

Low Noise Amplifier, 12.5 dB Gain 10 - 100 MHz

AM-/AMC-/AMS-162

V2.00

Features

- Low Noise Figure – 1.1 dB Typical @ 50 MHz
- High Output Power – +15 dBm Typical @ 50 MHz
- +32 dBm Typical 3rd Order Intercept @ 50 MHz
- Fully Hermetic Package (AMS-162)

Guaranteed Specifications* (From – 55°C to + 85°C Case Temp)

Frequency Range	10-100 MHz
Gain (+ 25°C) @ 50 MHz	12.5 ± 0.5 dB
Frequency Response	± 0.6 dB Max
Gain Variation with Temperature	± 0.6 dB Max
Output Power (1 dB Compression)	+ 13 dBm Min
Noise Figure	1.6 dB Max
Reverse Transmission	– 14 dB Max – 15 dB Typ
VSWR	2.0:1 Max
Intermodulation Intercept Point (for two-tone output power up to 0 dBm)	
Second Order	+ 40 dBm Min
Third Order	+ 26 dBm Min
Bias Power	+ 15 VDC @ 15 mA Max (11 mA, 165 mW Typ)

Operating Characteristics

Impedance 50 Ohms Nominal

Maximum Rating
RF Input + 10 dBm

Environmental

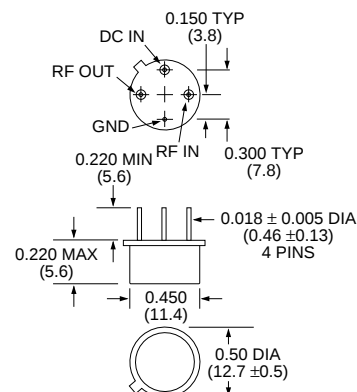
MIL-STD-883 screening available.

*All specifications apply when operated at + 15 VDC, with 50 ohm source and load impedance.
This product contains elements protected by U.S. Patent Number 3,891,934.

Ordering Information

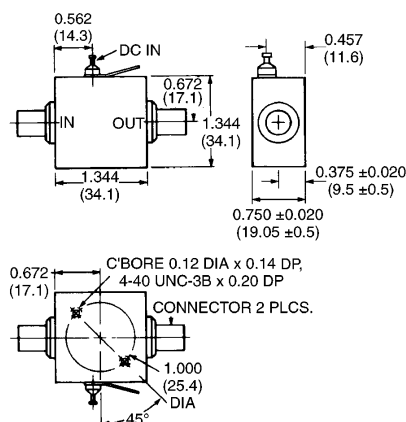
Model No.		Package
AM-162 PIN	TO-8-1	Pin
AMC-162 SMA	C-6	Connectorized
AMS-162 PIN	SF-1	Pin

TO-8-1



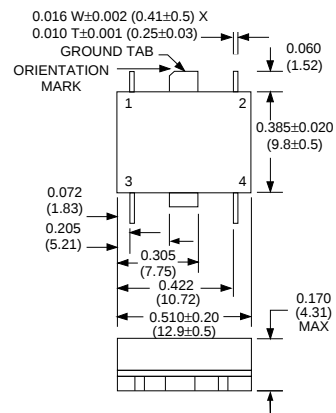
WEIGHT (APPROX.): 0.10 OUNCES 2.8 GRAMS

C-6



WEIGHT (APPROX.): 1.76 OUNCES 50 GRAMS

SF-1



WEIGHT (APPROX.): 0.07 OUNCES 2 GRAMS

Dimensions in () are in mm.
Unless Otherwise Noted: .xxx = ± 0.010 (.xx = ± 0.25)
.xx = ± 0.02 (.x = ± 0.5)

Specifications Subject to Change Without Notice.

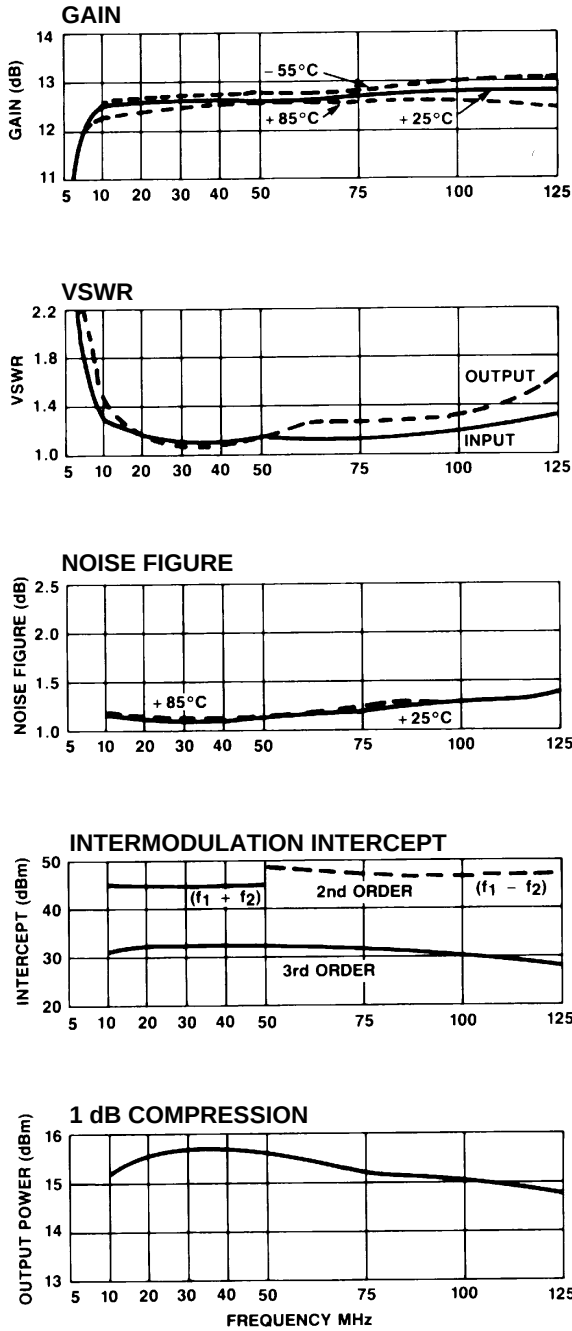
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Typical Performance



Pin Configuration
AMS-162

Pin Number	Description
1	Output
2	VDC
3	Input
4	Ground

S-Parameter Data

AM-162 FREQUENCY	S11		S21		S12		S22	
	MAG	ANG	MAG	ANG	MAG	ANG	MAG	ANG
10.0	0.07	165	4.06	66	6.8	0.11	0.09	169.1
20.0	0.09	-166.8	4.13	-6.5	0.17	0.09	0.09	-159.2
30.0	0.08	-151.5	4.18	-15.8	0.17	0.09	0.09	-129.5
40.0	0.10	-146.9	4.20	-24.0	0.17	0.11	0.11	-120.3
50.0	0.11	-147.9	4.23	-32.2	0.17	0.12	0.12	-117.7
60.0	0.11	-152.0	4.19	-39.8	0.17	0.13	0.13	-118.5
7.0	0.12	-159.7	4.20	-47.7	0.17	0.14	0.14	-120.3
85.0	0.12	-171.2	4.17	-59.5	0.16	0.14	0.14	-122.6
100.0	0.12	174.1	4.15	-72.1	0.16	0.15	0.15	-123.6

Frequency in MHz.