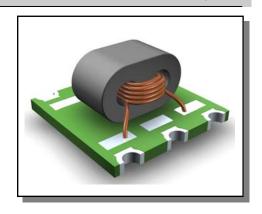


Coupler, 14dB 4 MHz - 862 MHz

Rev. V2

#### **Features**

- ♦ 14dB Coupler
- ♦ Surface mount
- Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability



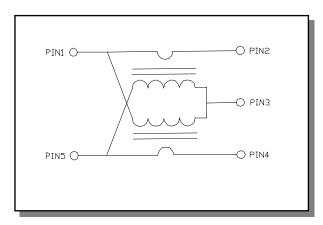
## **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	4		862
Impedance		Ω	-	75	
Coupling	4 - 862 MHz	dB	-	14	±2.2
Main Line Loss	5 - 862 MHz	dB	-	0.95	1.2
Input Return Loss	4 - 862 MHz	dB	18	24	-
Output Return Loss	4 - 862 MHz	dB	18	21	-
Coupled Return Loss	4 - 862 MHz	dB	18	26	-
Isolation	4 - 862 MHz	dB	26	38	-

## **Pin Configuration**

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

## **Schematic**



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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.

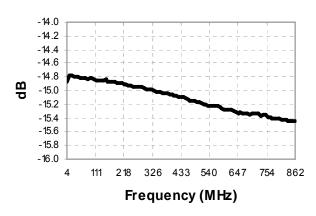
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



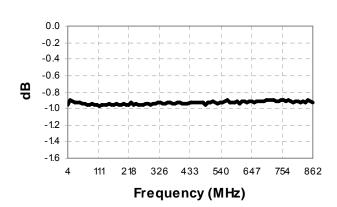
Coupler, 14dB 4 MHz - 862 MHz

Rev. V2

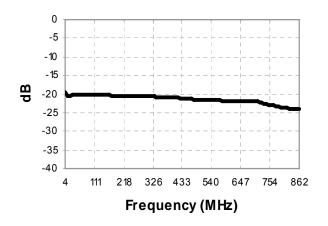
## Coupling:



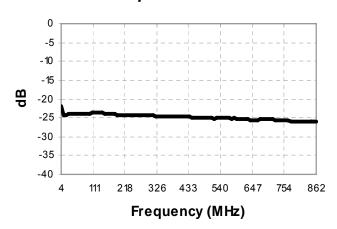
#### Main Line Loss:



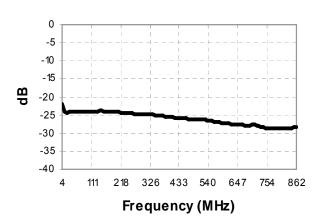
### Return Loss: Input



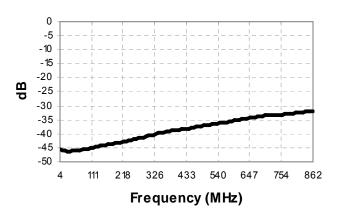
## Return Loss: Output



## Return Loss: Coupled



#### Isolation:



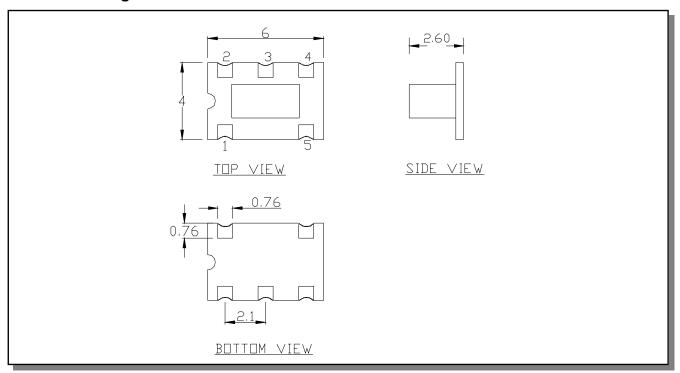
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm



Rev. V2

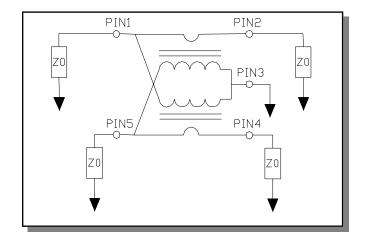
Coupler, 14dB 4 MHz - 862 MHz

### **Outline Drawing**

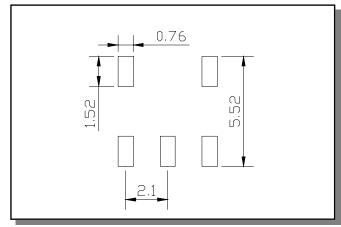


- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Finish: Electreless nickel immersion gold

## **Application Circuit**



## **Recommended Footprint**





Coupler, 14dB 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	16.0
Pitch	mm	8.0
Ao	mm	4.3
Во	mm	6.3
Ko	mm	3.2
Orientation	-	F45

Reference Application Note ANI-019 for orientation

### **Ordering Information**

Part Number	Description
MACP -010389-CE0880	Tape & Reel
MACP -010389-CE08TB	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	24 August, 2010	Created datasheet	20101182
V2	24 Sep 2010	Component outline drawing corrected	20101613

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