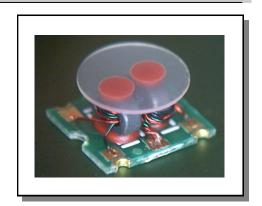


Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

Rev. V3

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
- \bullet Can be used on 50Ω and 75Ω systems



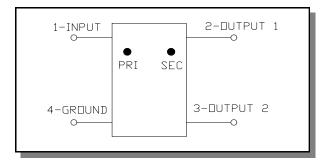
Electrical Specifications: Z_0 = 75 Ω , T_A = 25°C, P_{in} = 0dBm

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.

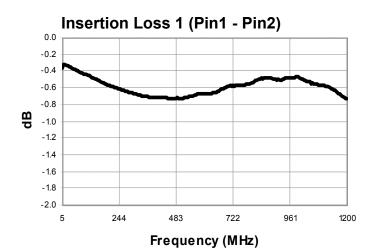
• India Tel: +91.80.43537383

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

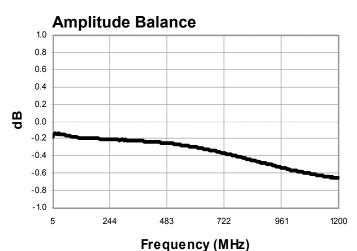


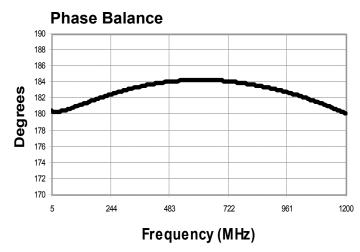
Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

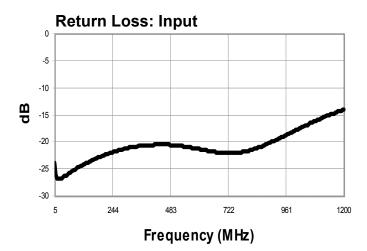
Rev. V3











Electrical Specifications: Z_0 = 75 Ω , T_A = 25 $^{\circ}$ C, P_{in} = 0dBm

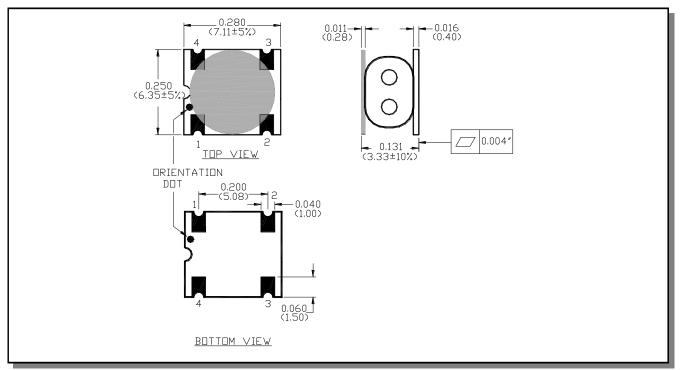
typical. Mechanical outline has been fixed. Engir Commitment to produce in volume is not pure ran Visit www.macomtech.com for additional data sheets and product information.



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

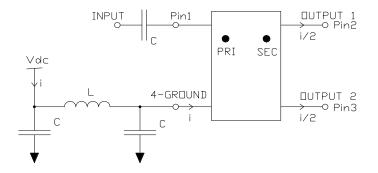
Rev. V3

Outline Drawing



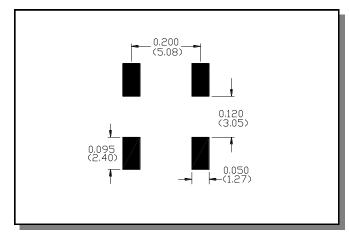
- Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- Plating finish: ENIG on both sides, 0.05 to 0.1 µm gold over 3 to 6 µm nickel

Recommended DC bias circuit



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

Recommended Footprint



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• China Tel: +86.21.2407.1588

Solutions has under development. Performance is based on encome in a test, specification are typical. Mechanical outline has been fixed in Figure 17ng, samples and for test catain ay be available. MA-COM Technology Solutions Ir c. and its affiliates reserve the right to make changes of the product (s) of information can ained herein without notice. typical. Mechanical outline has been fixed. Endineding samples Commitment to produce in volume is not pulsabled.



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

Rev. V3

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

Solutions has under development. Performance is based on engineering less a Spriftigation are typical. Mechanical outline has been fixed. Englineering samples and/or test catain ay be available Commitment to produce in volume is not subrapted.