

Plug-In Amplifier

MAN-1

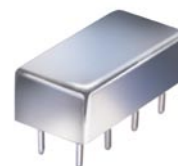
50Ω Low Power 0.5 to 500 MHz

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

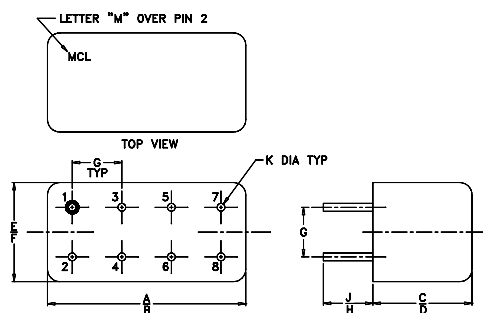
Pin Connections

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.

Outline Drawing



NOTE: BLUE BEAD INDICATES PIN 1.
PIN NUMBERS DO NOT APPEAR ON UNIT,
FOR REFERENCE ONLY.

Outline Dimensions (inch/mm)

A	B	C	D	E	F
.770	.800	.240	.250	.370	.400
19.56	20.32	6.10	6.35	9.40	10.16
G	H	J	K		wt
.200	.20	.14	.031		grams
5.08	5.08	3.56	0.79		3.7

Typical Performance Data/Curves

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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		
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

