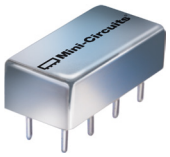
Plug-In

Amplifier

MAN-2

50Ω Low Power 0.5 to 1000 MHz



CASE STYLE: A05

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	
					Output (1 dB Compr.)		Input	NF	IP3			Volt	Current
	f_L	f_U	Min.	Flatness Max.	L	U	(no damage)	(dB) Typ.	(dBm) Typ.	In	Out	(V) Nom.	(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

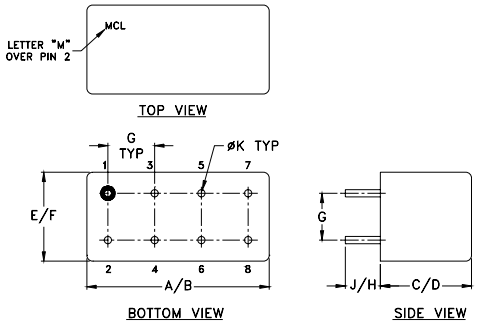
RF IN	1
RF OUT	8
DC	5
GROUND	2,3,4,6
CASE GROUND	2,3,4,6
NOT USED	7

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
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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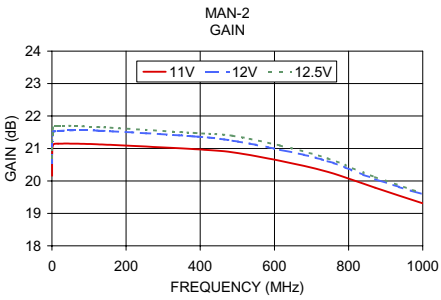
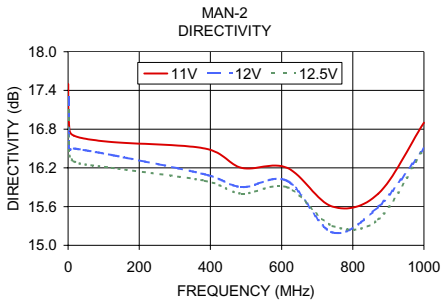
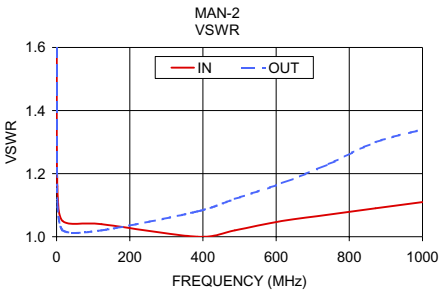
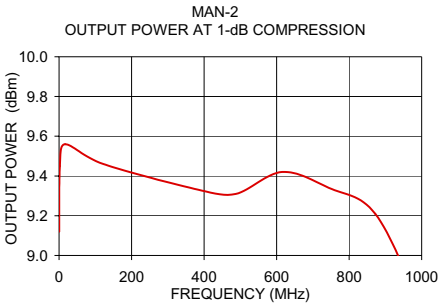
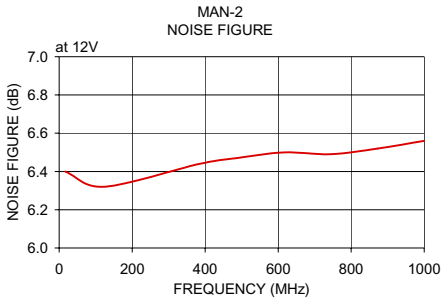
FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	11V	12V	12.5V	11V	12V	12.5V	IN	OUT	12V	12V
0.50	20.16	20.56	20.71	17.50	17.30	17.10	1.61	1.77	—	9.12
2.20	21.09	21.48	21.63	16.90	16.50	16.60	1.16	1.11	—	9.45
16.60	21.15	21.54	21.70	16.70	16.50	16.30	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











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