


Amplifier

 [print this page](#)



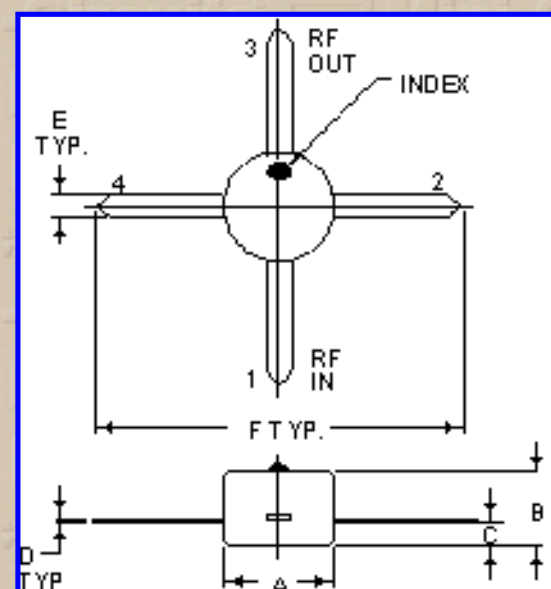
MAV-11

Frequency MHz	GAIN, dB		Maximum Power, dBm		Dynamic Range		VSWR		Absolute Maximum Rating		DC Power		Thermal resistance θ_{jc} °C/W
	$f_L - f_U$	Min.	Typ. Flatness	Output (1 dB Comp.)	Input (no damage)	NF dB Typ.	IP3 dBm Typ.	In Typ.	Out Typ.	I (mA)	P (mW)	Current (mA)	
50-1000	9.50	± 0.70	+18.20	+13.00	4.40	34.00	1.30	1.20	80.00	460.00	60.00	5.50	141.00

L_w =low range(f_L to $f_U/2$) U =upper range($f_U/2$ to f_U)

Pin Connections

Port	RF in	RF Out	DC	Case	GND	Not Used
cb	1	3	3	2,4	-	-



Case Style - BBB123 (inch,mm) weight: 0.015 grams.

A	B	C	D	E	F	G	H	J
.145	.100	.04	.006	.030	.488			
3.683	2.540	1.016	0.152	0.762	12.395			
K	L	M	N	P	Q	R	S	T

Tolerance: .x \pm .1 .xx \pm .03 .xxx \pm .015 inch.

Material and Finish:

Case material: plastic. Lead finish: tin-lead plate or tin plate.

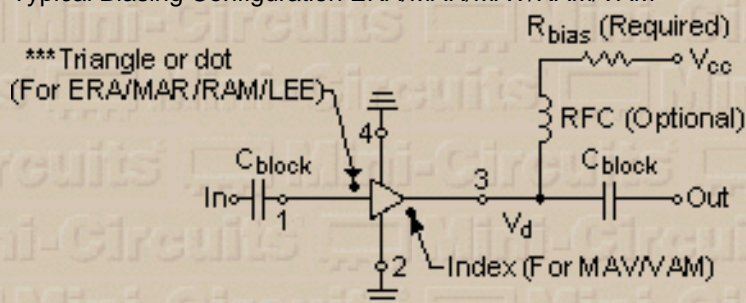
Marking:

RF output is identified by index mark, model dash number by alphanumeric code.

Special Tolerances:

Notes:

- Minimum gain at highest frequency. Full temperature range, except room temperature for Dash-4 models.
- Thermal resistance θ_{jc} is from hottest junction in the device to the mounting surface of the leads.
- Model number designated by alphanumeric code marking.
- Permanent damage may occur if any of these limits are exceeded. These ratings are not intended for continuous normal operation.
- For Amplifier Selection Guide, please click [here](#).
For Amplifier Environmental Specifications, please click [here](#).
- For Surface Mount Environmental Specifications, please click [here](#).
Re-flow soldering information is available in "[Surface Mount](#)" article.
- Low frequency cutoff determined by external coupling capacitors.
- Frequency at which output power, NF and IP3 are specified: 500 MHz.
- Typical Biasing Configuration ERA/MAR/MAV/RAM/VAM



*** For RAM models, Pin 1 is identified by a diagonally cut lead.

- Prefix letter (optional) designates assembly location.
- Supply voltage must be connected to pin 3 through a bias resistor in order to prevent damage. See [Biasing MMIC Amplifiers](#). Reliability predictions are applicable at specified current and normal operating conditions.
- Aqueous washable.
- General Quality Control Procedures and Environmental Specifications are given in [Mini-Circuits Guarantees Quality](#).
Hi-Rel, MIL description are given in [Hi-Rel and MIL](#).
- Prices and Specifications subjects to change without notice.

Lead width ±.010 inch; lead thickness ±.003 inch.

Typical Performance Data

FREQ (MHz)	S ₁₁ (Input Return Loss)			S ₂₁ (Power Gain)		S ₁₂ (Isolation Out-in)			S ₂₂ (Output Return Loss)		
	dB	Mag	Ang	dB	Ang	dB	Mag	Ang	dB	Mag	Ang
50.00	-16.79	0.14	-72.26	12.96	167.00	-16.61	0.15	7.30	-18.23	0.12	-81.16
100.31	-21.58	0.08	-72.34	12.60	169.51	-16.53	0.15	2.12	-25.47	0.05	-86.50
150.62	-23.55	0.07	-71.81	12.50	168.94	-16.54	0.15	-0.24	-31.27	0.03	-84.66
200.93	-24.38	0.06	-73.27	12.44	167.50	-16.58	0.15	-1.93	-38.02	0.01	-71.38
251.24	-24.69	0.06	-75.88	12.40	165.73	-16.61	0.15	-3.22	-44.01	0.01	-17.90
301.55	-24.67	0.06	-79.35	12.35	163.77	-16.66	0.15	-4.27	-39.98	0.01	31.80
351.86	-24.51	0.06	-83.79	12.31	161.75	-16.71	0.15	-5.26	-36.10	0.02	46.27
402.17	-24.24	0.06	-88.42	12.26	159.66	-16.76	0.15	-6.19	-33.77	0.02	50.93
452.48	-23.94	0.06	-92.70	12.21	157.55	-16.80	0.14	-6.98	-32.15	0.02	51.71
502.79	-23.60	0.07	-97.36	12.16	155.43	-16.85	0.14	-7.73	-31.02	0.03	51.60
553.10	-23.19	0.07	-101.78	12.11	153.30	-16.90	0.14	-8.48	-30.06	0.03	50.25
603.41	-22.71	0.07	-106.12	12.05	151.17	-16.96	0.14	-9.14	-29.42	0.03	49.52
653.72	-22.31	0.08	-110.84	11.99	149.09	-17.00	0.14	-9.68	-29.03	0.04	50.42
698.44	-21.97	0.08	-114.48	11.93	147.26	-17.02	0.14	-10.26	-28.68	0.04	50.46
704.03	-21.94	0.08	-114.90	11.92	147.03	-17.03	0.14	-10.31	-28.57	0.04	49.94
754.34	-21.57	0.08	-119.11	11.86	144.95	-17.07	0.14	-10.95	-28.16	0.04	49.80
804.65	-21.22	0.09	-122.62	11.79	142.90	-17.11	0.14	-11.54	-27.85	0.04	48.71
854.96	-20.87	0.09	-126.17	11.72	140.87	-17.14	0.14	-12.13	-27.66	0.04	47.73
905.27	-20.53	0.09	-129.53	11.66	138.85	-17.18	0.14	-12.73	-27.37	0.04	46.57
955.58	-20.19	0.10	-132.82	11.59	136.89	-17.22	0.14	-13.25	-27.15	0.04	46.08
1000.30	-19.92	0.10	-135.61	11.52	135.12	-17.24	0.14	-13.79	-26.99	0.04	46.04
1100.92	-19.36	0.11	-141.55	11.38	131.21	-17.31	0.14	-14.92	-26.81	0.05	43.38
1201.54	-18.77	0.12	-146.64	11.24	127.36	-17.38	0.14	-16.02	-26.53	0.05	40.33
1302.16	-18.27	0.12	-151.74	11.09	123.61	-17.45	0.13	-17.12	-26.37	0.05	38.19
1402.78	-17.85	0.13	-156.40	10.95	119.90	-17.52	0.13	-18.22	-26.17	0.05	35.00
1503.40	-17.43	0.13	-160.64	10.80	116.24	-17.59	0.13	-19.31	-26.02	0.05	30.47
1604.02	-17.03	0.14	-164.69	10.65	112.65	-17.67	0.13	-20.38	-25.82	0.05	26.97
1704.64	-16.67	0.15	-168.52	10.50	109.09	-17.75	0.13	-21.46	-25.43	0.05	23.54
1805.26	-16.36	0.15	-172.07	10.36	105.62	-17.83	0.13	-22.51	-25.12	0.06	19.39
1900.29	-16.10	0.16	-175.39	10.23	102.40	-17.91	0.13	-23.49	-24.63	0.06	16.25
2000.91	-15.82	0.16	-179.06	10.08	98.97	-17.99	0.13	-24.60	-24.28	0.06	13.07
2101.53	-15.60	0.17	177.23	9.94	95.57	-18.08	0.12	-25.66	-23.80	0.06	10.52
2202.15	-15.37	0.17	173.45	9.80	92.27	-18.18	0.12	-26.79	-23.39	0.07	8.49
2302.77	-15.13	0.18	169.71	9.65	88.99	-18.28	0.12	-27.82	-22.98	0.07	5.75
2403.39	-14.89	0.18	166.21	9.51	85.77	-18.39	0.12	-28.86	-22.53	0.07	4.51
2504.01	-14.63	0.19	162.21	9.38	82.59	-18.51	0.12	-29.85	-22.04	0.08	4.00
2604.63	-14.34	0.19	158.39	9.25	79.43	-18.63	0.12	-30.79	-21.53	0.08	4.20
2705.25	-14.07	0.20	154.34	9.11	76.28	-18.77	0.12	-31.75	-21.06	0.09	4.72
2800.28	-13.80	0.20	150.57	8.99	73.29	-18.88	0.11	-32.55	-20.59	0.09	5.03
2900.90	-13.49	0.21	146.62	8.86	70.19	-19.02	0.11	-33.47	-20.06	0.10	5.09
3001.52	-13.21	0.22	142.49	8.73	67.06	-19.16	0.11	-34.23	-19.54	0.11	6.37



INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE • 44-1252-832600 • Fax 44-1252-837010

ISO 9001 CERTIFIED

[Back](#)

i2 Technologies US, Inc.

HTML Pages converted to PDF Document

This document contain component information from the manufacturer's website which are not available in a revision controlled document from the manufacturer. To facilitate the addition of these parts into the Electronics Database, we are converting the HTML pages related to that part, from the manufacturer's website into Adobe PDF format. The contents of this document is based on the information provided on the manufacturer's website, therefore the information may have been changed by the manufacturer since this was created.

