

# MACP-010382-CF0A40

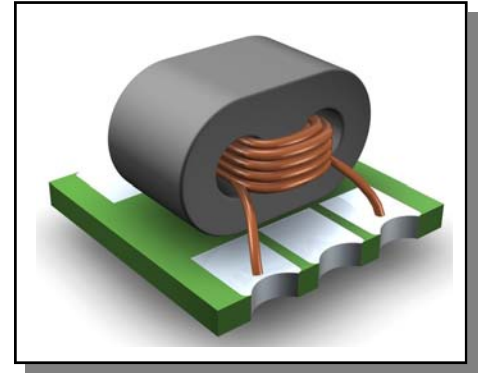


Coupler, 15dB  
4 MHz - 862 MHz

Rev. V2

## Features

- ◆ 15dB Coupler
- ◆ Surface mount
- ◆ Available on tape and reel
- ◆ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability



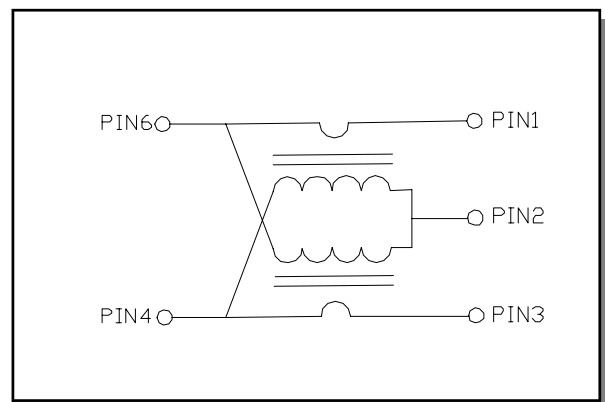
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	4		862
Impedance		$\Omega$	-	75	
Coupling	4 - 862 MHz	dB	-	15	$\pm 1.0$
Main Line Loss	4 - 862 MHz	dB	-	0.7	1.0
Input Return Loss	4 - 862 MHz	dB	18	30	-
Output Return Loss	4 - 862 MHz	dB	18	22	-
Coupled Return Loss	4 - 862 MHz	dB	18	24	-
Isolation	4 - 862 MHz	dB	28	33	-

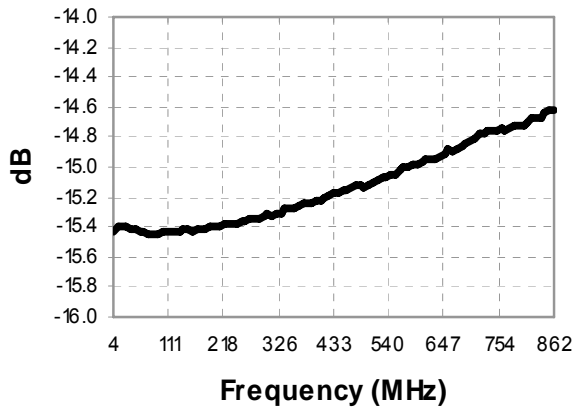
## Pin Configuration

Pin No.	Function
1	Input
2	Ground
3	Coupled
4	Isolated, External 75 $\Omega$
6	Output

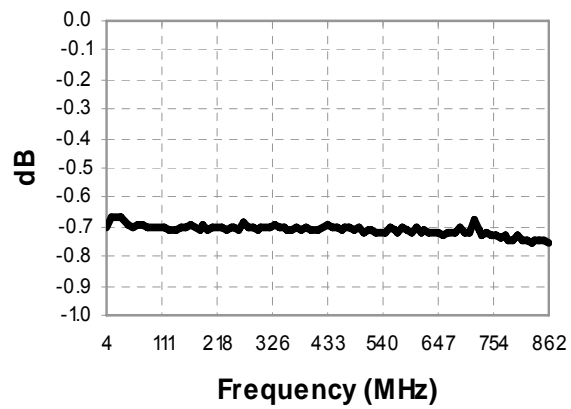
## Schematic



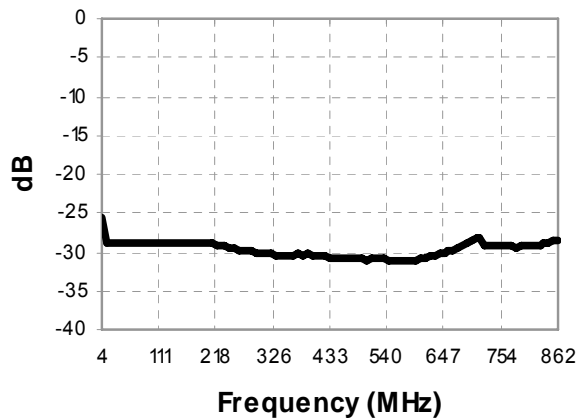
### Coupling:



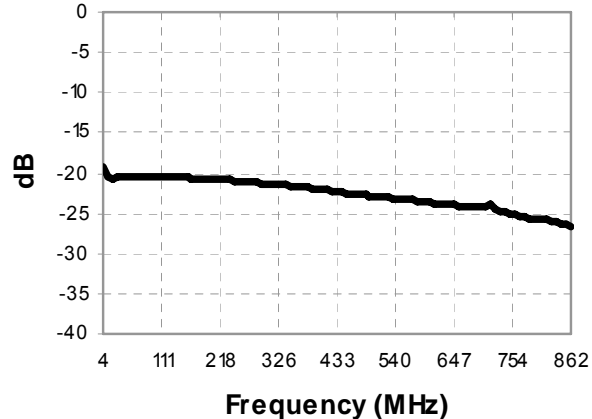
### Main Line Loss:



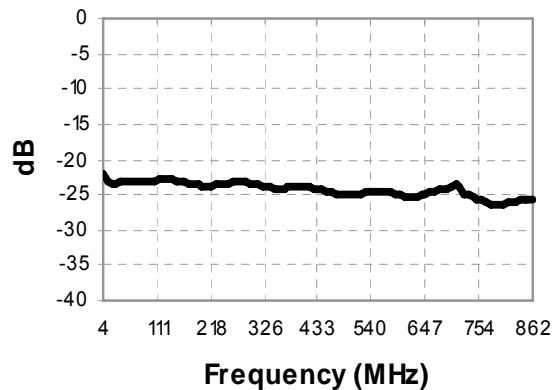
### Return Loss: Input



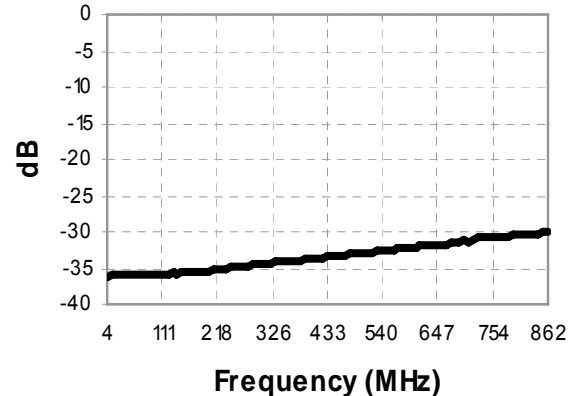
### Return Loss: Output



### Return Loss: Coupled

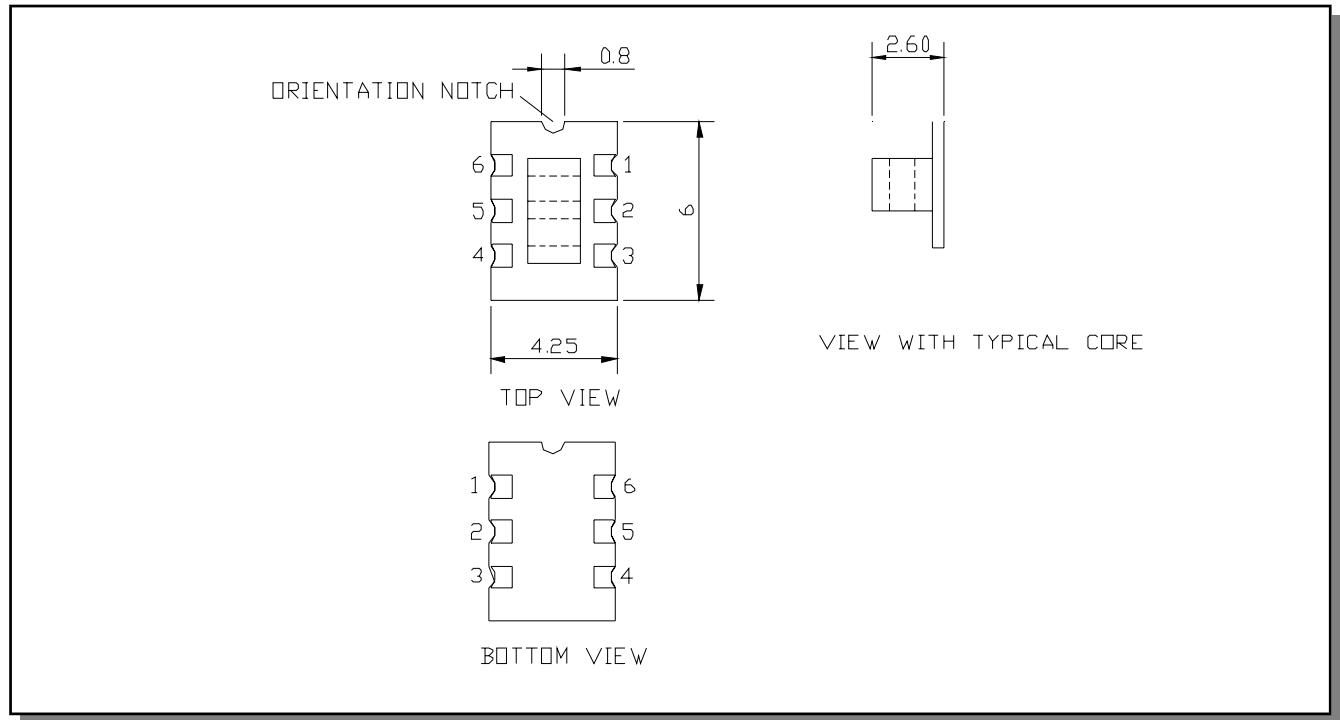


### Isolation:



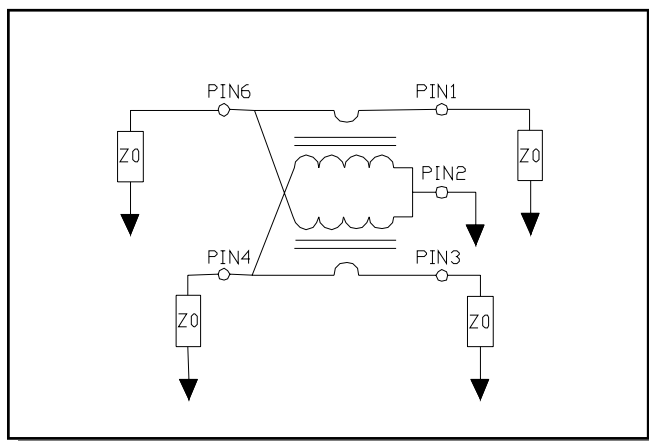
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

## Outline Drawing

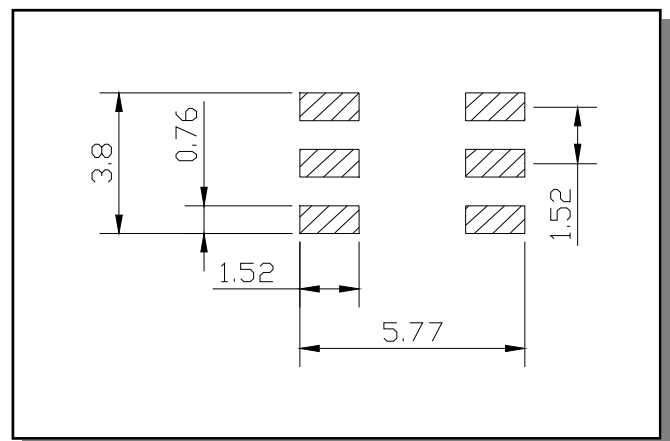


1. Dimensions in mm.
2. Tolerance:  $\pm 0.2\text{mm}$  unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold

## Application Circuit



## Recommended Footprint



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Coupler, 15dB  
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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
Bo	mm	6.4
Ko	mm	3.2
Orientation	-	F45
Reference Application Note ANI-019 for orientation		

## Ordering Information

Part Number	Description
MACP -010382-CF0A40	Tape & Reel
MACP -010382-CF0ATB	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	datasheet	20101170
V2	07 Oct, 2010	component outline drawing corrected	20101613

4

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