

# Plug-In Low Noise Amplifier

## AMP-77+

50Ω

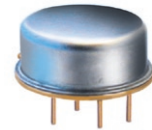
5 to 500 MHz

### Features

- low noise, 3.3 dB typ.
- high IP3, +32 dBm typ.
- hermetic, TO-8 can

### Applications

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



CASE STYLE: PP120  
PRICE: \$60.45 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-77+	5	500	3.3	15	±0.4	±1.0	+16	+13	+32	2.0	2.0	15	56

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

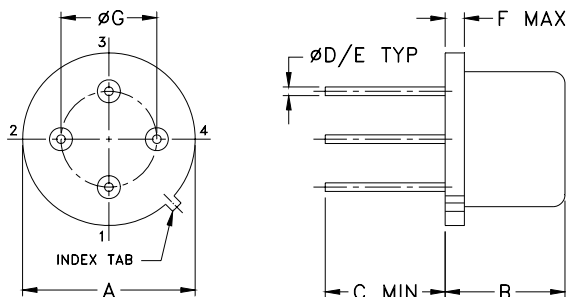
RF IN	2
RF OUT	4
DC	1
GROUND	3
CASE GROUND	3

### 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

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**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).

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Page 1 of 2

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	16.26	16.25	16.23	5.00	5.00	5.10	1.49	1.57	—	18.30
11.30	16.55	16.58	16.55	4.30	4.30	4.30	1.25	1.25	3.30	18.96
33.40	16.75	16.79	16.76	3.80	3.80	3.80	1.13	1.09	3.27	19.66
98.80	16.74	16.77	16.76	3.50	3.50	3.50	1.11	1.16	3.30	19.68
195.40	16.55	16.59	16.57	2.90	3.00	3.00	1.13	1.35	3.24	19.62
246.20	16.43	16.47	16.46	2.50	2.70	2.70	1.15	1.41	3.24	19.49
309.60	16.27	16.32	16.28	2.20	2.30	2.40	1.18	1.47	3.27	19.24
373.10	16.13	16.19	16.14	1.80	1.90	2.00	1.21	1.45	3.25	19.08
436.50	16.04	16.08	16.04	1.40	1.60	1.70	1.23	1.44	3.26	19.11
500.00	15.92	15.98	15.93	1.10	1.30	1.40	1.24	1.36	3.28	19.25

