

Plug-In

Low Noise Amplifier

MAN-1HLN

50Ω

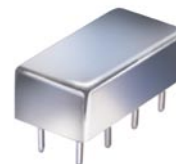
10 to 500 MHz

Features

- low noise, 3.7 dB typ.
- high IP3, +30 dB typ.
- hermetic case
- protected by US Patent, 6,943,629

Applications

- VHF/UHF
- military, hi-rel applications



CASE STYLE: A06
PRICE: \$22.20 ea. Qty. (1-9)

Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)			MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Typ.		DC POWER		
	f _L	f _U		Flatness Max.			Output (1 dB Compr.)	Input (no damage)		IP3 Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
				Min.	m	Total Range								
MAN-1HLN	10	500	3.7	10	±0.5	±0.8	+15	+15	+30	1.8	1.8	12	70	

m = mid range [2 fL to fU/2]

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

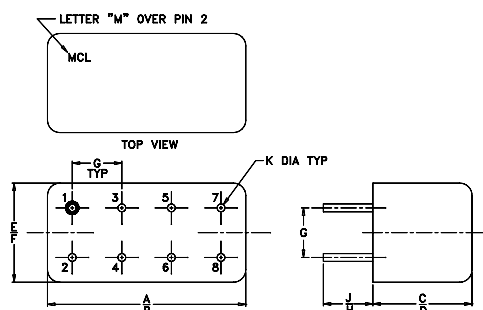
Pin Connections

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	.285	.310	.370	.400
19.56	20.32	7.24	7.87	9.40	10.16

G	H	J	K	wt
.200	.20	.14	.031	grams
5.08	5.08	3.56	0.79	5.2

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M98086
MAN-1HLN
060710
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Typical Performance Data/Curves

MAN-1HLN

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		
10.00	12.42	12.46	12.48	4.20	4.20	4.20	1.41	1.20	3.91	17.02
19.30	12.29	12.37	12.39	4.20	4.30	4.20	1.25	1.12	3.87	17.33
46.50	12.28	12.35	12.36	4.10	4.10	4.10	1.19	1.08	3.86	17.41
111.80	12.16	12.22	12.23	4.20	4.30	4.30	1.17	1.12	4.07	17.42
198.50	12.13	12.19	12.20	4.20	4.20	4.20	1.17	1.09	4.14	17.29
248.70	12.01	12.06	12.06	4.30	4.40	4.40	1.17	1.14	3.93	17.27
311.50	11.88	11.90	11.91	4.30	4.40	4.30	1.16	1.20	3.97	17.23
374.40	11.68	11.71	11.73	4.40	4.40	4.60	1.18	1.16	4.03	17.29
437.20	11.53	11.57	11.58	4.50	4.50	4.50	1.17	1.28	4.07	17.35
500.00	11.27	11.29	11.32	4.80	4.80	4.70	1.19	1.23	4.13	17.38

