

Plug-In Amplifier

MAN-2AD+ MAN-2AD

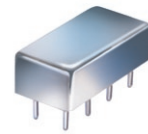
50Ω High Isolation 2 to 1000 MHz

Features

- wideband, 2 to 1000 MHz
- hermetic, metal case
- protected by US Patent, 6,943,629

Applications

- military, hi-rel applications
- receivers
- two-tone, 3rd order IM testing
- cellular
- satellite communication
- GPS



CASE STYLE: A06
PRICE: \$26.20 ea. QTY (1-9)

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

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)			MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1) Typ.		ACTIVE DIRECTIVITY* (dB)				DC POWER	
	f_L	f_U	Min.	m	Flatness Max. Total Range	Output (1 dB Compr.)		Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	L		U		Volt (V) Nom.	Current (mA) Max.
MAN-2AD(+)	2	1000	9	±0.4	±0.7	-2	-3.5	+10	6.5	+14	2.0	2.0	24	19	19	14	15	22

*Active Directivity(dB)= Isolation (dB)- Gain (dB)

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

L= low range (f_L to $f_U/2$) m= mid range ($2f_L$ to $f_U/2$) U= upper range ($f_U/2$ to f_U)

Pin Connections

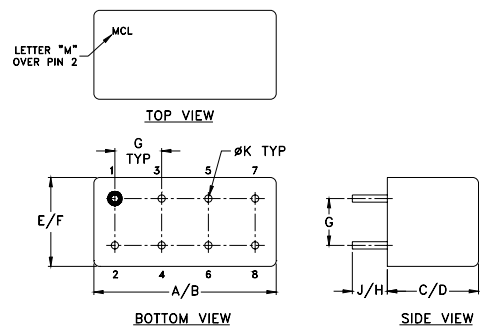
RF IN	1
RF OUT	8
DC	5
GROUND	2,3,4,6
CASE GROUND	2,3,4,6
NOT USED	7

Maximum Ratings

Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+16V 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	H	J	K	wt
.770	.800	.240	.250	.370	.400	.200	.20	.14	.031	grams
19.558	20.32	6.096	6.35	9.398	10.16	5.08	5.08	3.556	0.7874	3.7

Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
& shopping online see web site

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IF/RF MICROWAVE COMPONENTS

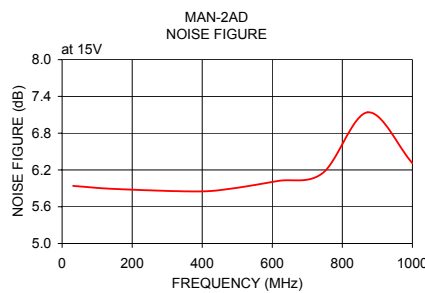
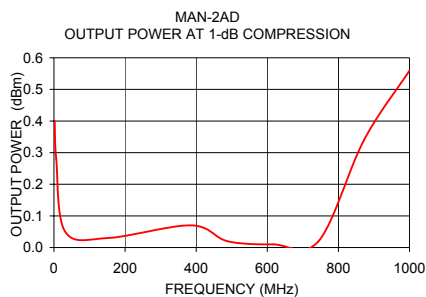
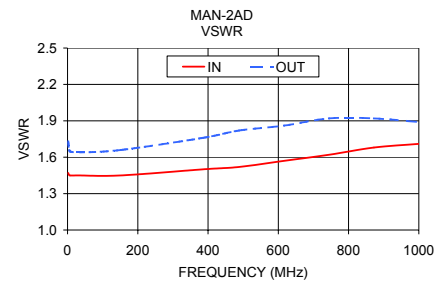
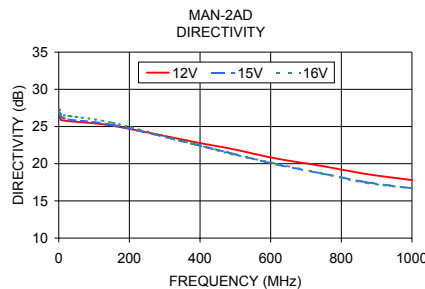
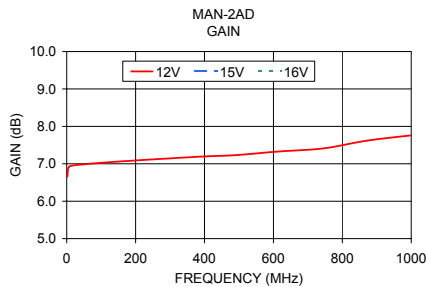
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established 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.

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MAN-2AD
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Typical Performance Data/Curves

MAN-2AD+ MAN-2AD

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		
2.00	6.66	10.75	11.25	26.80	26.90	27.30	1.47	1.73	—	0.40
6.50	6.92	10.99	11.49	25.90	26.30	26.60	1.45	1.65	—	0.28
31.50	6.97	10.99	11.47	25.70	25.90	26.40	1.45	1.64	5.94	0.05
152.20	7.06	11.01	11.49	25.10	25.20	25.50	1.45	1.66	5.89	0.03
385.80	7.19	11.05	11.52	22.90	22.60	22.60	1.50	1.76	5.85	0.07
488.20	7.23	11.01	11.45	22.00	21.40	21.30	1.52	1.82	5.90	0.02
616.20	7.33	11.10	11.56	20.70	19.90	20.00	1.57	1.86	6.02	0.01
744.10	7.41	11.19	11.65	19.70	18.70	18.70	1.62	1.92	6.15	0.02
872.10	7.62	11.46	11.93	18.60	17.50	17.40	1.68	1.92	7.14	0.34



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