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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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10 dB Coupler 5 - 1225 MHz

Rev. V2

Features

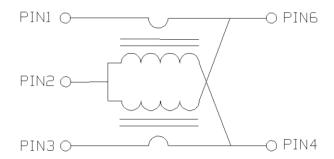
- 10 dB Coupling Ratio
- Surface Mount
- · Available on Tape and Reel
- Excellent Temperature Stability
- · RoHS Compliant and lead free
- 260°C Reflow Compatible



The MACP-011034 is a 10 dB coupler in a low cost, surface mount package. Ideally suited for broadband CATV applications.



Functional Schematic



Ordering Information

Part Number	Description	
MACP-011034	900 piece reel	
MACP-011034-TB	Sample Test Board	

Pin Configuration

Pin No.	Function	
1	Input	
2	Ground	
3	Coupled	
4	Isolated	
5	Not Connected	
6	Output	



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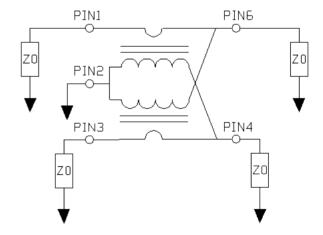
Electrical Specifications: Freq. = 5 - 1225 MHz, T_A = 25°C, Z_0 = 75 Ω , P_{in} = 0 dBm

Parameter	Conditions	Units	Min.	Тур.	Max.
Coupling Ratio	_	dB	_	10	_
Coupling (Pin 1- Pin 3)	5 - 1225 MHz	dB	10.6	10.0	9.4
Main Line Loss (Pin 1- Pin 6)	5 - 1000 MHz 1000 - 1225 MHz	dB		1.35 1.65	1.5 1.8
Isolation (Pin 1- Pin 4)	5 - 500 MHz 500 - 1225 MHz	dB	28 19	30 21	_
Input Return Loss (Pin 1)	5 - 500 MHz 500 - 1225 MHz	dB	17 12	19 15	_
Output Return Loss (Pin 6)	5 - 500 MHz 500 - 1225 MHz	dB	17 12	20 14	_
Coupling Return Loss (Pin 3)	5 - 50 MHz 50 - 1225 MHz	dB	11 15	13 17	_

Absolute Maximum Ratings

Parameter	Absolute Maximum
Input Power	0.5 W
DC Current	500 mA
Operating Temperature	-40°C to +85°C

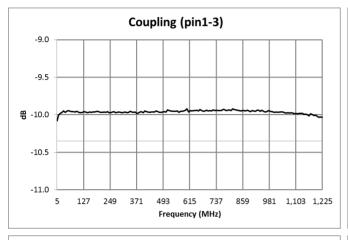
Application Schematic

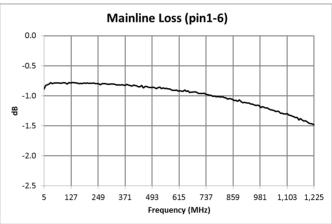


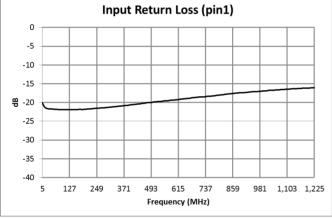


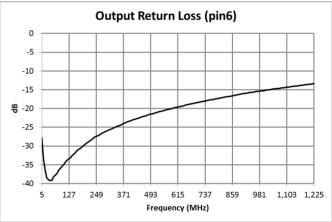
10 dB Coupler 5 - 1225 MHz Rev. V2

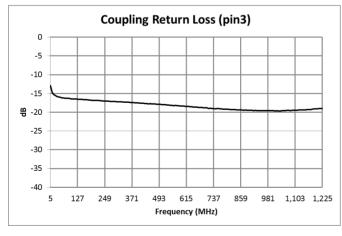
Typical Performance Curves¹

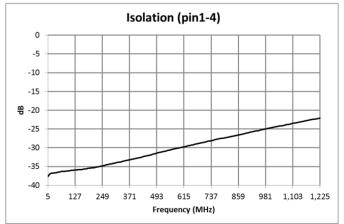










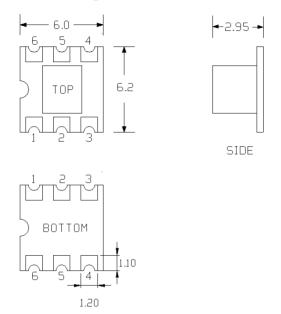


1. Full temperature plots available on request.

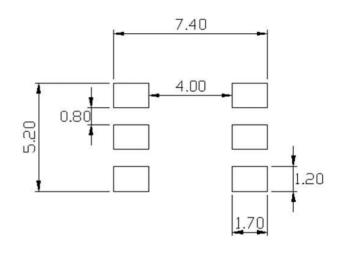


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Outline Drawing

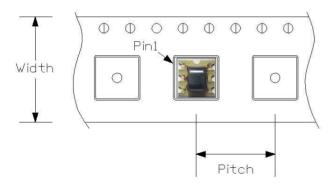


PCB Layout



- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code printed on reel.
- 4. Plating finish: ENIG on both sides, 0.05 to 0.1 μm gold over 3 to 6 μm nickel

Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value		
Qty per reel	-	900		
Reel Size	mm	330		
Tape Width	mm	16.00		
Pitch	mm	12.00		
Orientation	-	F45		
Reference Application Note ANI-019 for orientation				

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MACP-011034



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