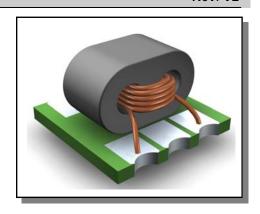


Coupler, 17dB 4 MHz - 862 MHz

Rev. V2

#### **Features**

- ♦ 17dB Coupler
- ♦ Surface mount
- Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability



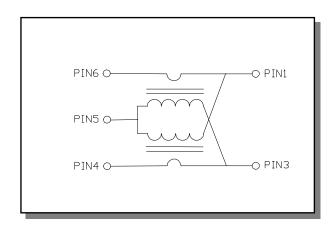
## **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	4		862
Impedance		Ω	-	75	
Coupling	4 - 862 MHz	dB	-	17	±1.0
Main Line Loss	4 - 862 MHz	dB	-	0.6	1.0
Input Return Loss	4 - 862 MHz	dB	18	27	-
Output Return Loss	4 - 862 MHz	dB	18	29	-
Coupled Return Loss	4 - 862 MHz	dB	18	31	-
Isolation	4 - 862 MHz	dB	24	35	-

## **Pin Configuration**

Pin No.	Function	
1	Input	
3	Coupled	
4	Isolated, External 75Ω	
5	Ground	
6	Output	

#### **Schematic**



**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.

India Tel: +91.80.43537383
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

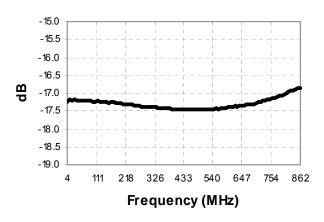
• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400



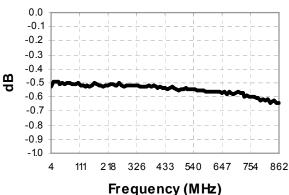
Coupler, 17dB 4 MHz - 862 MHz

Rev. V2

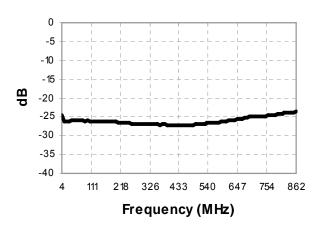
## Coupling:



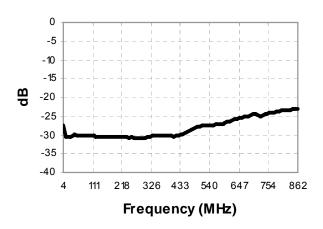
#### Main Line Loss:



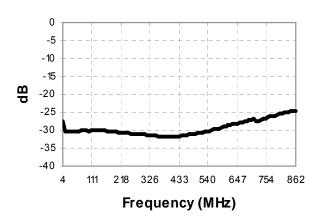
## Return Loss: Input



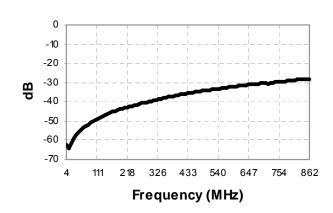
## Return Loss: Output



## Return Loss: Coupled



#### Isolation:



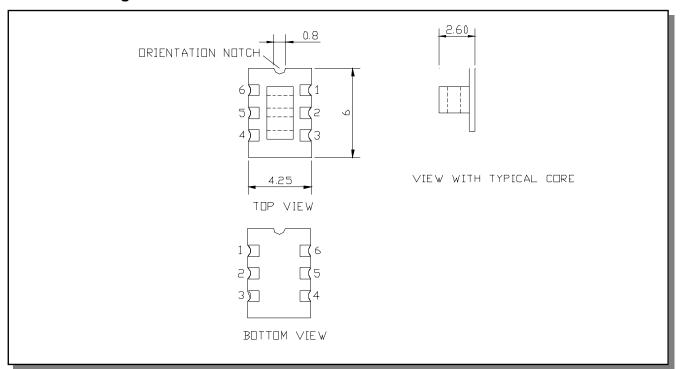
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm



Coupler, 17dB 4 MHz - 862 MHz

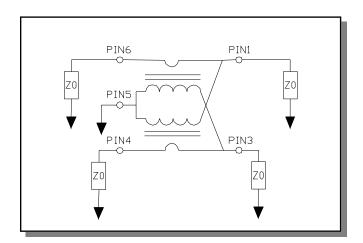
Rev. V2

## **Outline Drawing**

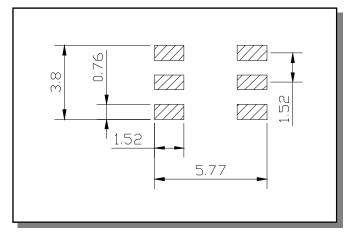


- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Finish: Electreless nickel immersion gold

## **Application Circuit**



## **Recommended Footprint**





Coupler, 17dB 4 MHz - 862 MHz

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### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	8.00
Ao	mm	4.5
Во	mm	6.4
Ko	mm	3.2
Orientation	-	F45
	•	

Reference Application Note ANI-019 for orientation

## **Ordering Information**

Part Number	Description
MACP -010383-CH0A40	Tape & Reel
MACP -010383-CH0ATB	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

Full temperature plots available on request

## **ECO History**

	•		
Rev	Date	Description	ECN NO.
V1	20 August,2010	Created datasheet	20101172
V2	24 Sep,2010	Component outline drawing corrected	20101613

**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.

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