

Plug-In

Low Noise Amplifier

AMP-15

50Ω

5 to 1000 MHz

Features

- very low noise, 2.8 dB typ.
- wideband, 5 to 1000 MHz
- hermetic, TO-8 can

Applications

- military, hi-rel applications
- small signal amplifier
- buffer amplifier
- printed circuit design
- VHF/UHF
- cellular



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

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_L	f_U		Typ.	Min.	m	Total Range	Output (1 dB Compr.)		Input (no damage)	IP3 Typ.	In	Out
AMP-15	5	1000	2.8	13	±0.6	±1.2	+8	+13	+22	2.0	2.0	15	29

m = mid range [2 f_L to $f_U/2$]

Open load is not recommended, potentially can cause damage.

With no load derate max input power by 20 dB

Pin Connections

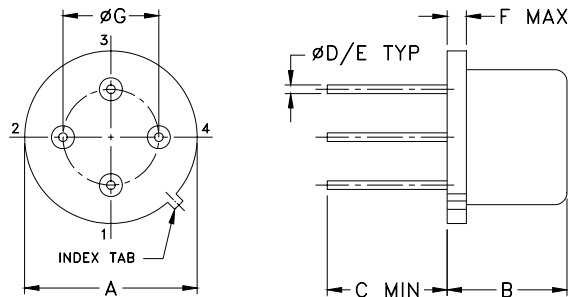
RF IN	2
RF OUT	4
DC	1
GROUND	3
CASE GROUND	3

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 ($\frac{inch}{mm}$)

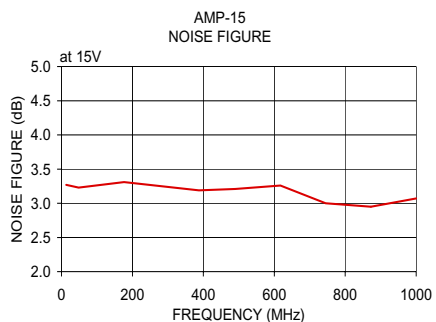
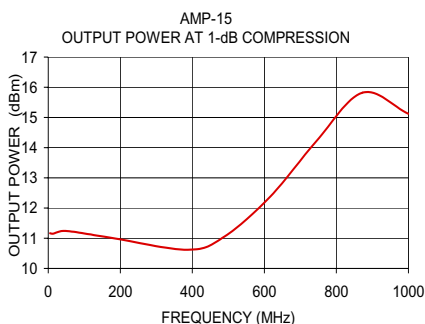
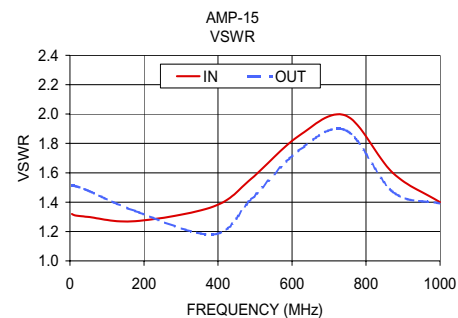
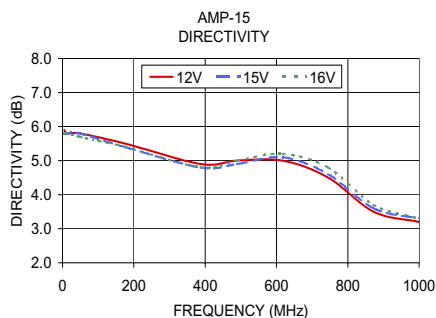
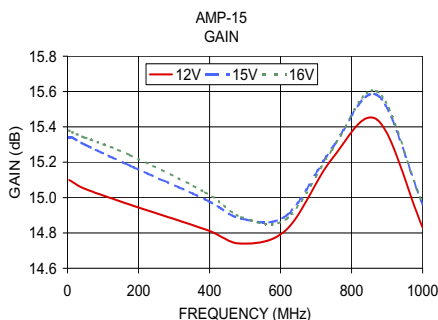
A	B	C	D	E	F	G	wt
.50	.21	.15	.016	.020	.04	.300	grams
12.70	5.33	3.81	0.41	0.51	1.02	7.62	1.5

Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
 B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
 C. The parts covered by this specification document 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



FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P _{OUT} at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
5.00	15.10	15.34	15.38	5.90	5.80	5.80	1.32	1.51	—	11.17
13.20	15.09	15.34	15.37	5.80	5.80	5.80	1.31	1.51	3.27	11.15
48.20	15.05	15.30	15.34	5.80	5.80	5.70	1.30	1.48	3.23	11.24
176.20	14.96	15.18	15.24	5.50	5.40	5.40	1.27	1.34	3.31	11.01
387.70	14.82	14.99	15.03	4.90	4.80	4.80	1.37	1.18	3.19	10.62
489.70	14.74	14.88	14.89	5.00	4.90	5.00	1.56	1.42	3.21	11.06
617.30	14.82	14.90	14.88	5.00	5.10	5.20	1.85	1.75	3.26	12.39
744.90	15.22	15.28	15.27	4.50	4.60	4.80	1.99	1.89	3.00	14.22
872.40	15.44	15.58	15.60	3.50	3.60	3.70	1.60	1.47	2.95	15.82
1000.00	14.83	14.96	14.96	3.20	3.30	3.30	1.40	1.39	3.07	15.12



Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document 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

