Connectorized

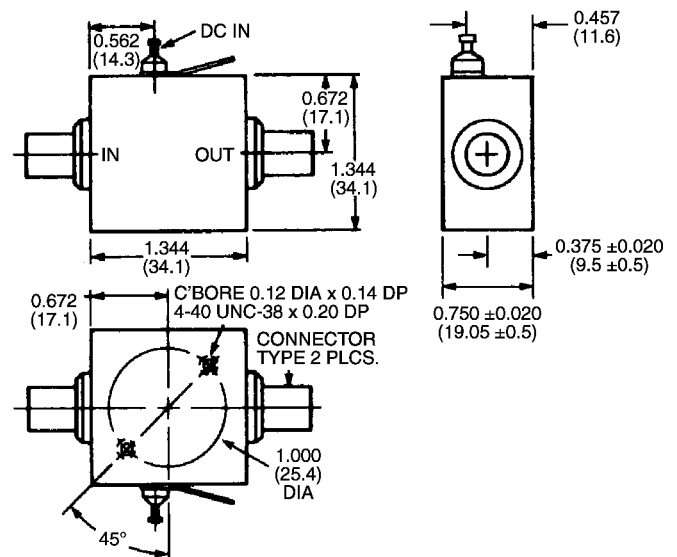
\*Mounting kit part number AU00071 required for PCB applications.

### TO-8-1



Dimensions in ( ) are in mm.  
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ±0.25)  
.xx = ±0.02 (.x = ±0.5)  
WEIGHT (APPROX.): 0.10 OUNCES 2.8 GRAMS

### C-32



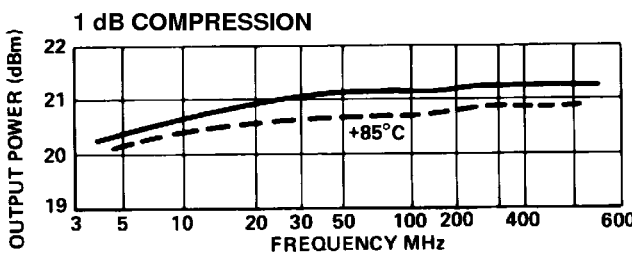
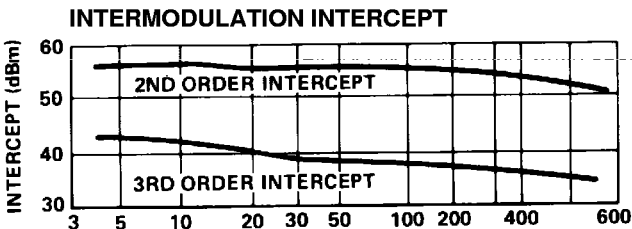
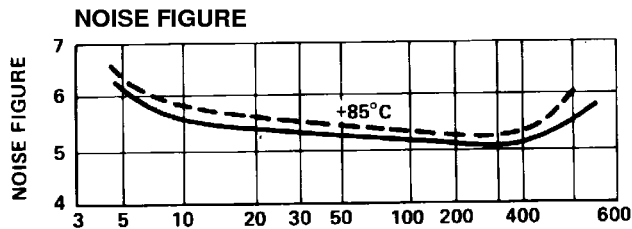
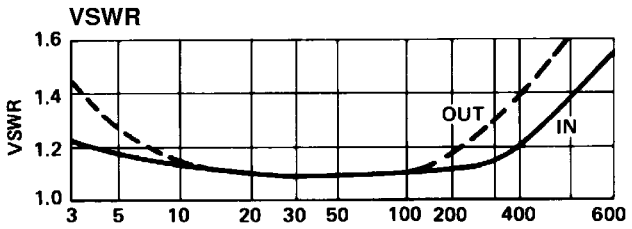
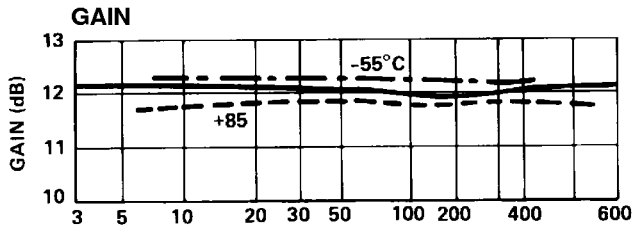
Dimensions in ( ) are in mm.  
Unless Otherwise Noted: .xxx = ±0.010 (.xx = ± 0.25)  
.xx = ±0.02 (.x = ±0.5)  
WEIGHT (APPROX.): 1.62 OUNCES 46 GRAMS

Specifications Subject to Change Without Notice.

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Typical Performance



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