MAPM-030400-010C00

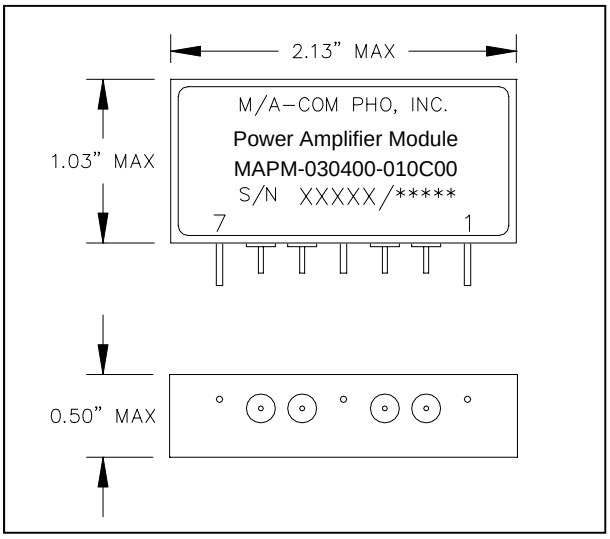
Broadband Power Module
30 – 400 MHz, 10W

M/A-COM Products
Preliminary - 03/18/09

Features

- Frequency band 30 - 400 MHz
- Output power: 10 W CW Min
- Power gain: 25dB Typ
- Built - in gain control
- AM Modulation capable
- Field proven transistor die
- Rugged construction for extreme environments
- Suitable for most commercial and industrial applications.

Product Image



Absolute Maximum Ratings

Parameter	Rating	Units
Supply Voltage	30	V
Input Power	20	dBm
Output Power	25	W
Bias Current	1.0	A
Operating Case Temperature	-40 - 100	ºC
Storage Temperature	-50 - 100	ºC

Electrical Specifications: T_c= 25 ± 5 ºC

Parameter	Test Conditions	Min	Typ	Max	Units
Output Power (CW)	V_D = 28 V, V_{ALC} = 10.0V	10	-	-	W
Power Gain	V_D = 28 V, V_{ALC} = 10.0V	-	25	-	dB
Gain Variation With Frequency	V_D = 28 V, V_{ALC} = 10.0V	-	± 3.0	-	dB
Input VSWR	V_D = 28 V, Pout=5 watt	-	1.5:1	-	VSWR
Load Mismatch Tolerance	V_D = 28 V, Pout=5 watt	-	3:1	-	VSWR
Even Harmonics	V_D = 28 V, Pout=5 watt	-	-	-25	dBc
Odd Harmonics	V_D = 28 V, Pout=5 watt	-	-	-15	dBc
Spurious Output	V_D = 28 V, Pout=5 watt	-	-	- 80	dBc

ADVANCED: Data Sheets contain information regarding a product M/A-COM is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

Typical Data

Freq (MHz)	P1dB (dBm)	P1dB (Watts)	Id @ P1dB (Amps)	Eff @ P1dB (%)	Gain (dB)	VDC (Volts)	Vctrl (Volts)
20	41.9	15.3	1.68	32.5	32.1	28	10.00
30	42.8	18.9	1.79	37.8	33.9	-	-
50	43.6	23.0	1.88	43.6	35.1	-	-
100	43.0	20.0	1.82	39.2	32.6	-	-
200	40.8	11.9	1.56	27.2	29.0	-	-
300	42.8	19.1	2.12	32.1	33.0	-	-
325	42.0	15.8	1.86	30.4	31.7	-	-
350	41.2	13.2	1.59	29.6	29.0	-	-
375	41.3	13.6	1.48	32.7	28.2	-	-
400	41.8	15.0	1.46	36.6	29.1	-	-
420	41.1	12.9	1.33	34.8	29.9	-	-

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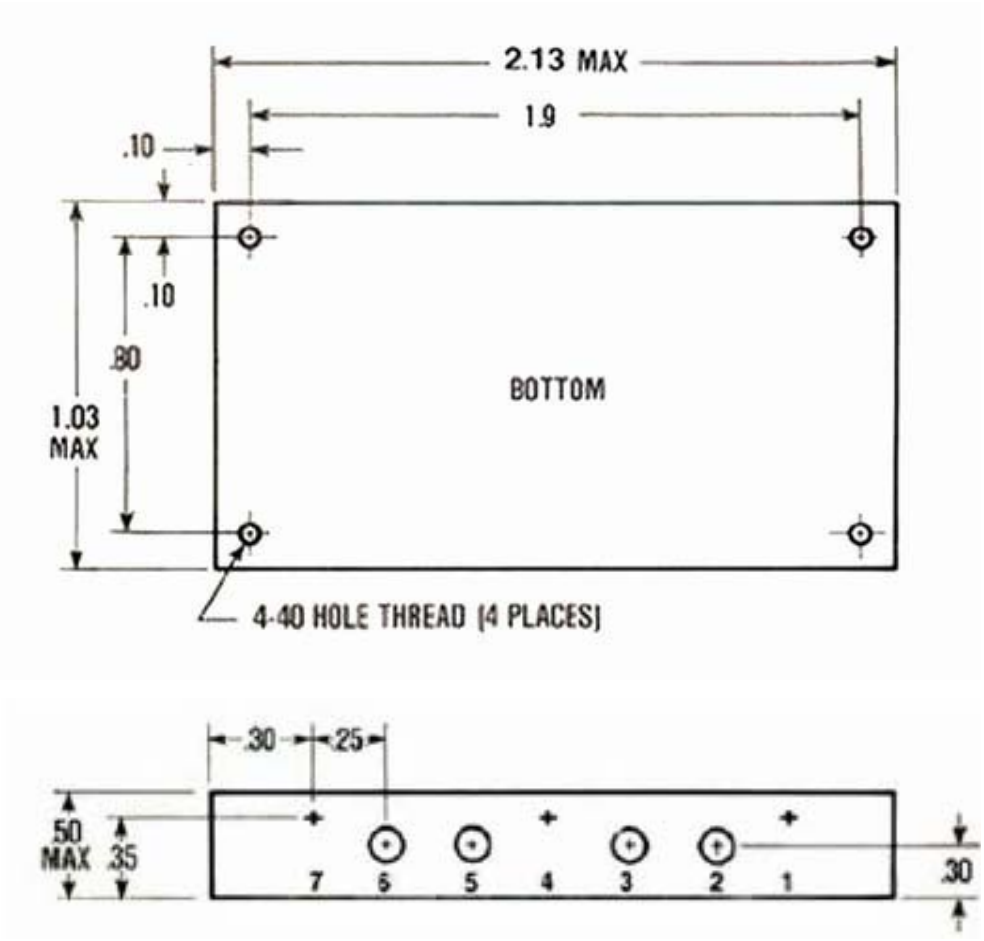
Outline Drawing



Nickel Plated Aluminum Housing

PIN FUNCTION			
PIN(S)	**Function**	**PIN(S)**	**Function**
1, 4, 7	Ground	5	Vdc Input
2	RF Input	6	RF Output
3	Gain/Bias Control		

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