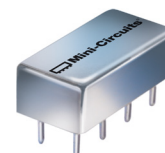


# Plug-In Amplifier

## MAN-1

50Ω Low Power 0.5 to 500 MHz



### Features

- wideband, 0.5 to 500 MHz
- low noise, 4.5 dB typ.
- hermetic, metal case
- protected by US Patent, 6,943,629

### Applications

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

CASE STYLE: A05  
PRICE: \$18.20 ea. Qty. (1-9)

### 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.) L	Input U	(no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
MAN-1	0.5	500	28	±1.4	+8	+8	+15	4.5	+18	1.8	1.8	12	60

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

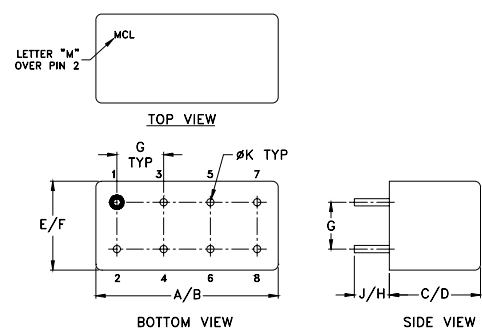
RF IN	1
RF OUT	8
DC	5
GROUND	2,3,4,6
CASE GROUND	2,3,4,6
NOT USED	7

### 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.
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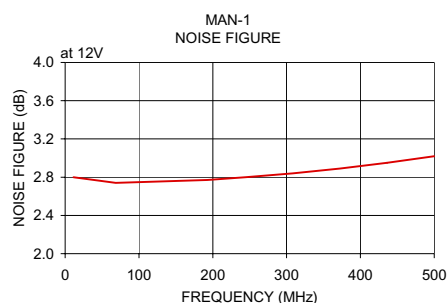
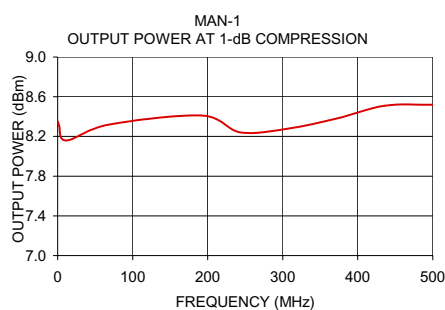
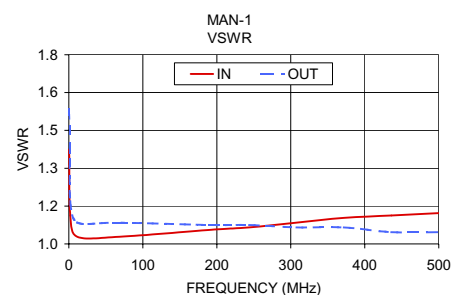
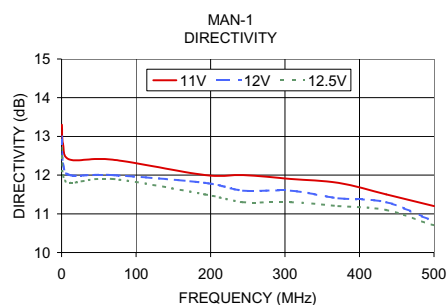
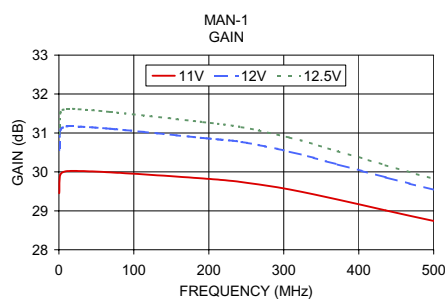
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REV. OR  
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MAN-1  
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Page 1 of 2

# Typical Performance Data/Curves

## MAN-1

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	P <sub>OUT</sub> at 1 dB COMPR. (dBm)
	11V	12V	12.5V	11V	12V	12.5V	IN	OUT		
0.50	29.45	30.56	30.97	13.30	13.00	12.70	1.40	1.57	—	8.35
1.90	29.93	31.07	31.52	12.80	12.30	12.00	1.12	1.18	—	8.31
11.40	30.02	31.17	31.62	12.40	12.00	11.80	1.03	1.09	2.80	8.16
68.40	29.99	31.11	31.54	12.40	12.00	11.90	1.03	1.09	2.74	8.32
192.60	29.83	30.87	31.28	12.00	11.80	11.50	1.06	1.08	2.77	8.41
243.80	29.74	30.77	31.15	12.00	11.60	11.30	1.07	1.08	2.80	8.24
307.90	29.55	30.52	30.88	11.90	11.60	11.30	1.09	1.07	2.84	8.28
371.90	29.29	30.19	30.53	11.80	11.40	11.20	1.11	1.07	2.89	8.38
436.00	29.01	29.86	30.17	11.50	11.30	11.10	1.12	1.05	2.95	8.51
500.00	28.74	29.54	29.82	11.20	10.80	10.70	1.13	1.05	3.02	8.52



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