



17dB Coupler 5-1000MHz

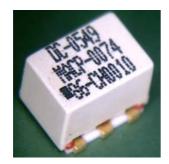
MACP-007486-CH0010 V1P

Features

- Surface Mount
- 17dB Coupler
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of ESDC-17-3-75
- Available on Tape and Reel. Reel quantity 900

Description

M/A-COM's MACP-007486-CH0010 is a 17dB Coupler in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



Pin Configuration

Pin No.	Function		
1	Output		
2	Not connected (ground)		
3	External 75 Ohm		
4	Coupled		
5	Not Connected (ground)		
6	Input		

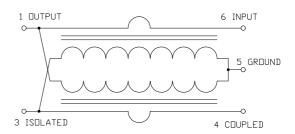
Ordering Information

Part Number	Package		
MACP-007486-CH0010	900		
MACP-007486-CH00TB	Customer Test Board		

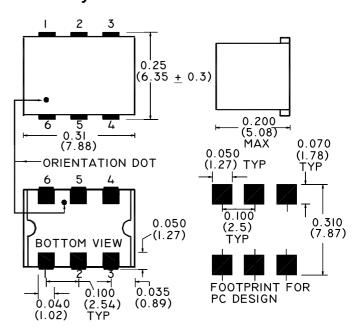
Note: Reference Application Note M513 for reel size information.

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

Schematic



Case Style: SM-1



Dimensions in inches [mm] Tolerance: .xx \pm .02, .xxx \pm .010

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





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Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega^1$

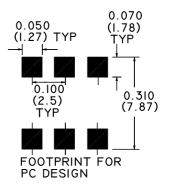
Parameter	Frequency	Units	Min	Тур	Max
Coupling	5 - 1000 MHz	dB	16	17	-
Coupling Flatness	5 - 1000 MHz	dB	-	-	0.8
Main Line Loss	5 - 50 MHz 50 - 500 MHz 500 - 1000 MHz	dB dB dB	- - -	0.6 0.6 0.7	1.3 1.1 1.2
Directivity	5 - 50 MHz 50 - 500 MHz 500 - 1000 MHz	dB dB dB	18 12 8	22 21 15	- - -
Input Return Loss	5 - 1000 MHz	dB	15	20	-
Output Return Loss	5 - 1000 MHz	dB	15	20	-
Coupling Return Loss	5 - 1000 MHz	dB	15	20	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum		
RF Power	250 mW		
DC current	30mA		
Operating Temperature	-20°C to +85°C		
Storage Temperature	-20°C to +85°C		

- 1. Exceeding any one or combination of these limits may cause permanent damage to this device.
- 2. M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration



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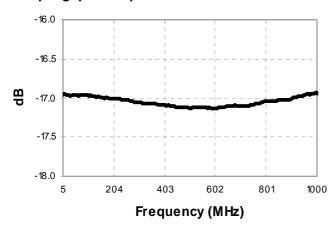


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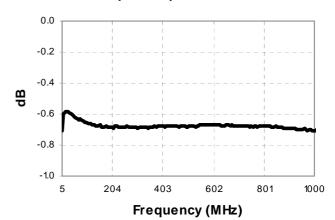
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Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{-1}$

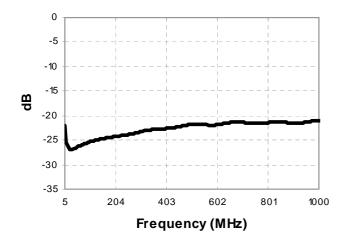
Coupling: pin 6 to pin 4



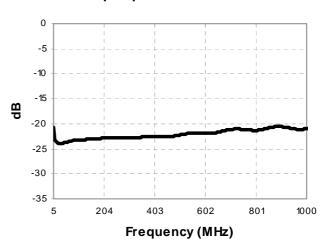
Main Line Loss: pin 6 to pin 1



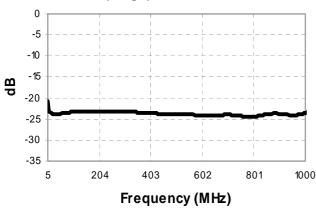
Return Loss Input: pin 6



Return Loss Output: pin 1



Return Loss Coupling: pin 4



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