

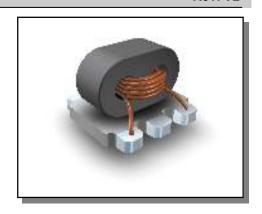
E-Series Coupler
5 to 1000 MHz

RELEASED

Rev. V2

Features

- Surface Mount
- · Typical Coupling 13dB
- · RoHS* Compliant, lead free
- RoHS version of EMDC-13-1-75
- 260°C Reflow Compatible
- · Available on Tape and Reel



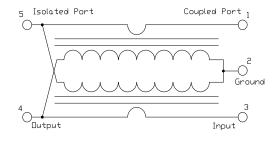
Electrical Specifications@ 25°C

Frequency Range 5 - 1000 MHz	Units	Nominal	Typical	Minimum	Maximum
Mainline Loss					
5 - 50 MHz	dB	_	1.5	_	2.2
50 - 500 MHz	dB	_	1.3	_	2.0
500 - 1000 MHz	dB	_	1.3	_	2.0
Coupling					
5 - 1000 MHz	dB	13 ± 1.1	_	_	_
Coupling Flatness	dB	_	_	_	0.9
Directivity					
5 - 50 MHz	dB	_	25	20	
50 - 500 MHz	dB	_	20	15	_
500 - 1000 MHz	dB	_	13	7	_
Return Loss, all Ports 5 - 1000 MHz	dB	_	14	8	_

Pin Configuration

Pin No.	Function
1	Coupled
2	Ground
3	Input
4	Output
5	External 75 Ω

Schematic



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.



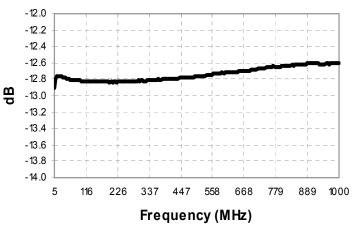
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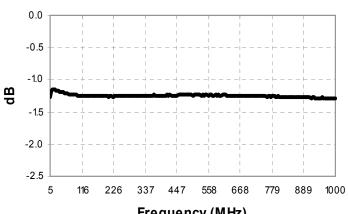
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Typical Performance Curves: $T_A = 25^{\circ}C$, 0dBm, $Z_0 = 75\Omega$, $P_{in} = 0$ dBm

Coupling

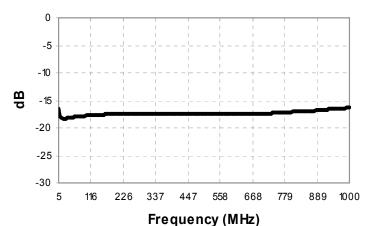


Main Line Loss

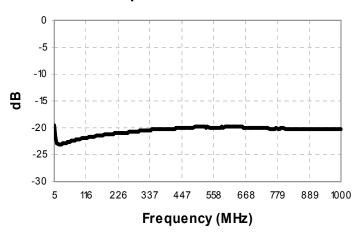


Frequency (MHz)

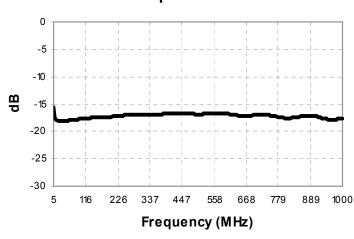
Return Loss: Input



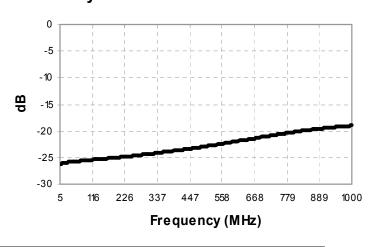
Return Loss: Output



Return Loss: Coupled



Directivity



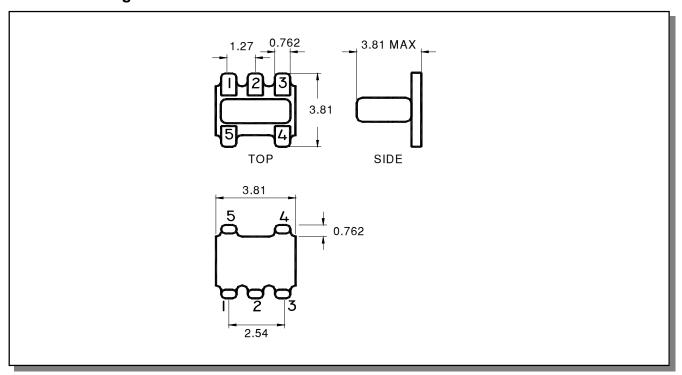
 North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400 India Tel: +91.80.43537383 China Tel: +86.21.2407.1588 Visit www.macomtech.com for additional data sheets and product information.



E-Series Coupler RELEASED 5 to 1000 MHz

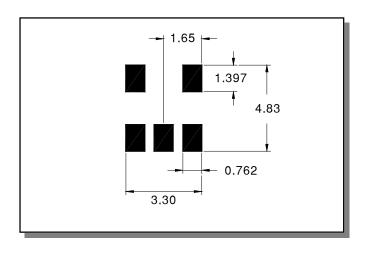
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Outline Drawing



- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- Termination plating is Au.

Recommended Footprint



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RELEASED

Rev. V2

Tape & Reel Information

Parameter	Units	Value	
Qty per reel	-	2000	
Reel Size	mm	330	
Tape Width	mm	12.00	
Pitch	mm	8.00	
Ao	mm	4.00	
Во	mm	4.00	
Ko	mm	2.90	
Orientation	-	F5	
Reference Application Note ANI-019 for orientation			

Ordering Information

Part Number	Description	
MACP-009736-CD0160	2000 piece reel	
MACP-009736-CD01TB	Customer Test Board	

Recommended Maximum Ratings

Parameter	Value	
RF power	250mW	
DC current	30mA	
Operating Temperature	-40°C to +85°C	
Storage Temperature	-40°C to +85°C	

ECO History

Rev	Date	Description	Ву
V2	12 May 2010	Corrected the dimensions on case style drawing and changed to the new format	СВ