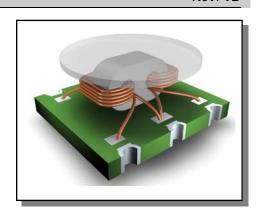


Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

Rev. V2

Features

- ♦ 1:2 impedance ratio
- ♦ Transmission line Transformer
- ◆ Surface mount
- ♦ Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- Excellent temperature stability
- Can be used on 50Ω and 75Ω systems



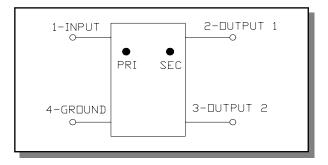
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Impedance Ratio				1:2	
Insertion Loss 1 (Pin 1 to pin 2)	5 - 50 MHz 50 - 1000 MHz 1000 -1200 MHz	dB dB dB	- - -	0.35 0.60 0.60	0.50 1.10 1.40
Insertion Loss 2 (Pin 1 to pin 3)	5 - 50 MHz 50 - 1000 MHz 1000 -1200 MHz	dB dB dB	- - -	0.5 0.9 1.8	0.70 1.50 2.20
Amplitude Balance	5 - 50 MHz 50 - 1000 MHz 1000 - 1200 MHz	dB dB dB	- - -	±0.10 ±0.30 ±0.60	±0.40 ±1.50 ±1.80
Phase Balance	5 - 50 MHz 50 - 1200 MHz	0	-	±0.2 ±3.0	±1.50 ±7.00
Input Return Loss (Pin 1)	5 - 50 MHz 50 - 1000 MHz 1000 - 1200 MHz	dB dB dB	22 14 8	25 22 17	- - -

Pin Configuration

Pin No.	Function	
1	Input (PRI dot)	
2	Output 1 (SEC dot)	
3	Output 2 (SEC)	
4	Ground (PRI)	

Schematic



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

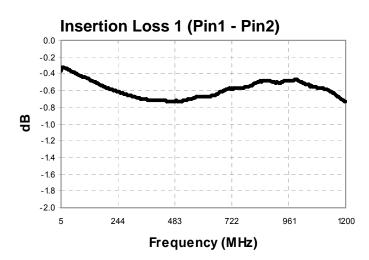
PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in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

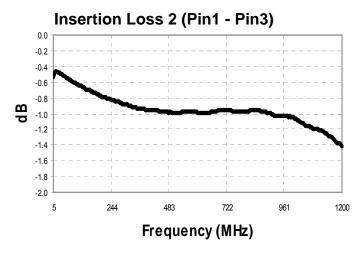
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

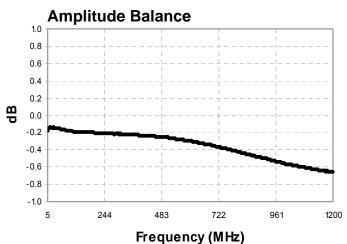


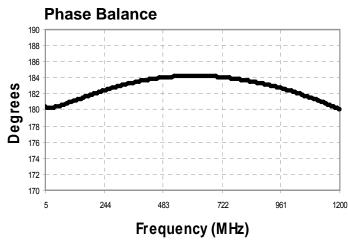
Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

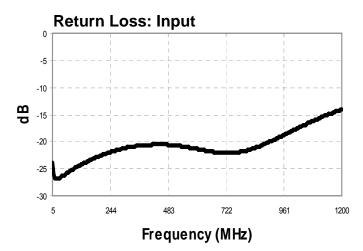
Rev. V2











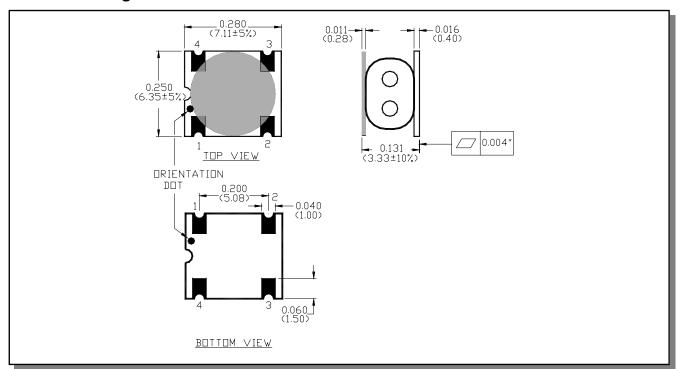
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25$ °C, $P_{in} = 0$ dBm



Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

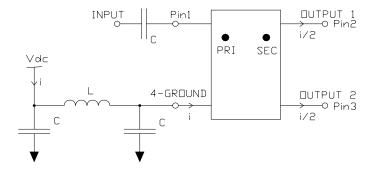
Rev. V2

Outline Drawing



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

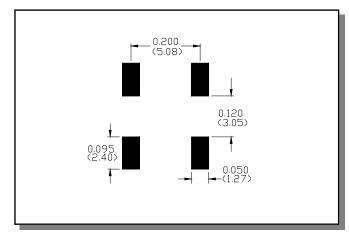
Recommended DC bias circuit



Cap/Ind	5-50MHz	50-1200MHz
С	100nF	10nF
L	10μH	1μH

Commitment to produce in volume is not guaranteed.

Recommended Footprint



typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

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



Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

Rev. V2

Tape & Reel Information

Parameter	Units	Value		
Qty per reel	-	900		
Reel Size	mm	330		
Tape Width	mm	16.00		
Pitch	mm	12.00		
Ao	mm	6.70		
Во	mm	7.50		
Ko	mm	3.60		
Orientation	-	F33		
Reference Application Note ANI-019 for orientation				

Ordering Information

Part Number	Description
MABA-007681-CT2010	Tape & Reel
MABA-007681-CT20TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		600
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

ECO History

Rev	Date	Description	ECO	
V1	30 Jan 2008	Created datasheet	20074250	
V2	11 Jan 2011	Change DC current specification from 30 to 600mA	20102299	

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

MACOM:

MABA-007681-CT2010