

MINI-CIRCUITS DESIGNER'S KITS

SPEED UP

THE SOLUTION!



0.5 to 5.9 GHz

MNA Features

- Wideband, 50Ω
- 3V & 5V operation
- High directivity
- Low noise figure
- Output power up to +19 dBm typ.
- No external biasing circuit required
- Internal DC blocking at RF input & output
- MCLP™ (Mini-Circuits Leadless Package)
- Miniature plastic case (L) 3.0 x (W) 3.0 x (H) 0.89mm
- Exposed metal bottom for excellent grounding and heat dissipation
- High repeatability

\$99.95
only *ea.kit* (6 models, 10 of each, 60 total)



Evaluation boards available, \$39.95
See individual model data sheets.

Kit K2-MNA Electrical specifications of each model

Model	Freq. (GHz)	DC Volts ¹ (V)	Gain, (dB) Typical					Maximum Power (dBm)			Dynamic Range			VSWR* (:1) Typ.		Directivity (dB) (Isolation-Gain)	DC Operating Current (mA)		Thermal Resistance ² θjc Typ. °C/W	Evaluation Board	
			Min. @ 2 GHz					Output (1dB Comp.) Typ.	Input ¹ f _L f _U	NF (dB) Typ. at 1 GHz	IP3 (dBm) Typ. at 1 at 2 GHz GHz	In	Out	Typ.	Typ.		Max.				
	f _L -f _U			over frequency, GHz 0.5 1.0 1.5 2.0 2.5																	
MNA-2+	0.5-2.5	5.0 2.8	10.6 9.6	12.8 11.5	12.8 11.2	12.3 10.7	11.9 10.2	10.3 -	17.7 12.9	14.9 12.4	10 10	5.4 5.4	26.5 23.2	28.0 24.2	1.5 1.5	1.6 1.6	20 20	76 60	95 -	78	TB-186
MNA-3+	0.5-2.5	5.0 2.8	14.6 14.2	16.2 15.2	16.1 15.0	15.0 14.0	11.8 11.0	13.0 -	11.4 9.7	9.5 8.0	10 10	4.9 4.8	19.6 18.0	21.3 19.9	1.9 1.9	1.5 1.5	17 17	30 28	40 -	78	TB-186
MNA-4+	0.5-2.5	5.0 2.8	15.6 14.3	16.6 14.6	16.4 14.5	15.8 14.1	13.3 11.7	14.0 -	19.0 13.4	17.0 13.7	10 10	4.8 4.8	28.4 23.9	29.0 24.9	1.5 1.5	1.7 1.7	20 20	75 67	90 -	78	TB-186
MNA-5+	0.5-2.5	5.0 2.8	18.5 18.0	22.8 21.4	21.9 20.5	20.6 19.4	18.0 17.4	17.0 -	12.2 10.1	8.0 6.5	10 10	3.5 3.5	19.4 18.0	21.0 20.0	1.6 1.6	1.9 1.9	17 17	28 26	40 -	78	TB-186
MNA-6+	0.5-2.5	5.0 2.8	19.4 18.6	23.5 21.5	23.6 21.2	23.0 21.0	20.2 19.0	21.5 -	18.0 14.1	15.8 13.2	10 10	2.9 2.9	27.1 23.4	28.0 25.0	1.5 1.5	1.6 1.9	17 17	81 65	95 -	78	TB-186
MNA-7+	1.5-5.9	5.0 2.8	over frequency, GHz 1.5 2.0 3.5 5.0 5.9					15.0 -	15.6 12.7	15.9 13.1	10 10	6.9 6.9	28.4 24.1	28.6 23.8	2.0 2.0	1.5 1.5	20 24	73 65	96 -	78	TB-186

* VSWR above .75GHz, MNA-7 above 2.5GHz.

1. Permanent damage may occurred if any of these limits are exceeded. These ratings are not intended for continuous normal operation.

2. Thermal resistance is from junction to heat slug (mounting paddle).

Mini-Circuits®
ISO 9001 ISO 14001 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For quick access to product information see MINI-CIRCUITS CATALOG & WEB SITE

RF/IF MICROWAVE COMPONENTS

REV. B
M141105
K2-MNA