

# MACP-010383-CH0A40

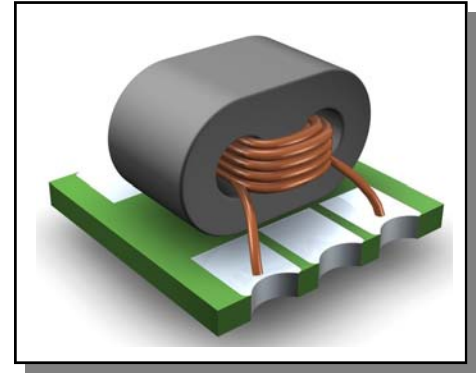


Coupler, 17dB  
4 MHz - 862 MHz

Rev. V2

## Features

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



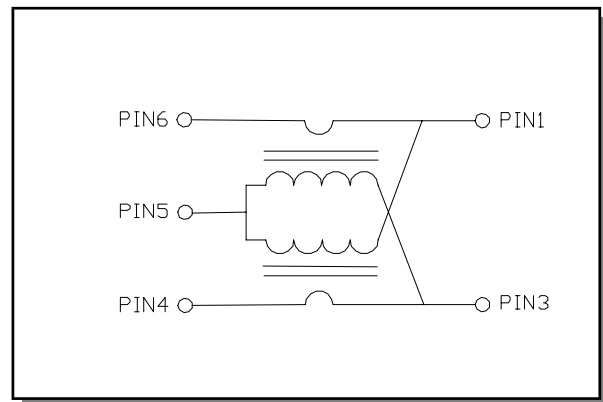
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	4		862
Impedance		$\Omega$	-	75	
Coupling	4 - 862 MHz	dB	-	17	$\pm 1.0$
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	-

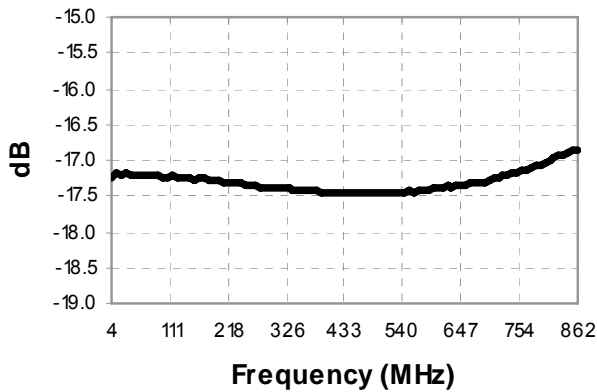
## Pin Configuration

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

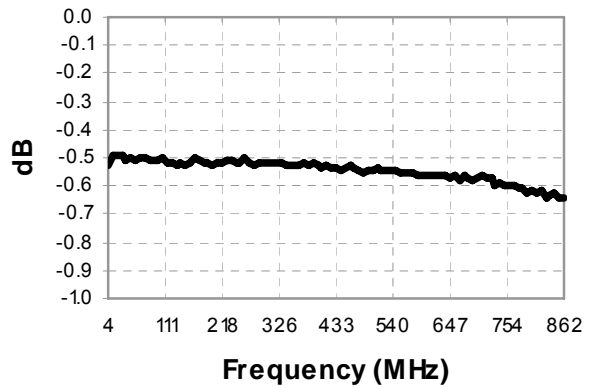
## Schematic



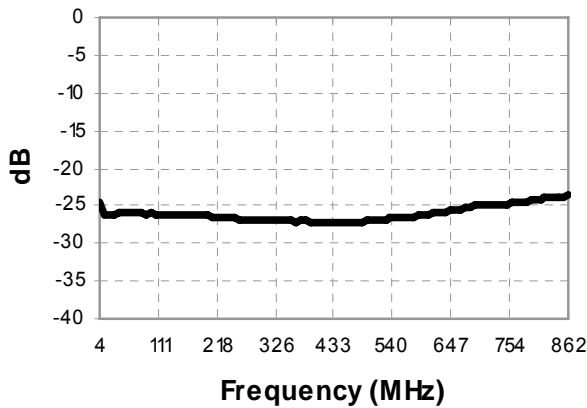
### Coupling:



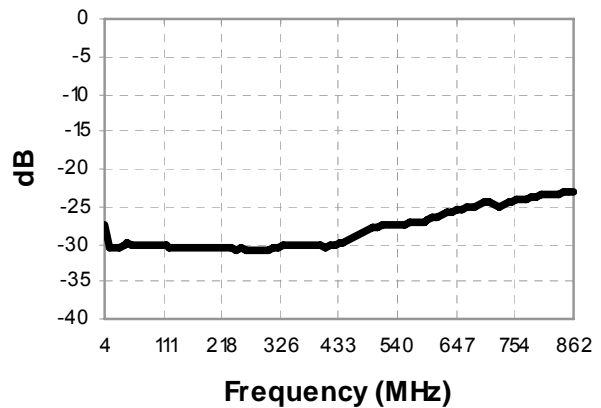
### Main Line Loss:



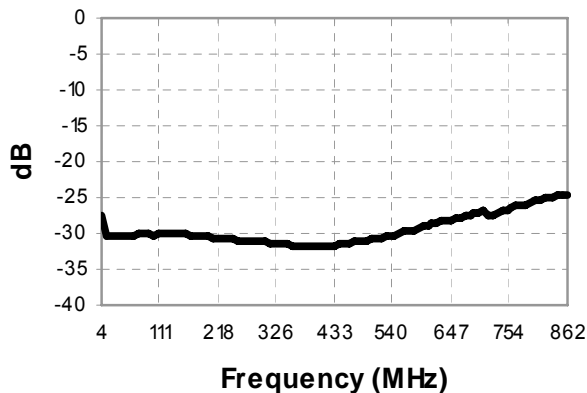
### Return Loss: Input



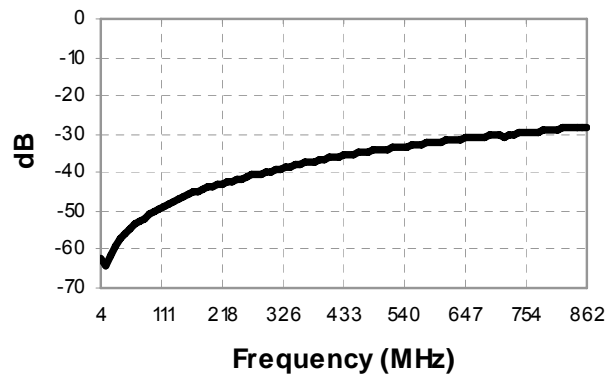
### Return Loss: Output



### Return Loss: Coupled

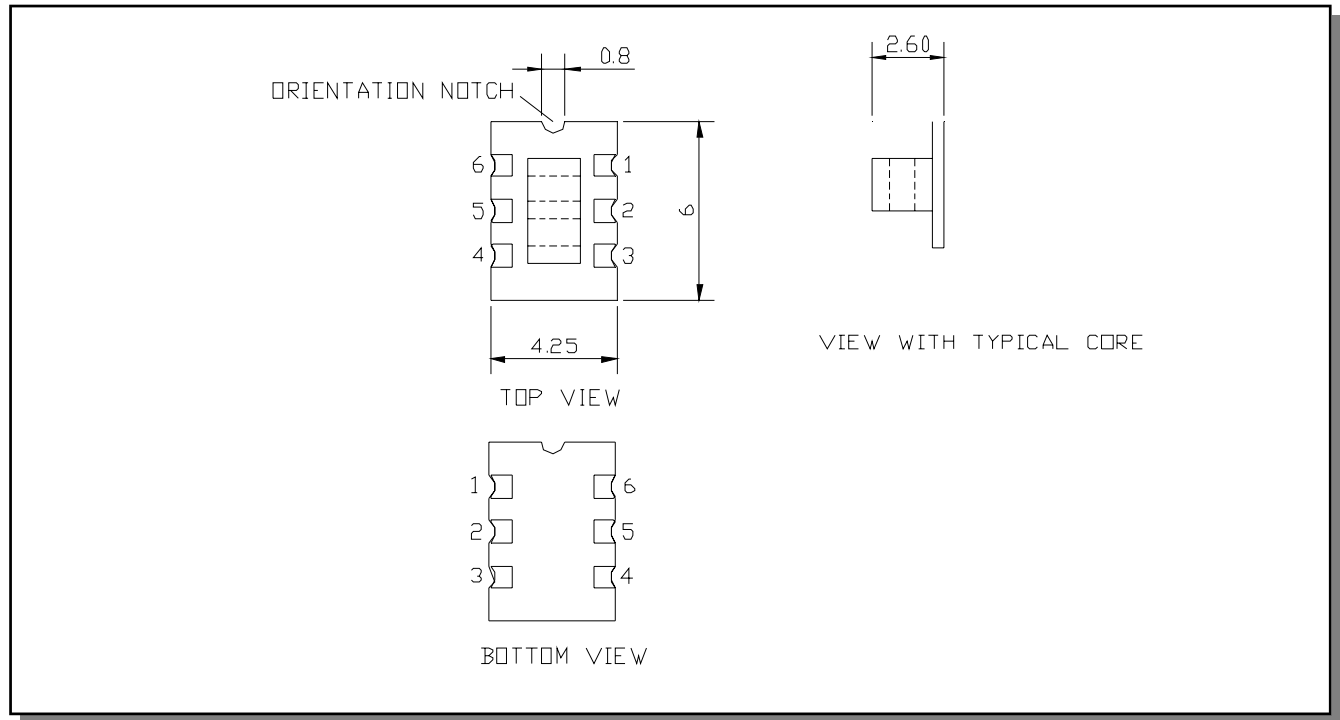


### Isolation:



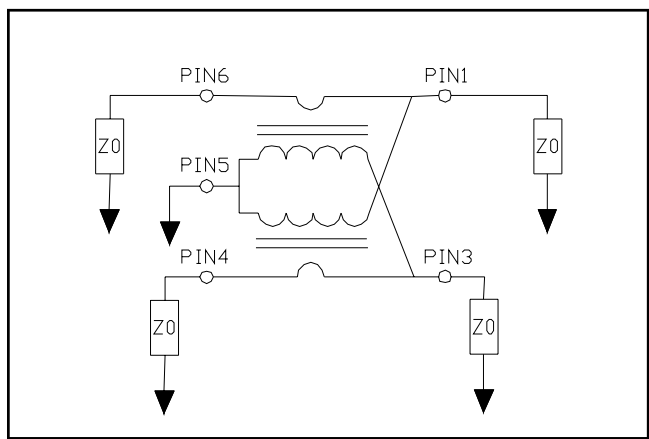
Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

## Outline Drawing

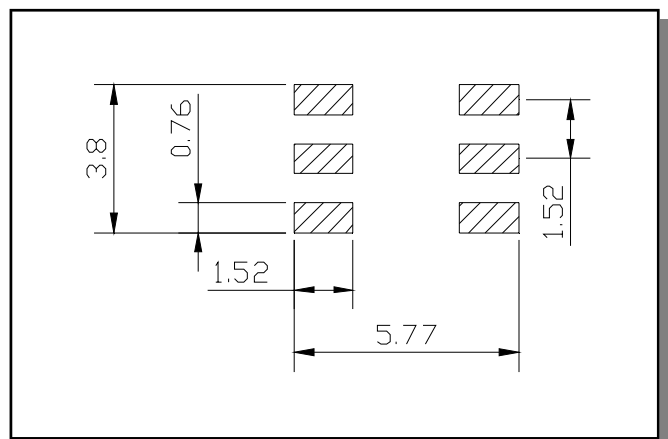


1. Dimensions in mm.
2. Tolerance:  $\pm 0.2\text{mm}$  unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold

## Application Circuit



## Recommended Footprint



## 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-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