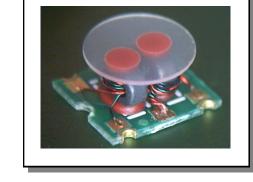
Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

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



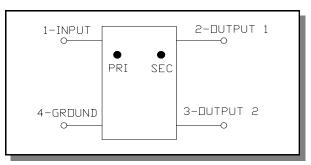
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^{\circ}C$, $P_{in} = 0dBm$

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		±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



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typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed. M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

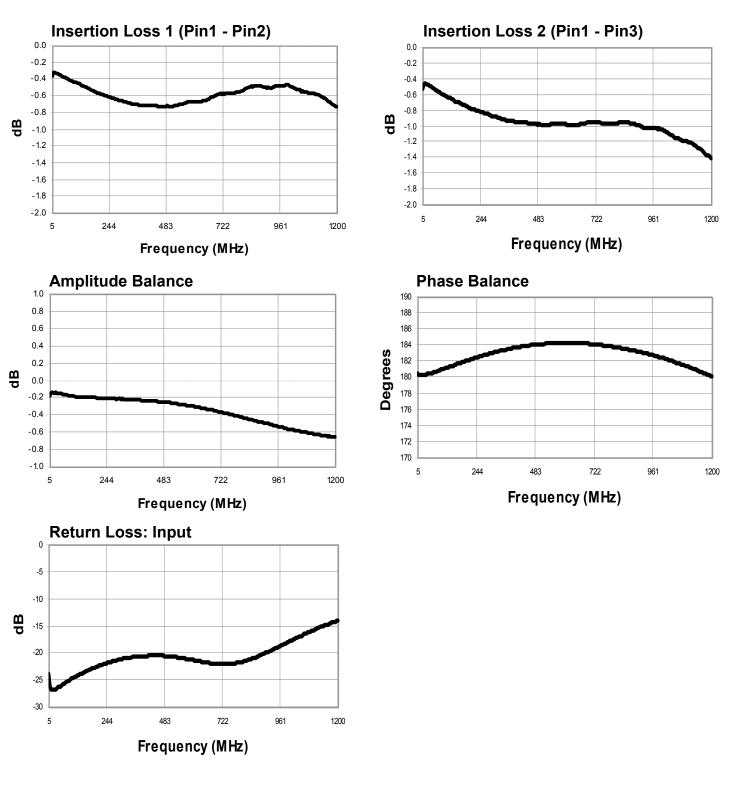


Rev. V3

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



Rev. V3



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

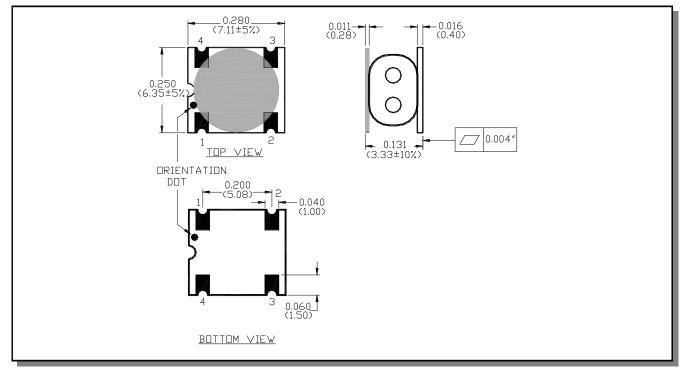
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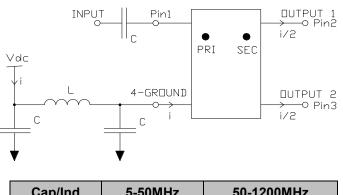
Transformer, 1:2 Transmission Line Balun 5 MHz - 1200 MHz

Outline Drawing



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

Recommended DC bias circuit



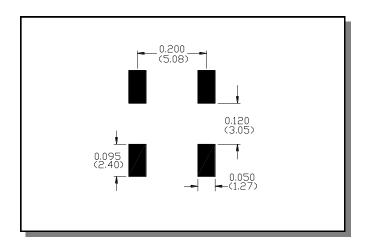
Cap/Ind	5-50MHz	50-1200MHz	
С	100nF	10nF	
L	10µH	1µH	

3

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Recommended Footprint



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Rev. V3





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

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