

Coupler, 14dB 5 MHz - 2400 MHz

Rev. V1

#### **Features**

- Coupling 14dB Typical
- Surface mount
- low profile
- 260°C reflow compatible
- Excellent Return Loss
- Available on Tape & Reel
- · RoHS compliant, lead free



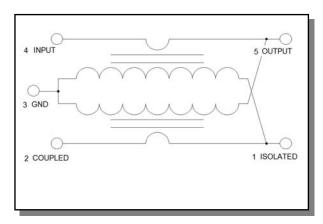
## **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	5		2400
Impedance		Ω		75	
Main Line Loss	5 - 1500 MHz 1500 - 2400 MHz	dB dB	-	0.93 1.3	1.3 2.0
Coupling	5 - 2400 MHz	dB	12.8	14	15.2
Coupling Flatness	-	dB	-	-	1.5
Isolation	5 - 1000 MHz 1000 - 2400 MHz	dB dB	25 20	30 25	-
Input Return Loss	5 - 1000 MHz 1000 - 2400 MHz	dB dB	15 10	18 20	-
Output Return Loss	5 - 2400 MHz	dB	15	25	-
Coupling Return Loss	5 - 2400 MHz	dB	15	25	-

## **Pin Configuration**

Pin No.	Function
1	Isolated
2	Coupled
3	GND
4	Input
5	Output

### **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

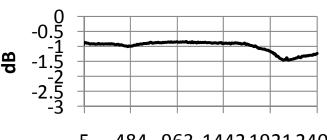
**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce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



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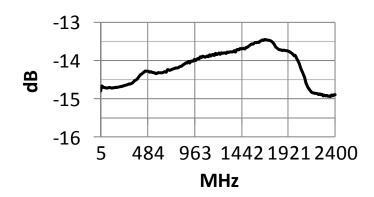
#### Main Line Loss:



484 963 1442 1921 2400

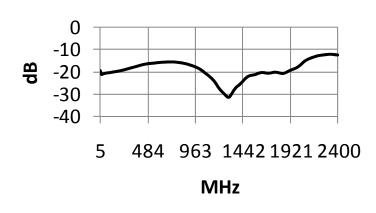
MHz

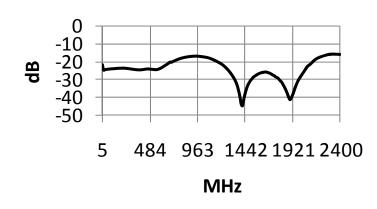
## Coupling:



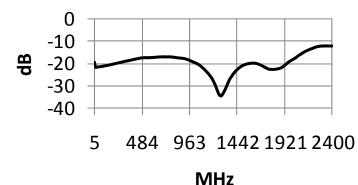
## Input Return Loss:

### **Output Return Loss:**



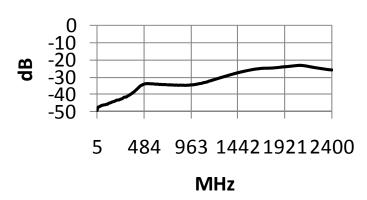


### **Coupled Return Loss:**



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

#### Isolation:

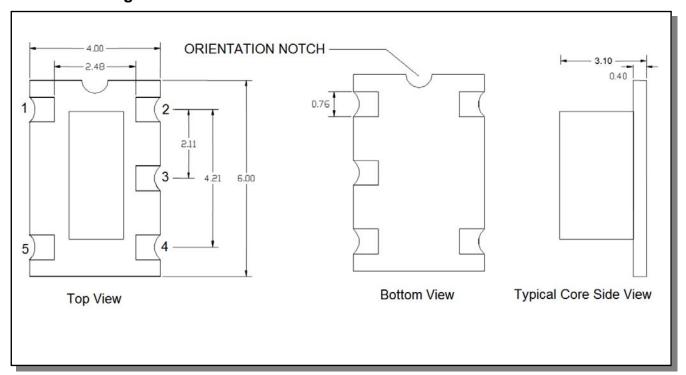




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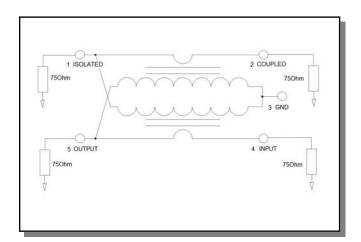
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#### **Outline Drawing**

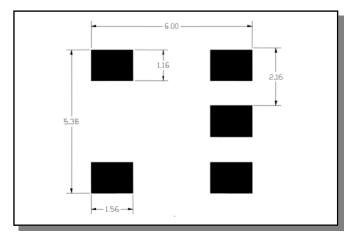


- Dimensions in mm.
- Tolerance: ±0.2mm unless otherwise noted.
- Model number and lot code printed on reel. 3.
- Finish: Electroless Nickel Immersion Gold.

## **Application Circuit**



## **Recommended Footprint**



• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400 • India Tel: +91.80.43537383 • China Tel: +86.21.2407.1588



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## **Tape & Reel Information**

Parameter	Units	Value	
Qty per reel	-	2000	
Reel size	mm	330	
Tape width (W)	mm	16.0	
Pitch (P <sub>1</sub> )	mm	8.0	
A <sub>0</sub>	mm	4.3	
B <sub>0</sub>	mm	6.3	
K <sub>0</sub>	mm	3.2	
Orientation	-	F45	
Reference Application Note ANI-019 for orientation			

## **Ordering Information**

Part Number	Description
MACP-010385-CE0880	Tape & Reel

### **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	2010-9-6	New release	20101296