## MAPM-020512-040C00



# Broadband UHF/VHF Power Module 20 - 512 MHz, 40W

M/A-COM Products Preliminary - 8/23/07

### **Features**

Broadband operation 20 - 512MHz

Output power: 40W CW
 Power gain: ≥ 10dB
 Rugged push-pull FET
 External bias control

Rugged construction for extreme environments

Suitable for most commercial and industrial applications

# 2.13" MAX VHF POWER MODULE MAPM-020512-040C00 S/N XXXXXX/\*\*\*\* 7 1 0.50" MAX ° • • • • • • •

### **Absolute Maximum Ratings**

Parameter	Rating	Units
Supply Voltage	30	V
Input Power	10	W
Output Power	120	W
Bias Current	3.0	Α
Operating Case Temperature	-40 - 100	°C
Storage Temperature	-50 - 100	°C

### Electrical Specifications: T<sub>c</sub>= 25 + 5 °C

Parameter	Test Conditions	Min	Тур	Max	Units
Output Power (CW)	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA	-	40	-	W
Power Gain	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA	10	-	15	dB
Efficiency	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA, P <sub>OUT</sub> = 40W	-	37	-	%
Input VSWR	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA	-	3:1	-	VSWR
Load Mismatch Tolerance	V <sub>D</sub> = 28 V, F=512Mhz, P <sub>OUT</sub> = 20W	-	3:1	-	VSWR
Even Harmonics	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA, P <sub>OUT</sub> = 20W	-	-	-25	dBc
Odd Harmonics	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA, P <sub>OUT</sub> = 20W	-	-	-15	dBc
Spurious Output	V <sub>D</sub> = 28 V, I <sub>D</sub> = 400 mA, P <sub>OUT</sub> = 20W	-	-	- 80	dBc

<sup>•</sup> North America Tel: 800.366.2266 / Fax: 978.366.2266

<sup>•</sup> 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.macomtech.com for additional data sheets and product information.

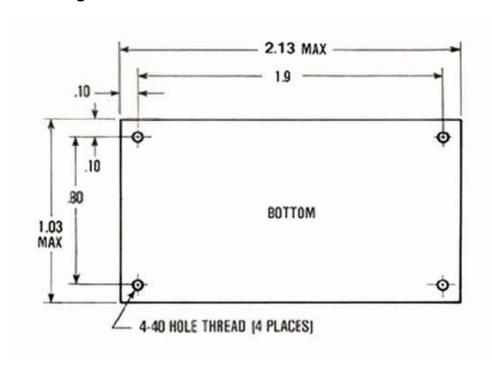
# MAPM-020512-040C00

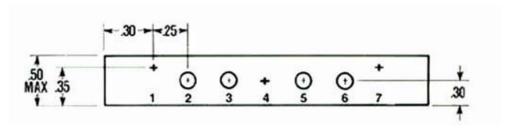


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### **Outline Drawing**





### **Nickel Plated Aluminum Housing**

PIN	FUNCTION	
1, 4, 7	GROUND	
2	RF INPUT	
3	Vbias, 0 to +5V	
5	VDC INPUT, 28V NOM.	
6	RF OUTPUT	

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