

Coupler 8dB 5 to 1200 MHz

Rev. V1

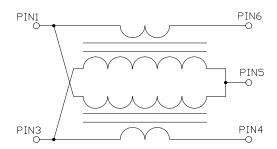
Features

- Surface Mount
- Typical Coupling 8dB
- 260°C Reflow Compatible
- RoHS* Compliant and lead free
- Available on Tape and Reel.
- Stable over large temperature range.

Description

M/A-COM Tech's MACP-010250-C808A0 is a 8dB broadband Coupler in a low cost, surface mount package. It offers low loss, good Isolation, good input/output matching and exceptional coupling repeatability. Ideally suited for high volume CATV/ Broadband applications.



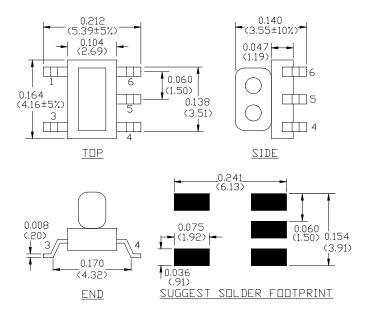




Pin Configuration

Pin no.	Function	
1	Output	
3	Isolation (External 75 Ohm Load)	
4	Coupling	
5	Ground	
6	Input	

Component Dimensions



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010, unless otherwise stated

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

Visit www.macomtech.com for additional data sheets and product information.

^{*} Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.



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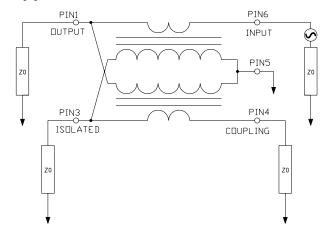
Electrical Specifications: $T_A = 25$ °C, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

Parameter	Test Conditions	Units	Min	Тур	Max
Coupling (Pin 6 to Pin 4)	5- 1200 MHz	dB	-	8.5	±0.8
Main Line Loss (Pin 6 to Pin 1)	5 - 500 MHz 500 - 1200 MHz	dB dB	-	1.6 1.7	1.8 2.3
Return Loss: Input (Pin 6)	5 - 1200MHz	dB	14	19	-
Return Loss: Output (Pin 1)	5 - 1200MHz	dB	18	35	-
Return Loss: Coupling (Pin 4)	5 - 1200MHz	dB	14	18	-
Return Loss: Isolation (Pin 3)	5 -1200MHz	dB	18	32	-
Isolation (Pin 6 to Pin 3)	5 - 250 MHz 250 - 1200 MHz	dB dB	25 18	27 24	-

Recommended Maximum Ratings

Parameter	Value
Parameter	value
Input power	At least +28dBm (631mW)
DC current (tested at 5V)	At least 600mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

Application Circuit



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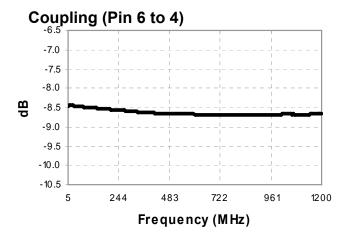
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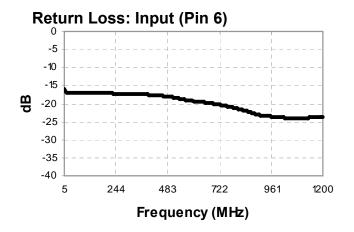
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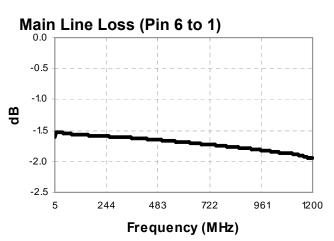


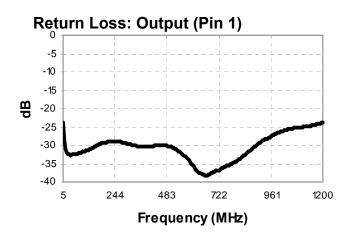
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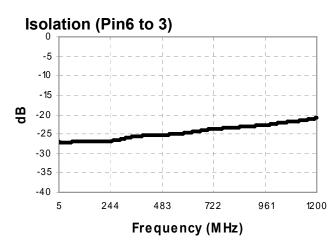
Typical Performance Curves: $T_A = 25^{\circ}C$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm



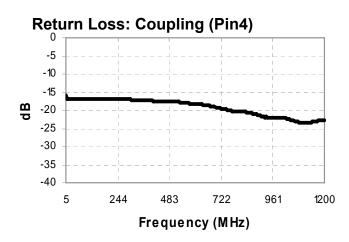








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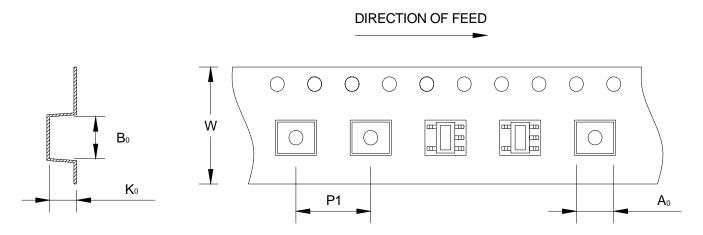
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Tape & Reel Information



Item	Dimension	
Ao	5.9mm +/- 0.1mm	
Во	4.55mm +/- 0.1mm	
Ko	3.8mm +/- 0.1mm	
W	12.0mm +/- 0.3mm	
P1	8.00mm +/- 0.1mm	

Ordering Information

Part number	Description
MACP-010250-C808A0	2000 piece reel
MACP-010250-C808TB	Customer Test Board

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