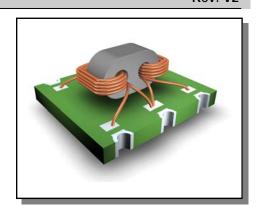


Coupler, 8dB 5 MHz - 1200 MHz

Rev. V2

Features

- ♦ 8dB coupling Typical
- ♦ Surface mount
- ♦ Available on tape and reel
- ◆ Low Profile
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability
- ◆ All wires welded to substrate

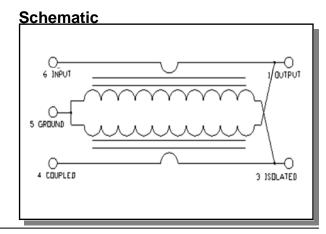


Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Coupling Ratio		dB		8	
Main Line Loss (Pin6 - Pin1)	5 – 870MHz 870 – 1002 MHz 1002 - 1200 MHz	dB dB dB	2.0 2.3 2.6	1.5 1.85 2.1	- - -
Coupling (Pin6 - Pin4)	5 – 1002MHz 1002 – 1200 MHz	dB dB	8.5 8.7	8.0 8.0	7.5 7.3
Coupling Flatness	5 - 1200 MHz	dB	-	0.5	0.8
Directivity	5 - 870 MHz 870 - 1200 MHz	dB dB	-	17.5 12.8	11.0 9.0
Return Loss: Input (Pin6)	5 - 50 MHz 50 - 1200 MHz	dB dB	17 16.5	18 18.7	-
Return Loss: Output (Pin1)	5 - 50 MHz 50 - 870 MHz 870 - 1200 MHz	dB dB dB	23 20 20	31.3 33.5 32.0	-
Return Loss: Coupling (Pin4)	5 - 1200 MHz	dB	16	18.5	-

Pin Configuration

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



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

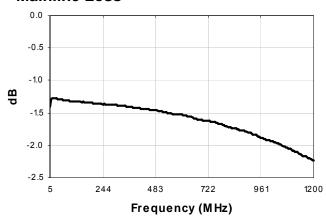
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



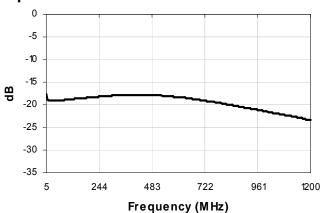
Coupler, 8dB 5 MHz - 1200 MHz

Rev. V2

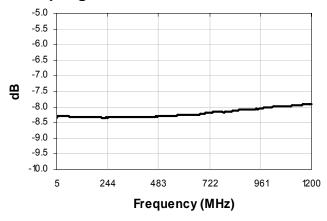
Mainline Loss



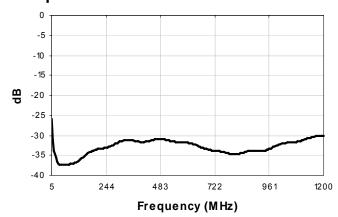
Input Return Loss



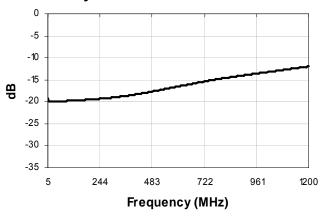
Coupling



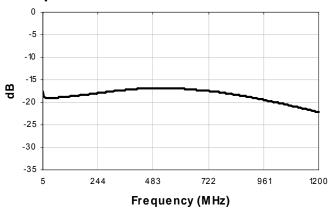
Output Return Loss



Directivity



Coupled Return Loss



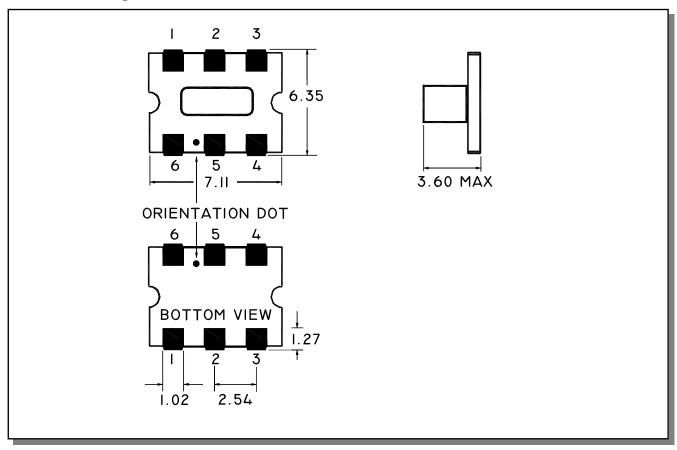
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25$ °C, $P_{in} = 0$ dBm



Coupler, 8dB 5 MHz - 1200 MHz

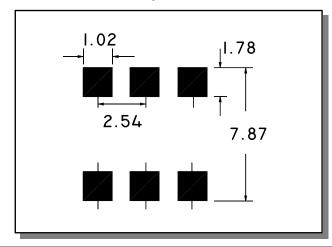
Rev. V2

Outline Drawing



- 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

Recommended Footprint



typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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Coupler, 8dB 5 MHz - 1200 MHz

Rev. V2

Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel size	mm	330
Tape width (W)	mm	16.0
Pitch (P ₁)	mm	12.0
A ₀	mm	6.7
B ₀	mm	7.4
K ₀	mm	3.1
Orientation	-	F15

Reference Application note ANI-019 for orientation

Ordering Information

Part Number	Description
MACP-010446-C80370	Tape & Reel
MACP-010446-C803TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		30
Operating Temperature Range	°C	-20	+85
Storage Temperature Range	°C	-20	+85

Temperature data available on request

ECO History

Rev	Date	Description	ECO
V1	4 Aug 2010	Released	20100998
V2	21 Sep 2010	Correct typ spec for i/p ret loss: was 1.8 is 18, on page 1/4	20101363

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