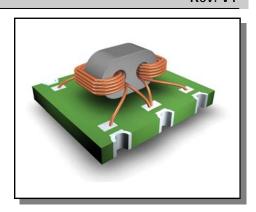


Coupler, 10dB 5 MHz - 1200 MHz

Rev. V1

#### **Features**

- ♦ 10dB coupling ratio
- ♦ Surface mount
- Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- Excellent temperature stability
- $\bullet$  Can be used on 50Ω and 75Ω systems
- ◆ Suitable for all CATV, Broadband and FTTx applications.



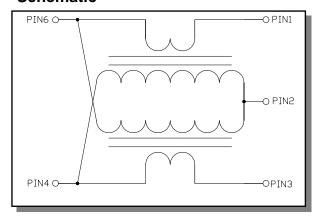
# **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Coupling Ratio		dB		10	
Coupling (Pin 3 to 1)	5 - 1200 MHz	dB	-	10.0	±0.5
Main Line Loss (Pin 3 to 4)	5 - 500 MHz 500 - 1200 MHz	dB dB	-	1.1 1.3	1.2 1.6
Isolation (Pin 3 to 6)	5 - 1000 MHz 1000 - 1200 MHz	dB dB	20 18	22 21	-
Return Loss: Input (Pin 3)	5 - 1200 MHz	dB	17	27	-
Return Loss: Coupling (Pin 1)	5 - 1200 MHz	dB	17	26	-
Return Loss: Output (Pin 4)	5 - 1000 MHz 1000 - 1200MHz	dB dB	20 17	23 20	-

### **Pin Configuration**

Pin No.	Function	
1	Coupled	
2	Ground	
3	Input	
4	Output	
5	Not Connected (ground)	
6	Isolated	

#### **Schematic**



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions 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 Technology

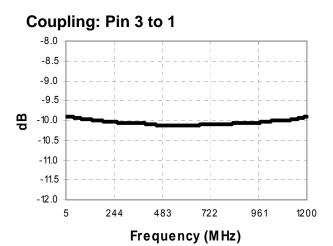
**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

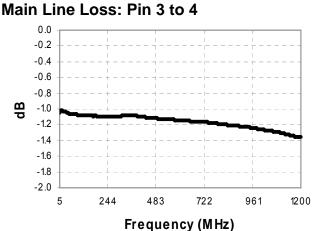
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



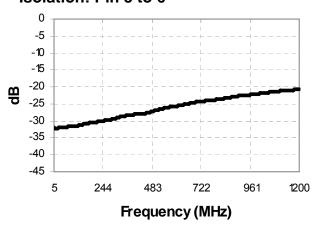
Coupler, 10dB 5 MHz - 1200 MHz

Rev. V1

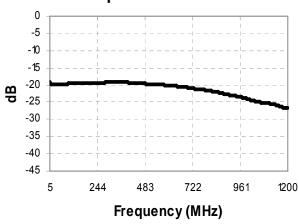




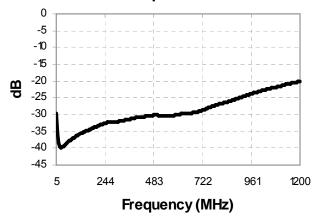
#### Isolation: Pin 3 to 6



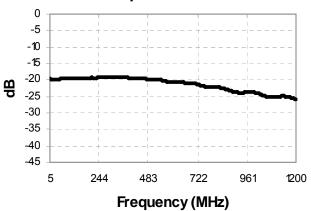
### **Return Loss: Input Pin 3**



### **Return Loss: Output Pin 4**



### **Return Loss: Coupled Pin 1**



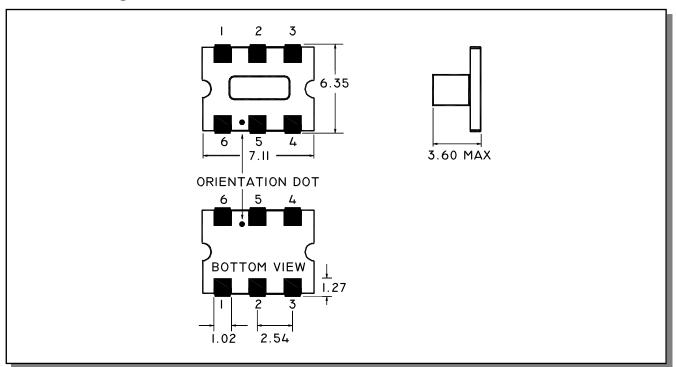
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm



Coupler, 10dB 5 MHz - 1200 MHz

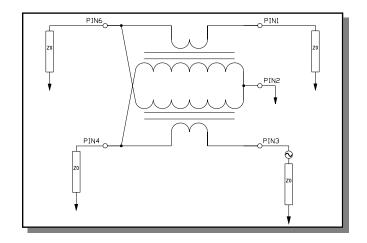
Rev. V1

### **Outline Drawing**

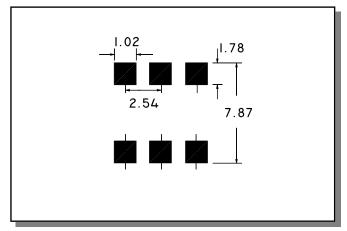


- Dimensions in mm.
- Tolerance: ±0.2mm unless otherwise noted.
- Model number and lot code printed on reel. 3.
- Plating Finish: ENIG gold on Nickel

## **Application Circuit**



## **Recommended Footprint**



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 • Europe Tel: +353.21.244.6400 • India Tel: +91.80.43537383 • China Tel: +86.21.2407.1588



Coupler, 10dB 5 MHz - 1200 MHz

### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	900
Reel size	mm	330
Tape width (W)	mm	16.0
Pitch (P <sub>1</sub> )	mm	12.0
A <sub>0</sub>	mm	6.7
B <sub>0</sub>	mm	7.4
K <sub>0</sub>	mm	3.1
Orientation	-	F15
Reference Application Note ANI-019 for orientation		

### **Ordering Information**

Part Number	Description
MACP -010414-CA0370	Tape & Reel
MACP -010414-CA03TB	Customer Evaluation Board

### **Recommended Maximum Ratings**

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Temperature data available on request

# **ECO History**

Rev	Date	Description	ECO
V1	18 Aug 2010	Released	20101117