

RoHS Compliant



MABACT0066 V1P

4:1 Transmission Line Transformer 5-1000MHz

Features

- Surface Mount
- 4:1 Impedance
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABAES0054
- Available on Tape and Reel. Reel quantity 2000

Description

M/A Com's MABACT0066 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.

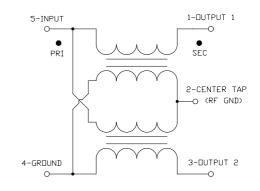


Pin Configuration

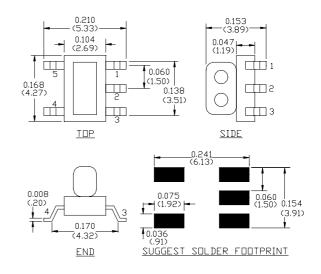
Pin No.	Function		
1	Secondary Dot (output 1)		
2	Centre Tap (ground)		
3	Secondary (output 2)		
4	Primary (Input)		
5	Primary Dot (Ground)		

Note: Reference Application Note M513 for reel size information.

Schematic



Case Style: SM-138



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Ordering Information

Part Number	Package		
MABACT0066TR	2000 piece reel		
MABA-007968-CT66TB	Customer Test Board		

^{*} Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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- North America Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- Asia/Pacific Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.



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Electrical Specifications: $T_A = 25$ °C, $Z_0 = 50\Omega$

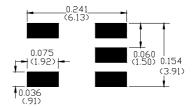
Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 50 MHz 50 - 879 MHz 879 - 1000 MHz	dB		1.5 1.0 1.5	2.0 1.5 2.0
Amplitude Unbalance (Nominal 0dB)	5 - 1000 MHz	dB	-	±0.25	±0.5
Phase Unbalance (Nominal 180º)	5 - 500 MHz 500 - 1000 MHz	0	-	±4.0 ±8.0	±8.0 ±12.0

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum		
Max Input Power	250mW		
DC current	40mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		

- 1. Exceeding any one or combination of these limits may cause permanent damage to this device.
- 2. M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration



²

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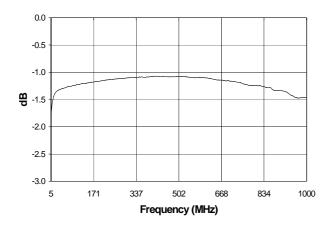


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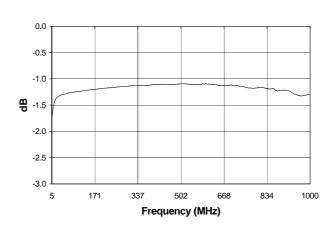
4:1 Transmission Line Transformer 5-1000MHz

Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 50\Omega$

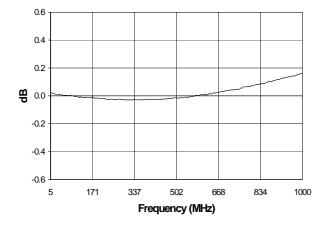
Insertion Loss 1 (through pin 4 to pin 1)



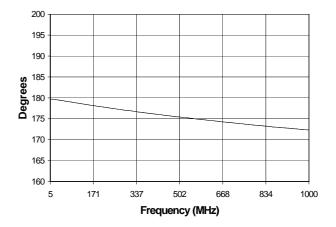
Insertion Loss 2 (coupled pin 4 to pin 3)



Amplitude Unbalance



Phase Balance



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