

MACP-010382-CF0A40

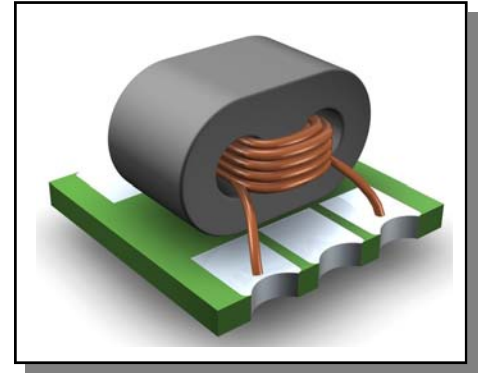


Coupler, 15dB
4 MHz - 862 MHz

Rev. V2

Features

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



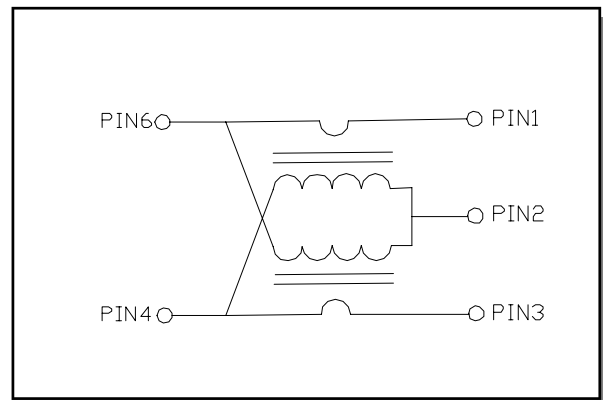
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	4		862
Impedance		Ω	-	75	
Coupling	4 - 862 MHz	dB	-	15	± 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	-

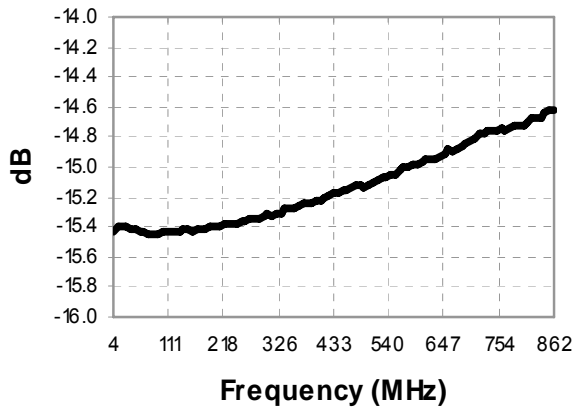
Pin Configuration

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

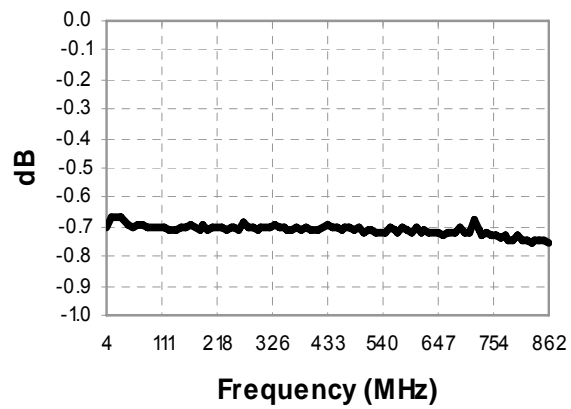
Schematic



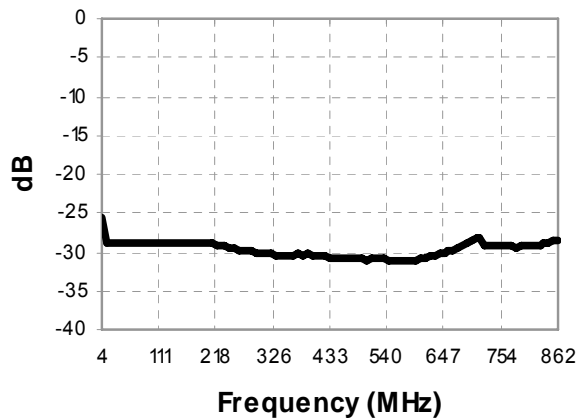
Coupling:



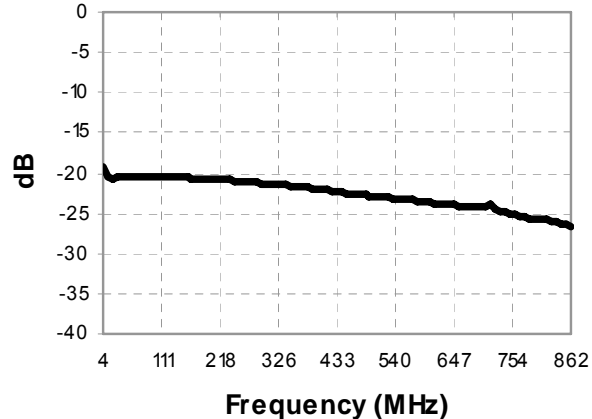
Main Line Loss:



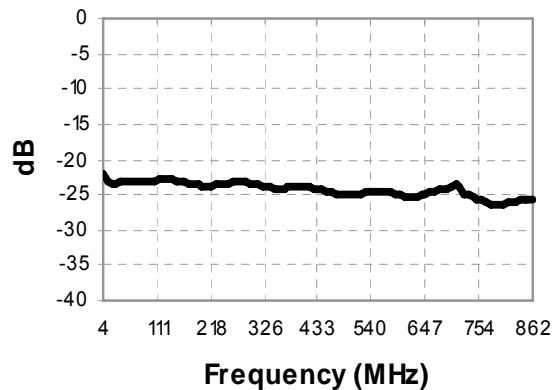
Return Loss: Input



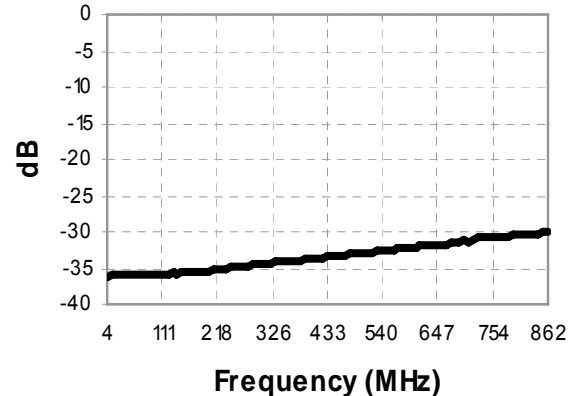
Return Loss: Output



Return Loss: Coupled

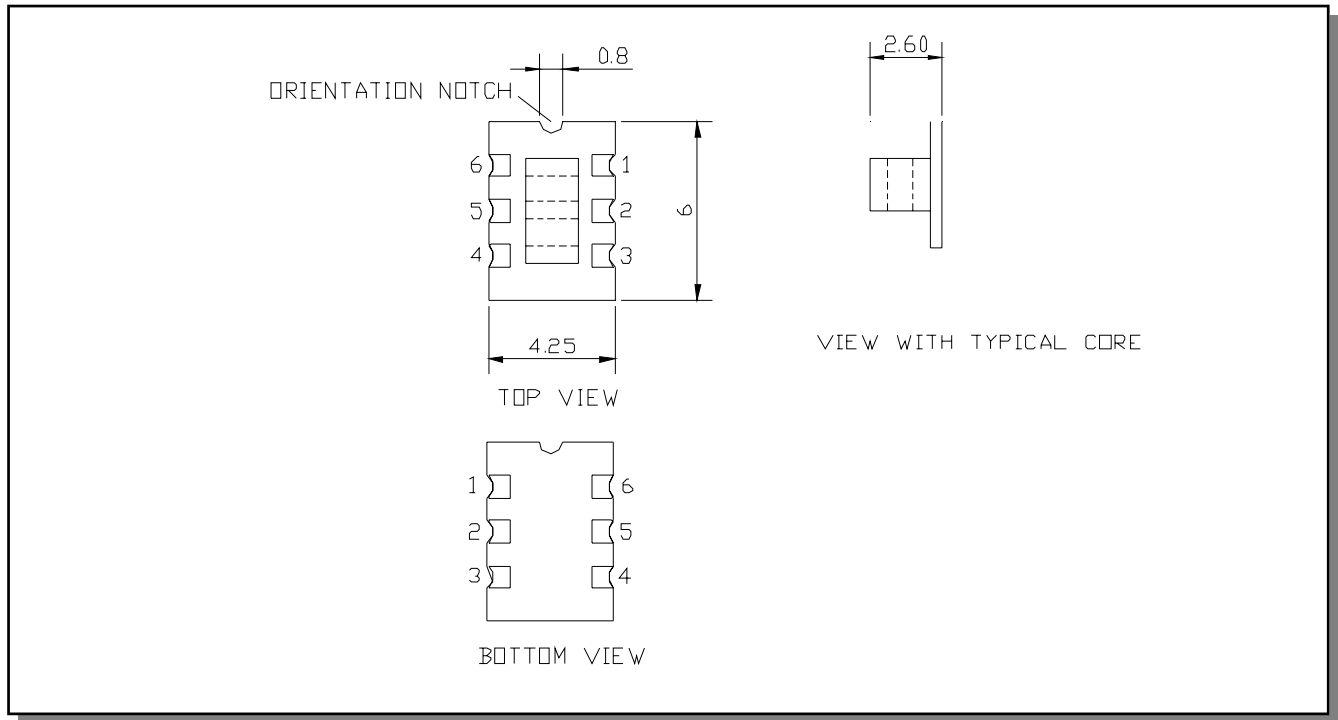


Isolation:



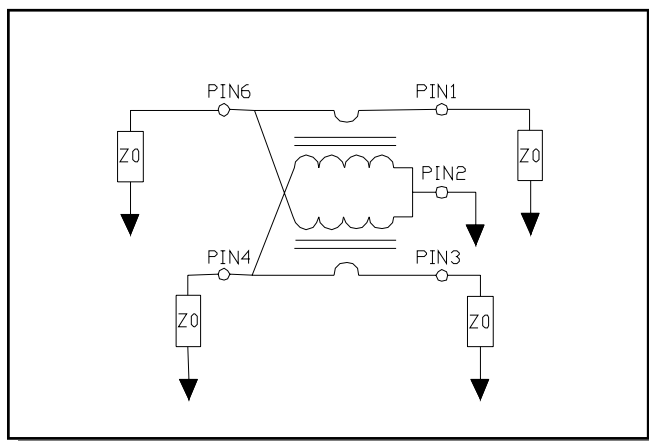
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Outline Drawing

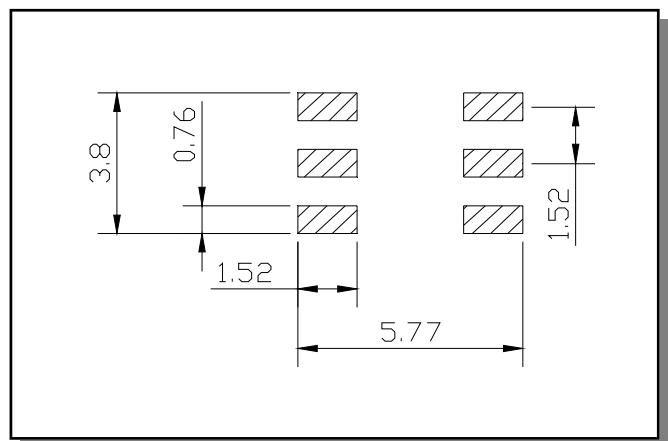


1. Dimensions in mm.
2. Tolerance: $\pm 0.2\text{mm}$ unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold

Application Circuit



Recommended Footprint



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Coupler, 15dB
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
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

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