

RoHS Compliant



MABACT0068 V₁P

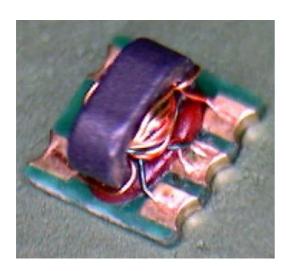
2:1 Flux Coupled Transformer 5-200MHz

Features

- Surface Mount
- 2:1 Impedance
- Excellent amplitude and phase balance
- 260°C Reflow Compatible
- RoHS* Compliant
- Available on Tape and Reel. Reel quantity 2000

Description

M/A-COM's MABACT0068 is a 2:1 RF Flux Coupled balun transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications. Suitable for use in 50 and 75 Ohm systems.

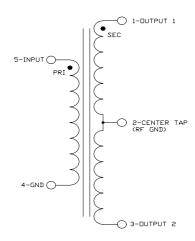


Pin Configuration

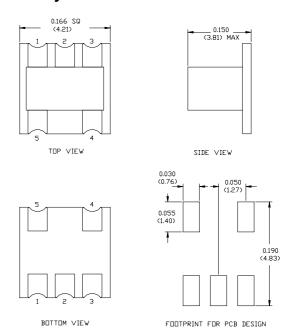
Pin No.	Function	
1	Secondary Dot (output 1)	
2	Centre Tap (ground)	
3	Secondary (output 2)	
4	Primary (Ground)	
5	Primary Dot (Input)	

Note: Reference Application Note M513 for reel size information.

Schematic



Case Style: SM-164



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

Ordering Information

Part Number	Package		
MABACT0068TR	2000 piece reel		

- * Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.
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 - products for any particular purpose, nor does M/A-COM assume any liability whatsoever arising out of the use or application of any product(s) or information.
- 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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2:1 Flux Coupled Transformer 5-200MHz

MABACT0068 V1P

Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega$

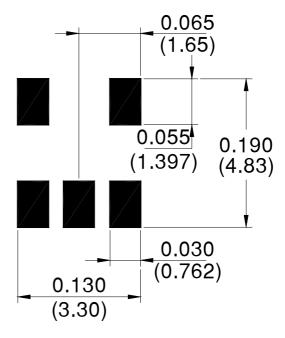
Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 65 MHz	dB	-	0.3	0.5
Insertion Loss	65 - 200 MHz	dB	-	0.4	0.9
Amplitude Unbalance (Nominal 0dB)	5 - 65 MHz	dB	-	±0.02	± 0.15
Phase Unbalance (Nominal 180º)	5 - 50 MHz	0	-	±0.00	± 2.00
Input Return Loss	5 - 200 MHz	dB	18	22	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum		
Max Input Power	250mW		
DC current	240mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-55°C to +100°C		

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

Recommended PCB Configuration



[•] Europe Tel: 44.1908.574.200 / Fax: 44.1908.574.300

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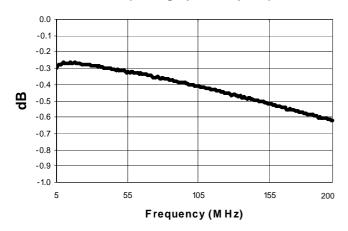


2:1 Flux Coupled Transformer 5-200MHz

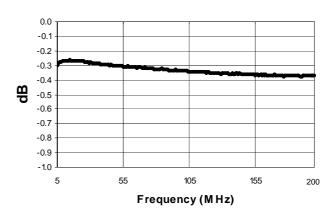
MABACT0068 V1P

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

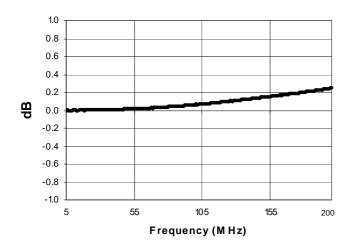
Insertion Loss 1 (through pin 5 to pin 1)



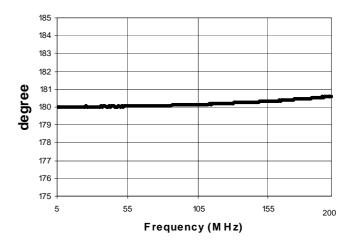
Insertion Loss 2 (coupled pin 5 to pin 3)



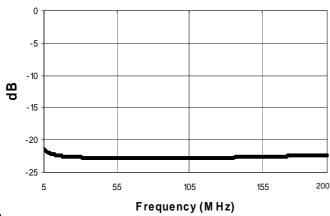
Amplitude Unbalance



Phase Balance



Input Return Loss



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