Plug-In

Low Noise Amplifier

AMP-15

50Ω 5 MHz to 1000 MHz

Generic photo used for illustration purposes only

CASE STYLE: PP120

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

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	
					Flatness Max.							Volt (V)	Current (mA)
	f_L	f_U	Typ.	Min.	m	Total Range	Output (1 dB Compr.)	Input (no damage)	IP3 Typ.	In	Out	Nom.	Max.
AMP-15	5	1000	2.8	13	±0.6	±1.2	+8	+13	+22	2.0	2.0	15	29

m = mid range [2 fL to fU/2]

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

Pin Connections

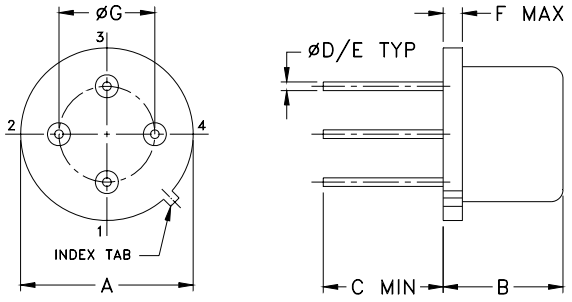
RF IN	2
RF OUT	4
DC	1
GROUND	3
CASE GROUND	3

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

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.
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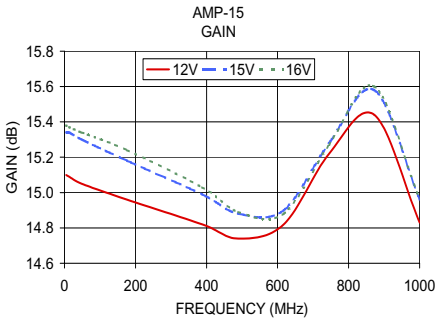
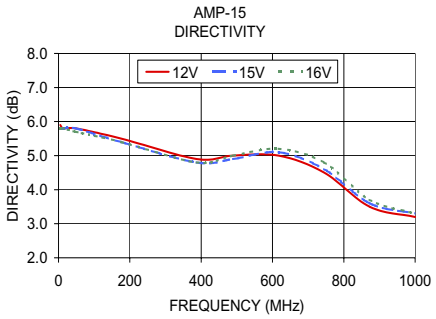
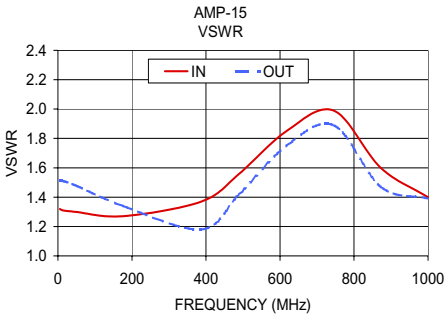
Typical Performance Data/Curves

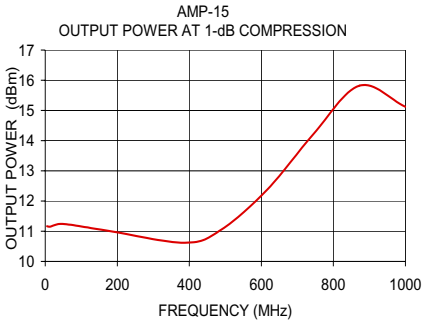
AMP-15

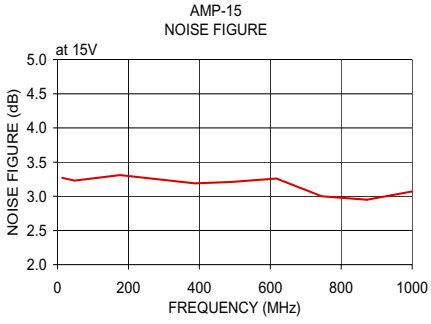
FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT	15V	15V
5.00	15.10	15.34	15.38	5.90	5.80	5.80	1.32	1.51	—	11.17
13.20	15.09	15.34	15.37	5.80	5.80	5.80	1.31	1.51	3.27	11.15
48.20	15.05	15.30	15.34	5.80	5.80	5.70	1.30	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











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