

Plug-In Amplifier

50Ω Low Power 0.5 to 1000 MHz

MAN-2



CASE STYLE: A05
PRICE: \$22.20 ea. Qty. (1-9)

Features

- wideband, 0.5 to 1000 MHz
- low noise figure 6 dB typ.
- hermetic, metal case
- protected by US Patent, 6,943,629

Applications

- military, hi-rel applications
- VHF/UHF
- communication systems
- cellular
- instrumentation
- lab use

Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)		MAXIMUM POWER (dBm)			DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f_L	f_U	Min.	Flatness Max.	Output (1 dB Compr.)		Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
MAN-2	0.5	1000	18	±1.5	+9	+7	+15	6.0	+19	1.8	1.8	12	85

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 $f_U/2$) U= upper range ($f_U/2$ to f_U)

Pin Connections

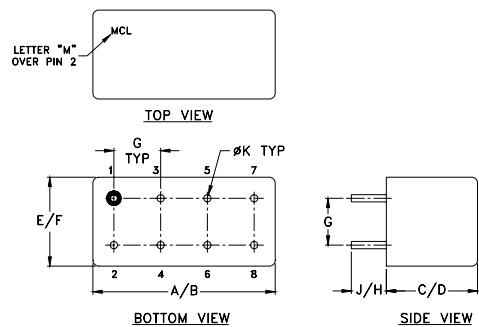
RF IN	1
RF OUT	8
DC	5
GROUND	2,3,4,6
CASE GROUND	2,3,4,6
NOT USED	7

Maximum Ratings

Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	+12.5V 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

Notes

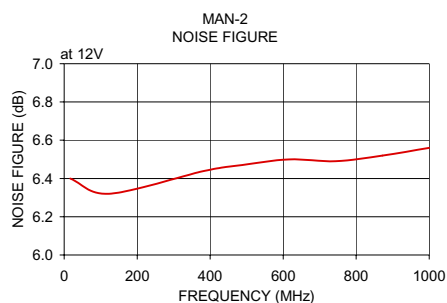
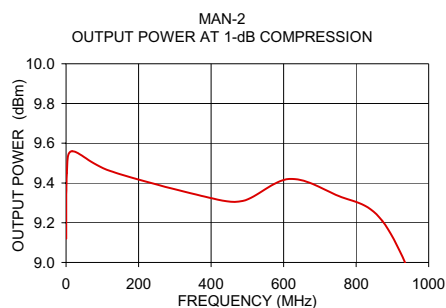
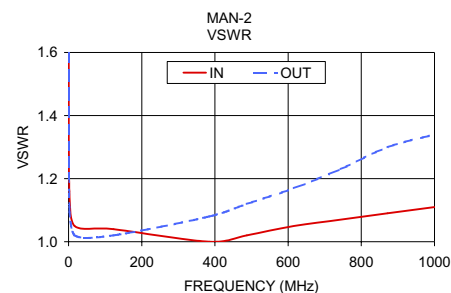
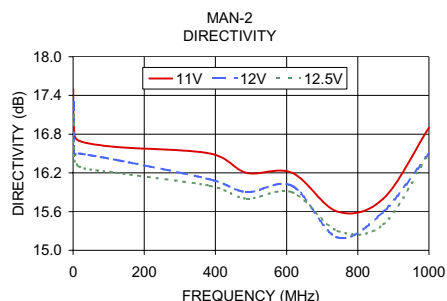
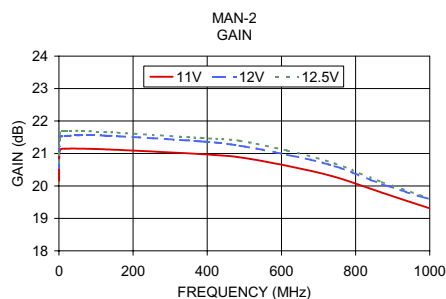
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's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



Typical Performance Data/Curves

MAN-2

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	11V	12V	12.5V	11V	12V	12.5V	IN	OUT		
0.50	20.16	20.56	20.71	17.50	17.30	17.10	1.61	1.77	—	9.12
2.20	21.09	21.48	21.63	16.90	16.50	16.60	1.16	1.11	—	9.45
16.60	21.15	21.54	21.70	16.70	16.50	16.30	1.05	1.02	6.40	9.56
122.70	21.13	21.55	21.66	16.60	16.40	16.20	1.04	1.02	6.32	9.46
384.90	20.98	21.37	21.48	16.50	16.10	16.00	1.00	1.08	6.44	9.33
487.40	20.88	21.24	21.39	16.20	15.90	15.80	1.02	1.12	6.47	9.31
615.60	20.62	20.96	21.09	16.20	16.00	15.90	1.05	1.17	6.50	9.42
743.70	20.28	20.61	20.69	15.60	15.20	15.30	1.07	1.23	6.49	9.34
871.90	19.79	20.05	20.12	15.80	15.60	15.40	1.09	1.30	6.52	9.21
1000.00	19.31	19.59	19.62	16.90	16.50	16.50	1.11	1.34	6.56	8.74



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

