

# Plug-In Low Noise Amplifier

## AMP-75+

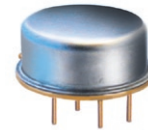
50Ω      5 to 500 MHz

### Features

- very low noise, 2.4 dB typ.
- hermetic, TO-8 can.

### Applications

- VHF/UHF
- military, hi-rel application
- small signal amplifier



CASE STYLE: PP120  
PRICE: \$52.20 ea. Qty. (1-9)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

*The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.*

### Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)			MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Typ.		DC POWER	
	f <sub>L</sub>	f <sub>U</sub>		Typ.	Min.	m	Total Range	Output (1 dB Compr.)		Input (no damage)	IP3 Typ.	In	Out
AMP-75+	5	500	2.4	19	±0.4	±1.0	+12	+13	+28	2.0	2.0	15	31

m = mid range [2 f<sub>L</sub> to f<sub>U</sub>/2]

Open load is not recommended, potentially can cause damage.  
With no load derate max input power by 20 dB

### Pin Connections

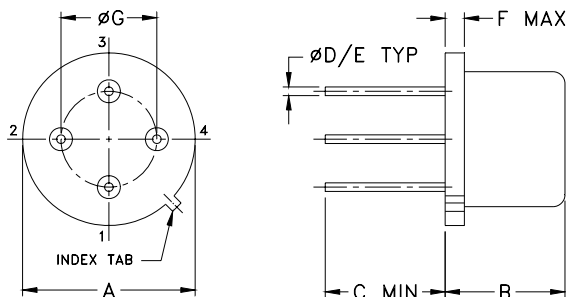
RF IN	2
RF OUT	4
DC	1
GROUND	3
CASE GROUND	3

### Maximum Ratings

Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+17V Max.

Permanent damage may occur if any of these limits are exceeded.

### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	wt
.50	.21	.15	.016	.020	.04	.300	grams
12.70	5.33	3.81	0.41	0.51	1.02	7.62	1.5

**Mini-Circuits®**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine  Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)  
I/F/RF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).

For detailed performance specs & shopping online see web site

# Typical Performance Data/Curves

# AMP-75+

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P <sub>OUT</sub> at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
5.00	20.23	20.44	20.48	4.10	4.20	4.20	1.52	1.59	—	13.88
11.30	20.38	20.59	20.65	3.70	3.70	3.80	1.47	1.47	2.83	14.23
33.40	20.45	20.65	20.72	3.50	3.40	3.50	1.46	1.42	2.81	14.80
98.80	20.38	20.58	20.64	3.30	3.30	3.30	1.40	1.40	2.91	14.90
195.40	20.29	20.49	20.53	2.70	2.70	2.70	1.24	1.40	2.92	14.99
246.20	20.28	20.47	20.52	2.20	2.20	2.20	1.14	1.40	2.94	14.83
309.60	20.25	20.46	20.49	1.80	1.70	1.70	1.05	1.37	2.95	14.51
373.10	20.24	20.44	20.47	1.30	1.30	1.30	1.19	1.30	2.92	14.64
436.50	20.21	20.40	20.45	1.20	1.10	1.10	1.41	1.20	2.98	15.03
500.00	20.08	20.27	20.29	1.40	1.30	1.30	1.79	1.09	3.13	15.57

