

# MAPM-020512-010C00



**Broadband UHF/VHF Power Module**  
20 - 512 MHz, 10W

**M/A-COM Products**  
REV 0

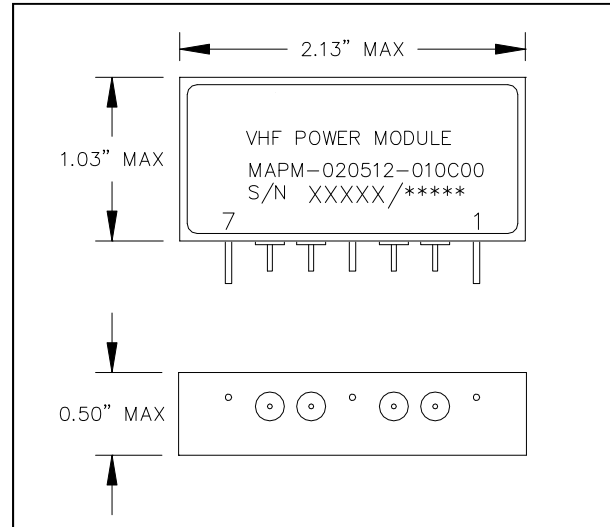
## Features

- Broadband operation 20 - 512 MHz
- Output power: 7.0W min
- Power gain: 22dB min
- Built - in gain control
- AM Modulation capable
- Rugged construction for extreme environments
- Suitable for most commercial and industrial applications.

## Absolute Maximum Ratings

Parameter	Rating	Units
Supply Voltage	30	V
Input Power	20	dBm
Output Power	20	W
Supply Current	2.5	A
Operating Case Temperature	-40 to +85	°C
Storage Temperature	-50 to +100	°C

## Product Image



## Electrical Specifications: $T_c = 25 \pm 5 \text{ }^\circ\text{C}$

Parameter	Test Conditions	Min	Typ	Max	Units
Frequency Band	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ watt}$	20	-	512	MHz
$P_{1dB}$	$V_{SUPP} = 28 \text{ V}$ , $V_{ALC} = 10.0 \text{ V}$	7.0	10	-	W
Power Gain	$V_{SUPP} = 28 \text{ V}$ , $V_{ALC} = 10.0 \text{ V}$	22	25	-	dB
Gain Control Range	$V_{SUPP} = 28 \text{ V}$ , $V_{ALC} = 0.0 - 10.0 \text{ V}$	-	60	-	dB
Gain Variation With Frequency	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$	-	-	$\pm 3.0$	dB
Input VSWR	$V_{SUPP} = 28 \text{ V}$	-	3:1	-	VSWR
Load Mismatch Tolerance	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$	-	3:1	-	VSWR
Even Harmonics	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$	-	-	-25	dBc
Odd Harmonics	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$	-	-	-15	dBc
Spurious Output	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$	-	-	-60	dBc
IP3	$V_{SUPP} = 28 \text{ V}$ , $P_{OUT} = 4 \text{ W}$ , $\Delta F = 100 \text{ kHz}$	-	50	-	dBm

**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.

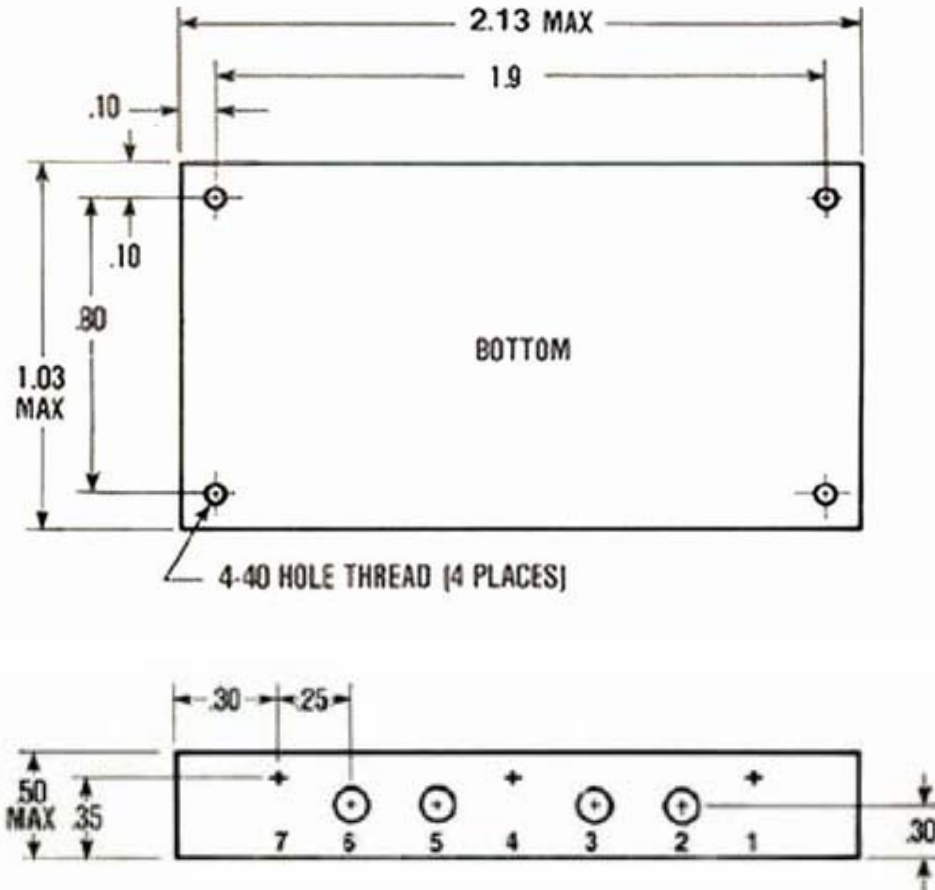
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Visit [www.macom.com](http://www.macom.com) for additional data sheets and product information.

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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 Control		