

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**

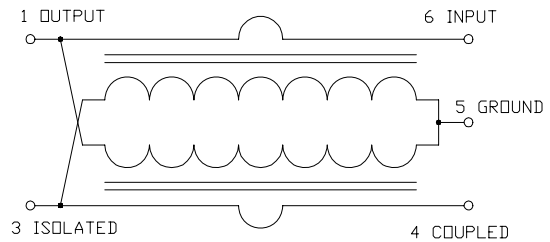
M/A-COM's MACP-007486-CH0010 is a 17dB Coupler in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



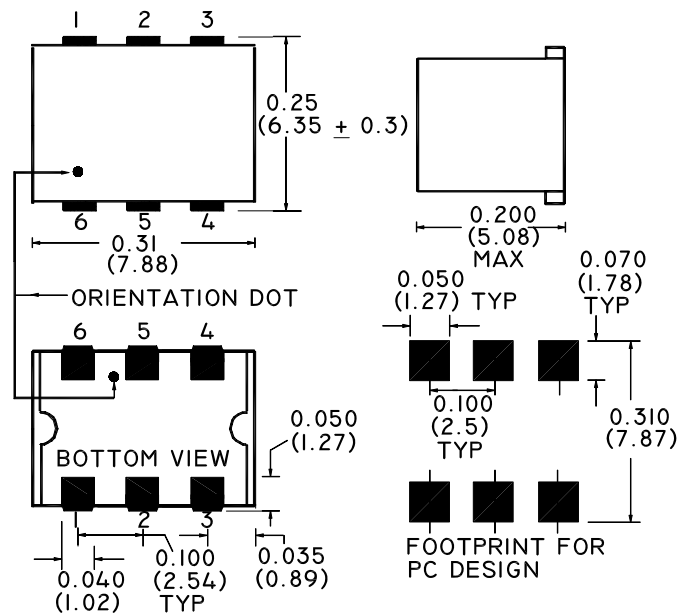
**Pin Configuration**

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

**Schematic**



**Case Style: SM-1**



**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.

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**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$  <sup>1</sup>**

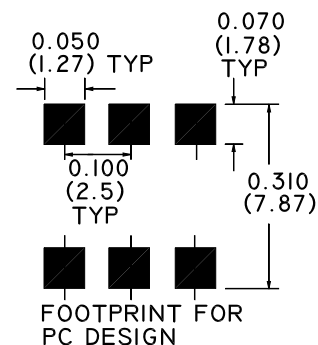
Parameter	Frequency	Units	Min	Typ	Max
Coupling	5 - 1000 MHz	dB	16	17	-
Coupling Flatness	5 - 1000 MHz	dB	-	-	0.8
Main Line Loss	5 - 50 MHz	dB	-	0.6	1.3
	50 - 500 MHz	dB	-	0.6	1.1
	500 - 1000 MHz	dB	-	0.7	1.2
Directivity	5 - 50 MHz	dB	18	22	-
	50 - 500 MHz	dB	12	21	-
	500 - 1000 MHz	dB	8	15	-
Input Return 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 <sup>1,2</sup>**

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**

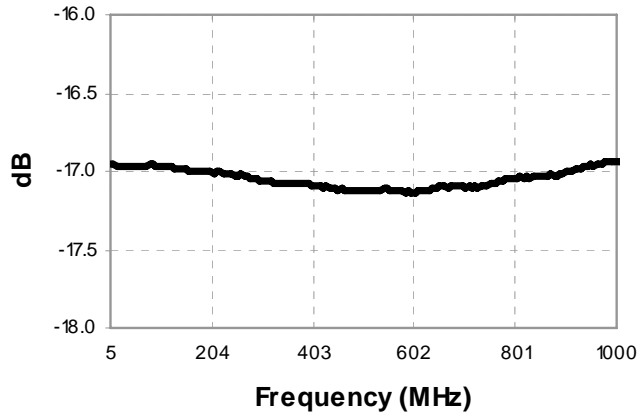


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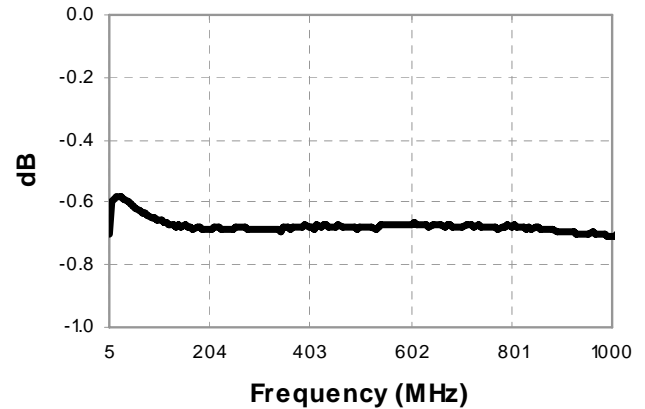
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**Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$  <sup>1</sup>**

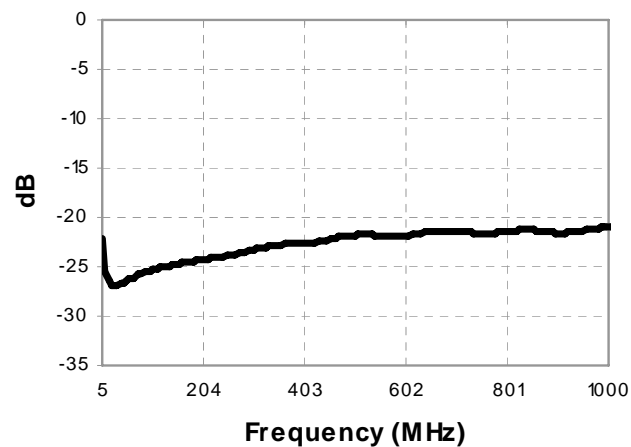
**Coupling: pin 6 to pin 4**



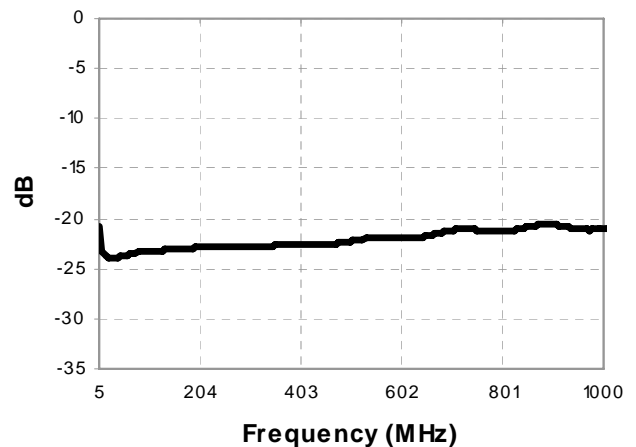
**Main Line Loss: pin 6 to pin 1**



**Return Loss Input: pin 6**



**Return Loss Output: pin 1**



**Return Loss Coupling: pin 4**

