



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**4:1 Flux Coupled Transformer  
1-350MHz**

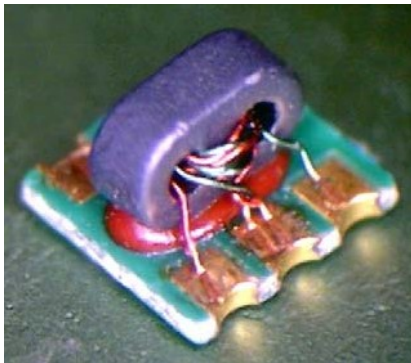
**MABACT0067  
V1P**

**Features**

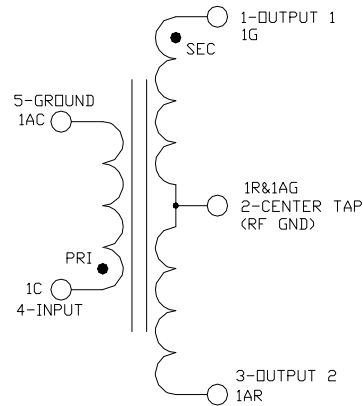
- Surface Mount
- 4:1 Impedance
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems
- 260°C Reflow Compatible
- RoHS\* Compliant
- Available on Tape and Reel. Reel quantity 2000

**Description**

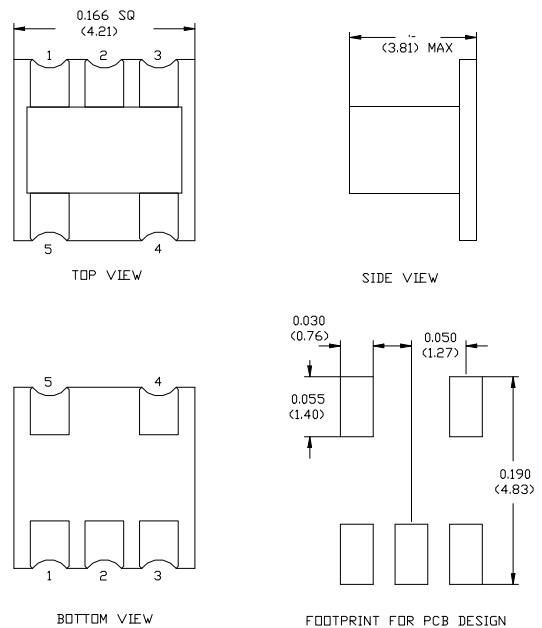
M/ACom's MABACT0067 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



**Schematic**



**Case Style: SM-164**



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

**Pin Configuration**

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

Note: Reference Application Note **M513** for reel size information.

**Ordering Information**

Part Number	Package
MABACT0067TR	2000 piece reel

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

**4:1 Flux Coupled Transformer  
1-350MHz**

**MABACT0067  
V1P**

**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$**

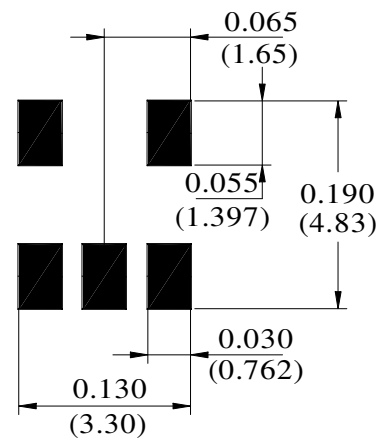
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss 1 (pin 4-1)	1 - 5 MHz	dB	-	1.6	2.0
	5 - 200 MHz		-	0.9	1.0
	200 - 350 MHz		-	1.0	1.5
Insertion Loss 2 (pin 4-3)	1 - 5 MHz	dB	-	1.5	2.0
	5 - 150 MHz		-	0.9	1.0
	150 - 350 MHz		-	1.1	1.5
Amplitude Unbalance (Nominal 0dB)	1 - 250 MHz	dB	-	$\pm 0.1$	$\pm 0.2$
	250 - 350 MHz		-	$\pm 0.2$	$\pm 0.3$
Phase Unbalance (Nominal 180°)	1 - 150 MHz	°	-	$\pm 1.0$	$\pm 2.0$
	150 - 350 MHz		-	$\pm 2.0$	$\pm 5.0$
Input Return Loss	1 - 5 MHz	dB	10	12	-
	5 - 200 MHz		15	19	-
	200 - 350 MHz		11	14	-

**Absolute Maximum Ratings <sup>1,2</sup>**

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

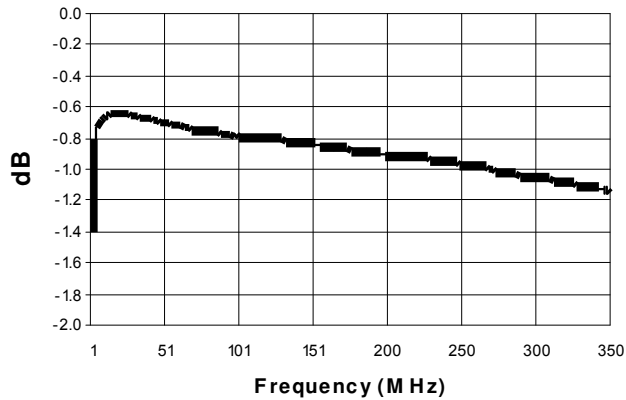


**4:1 Flux Coupled Transformer  
1-350MHz**

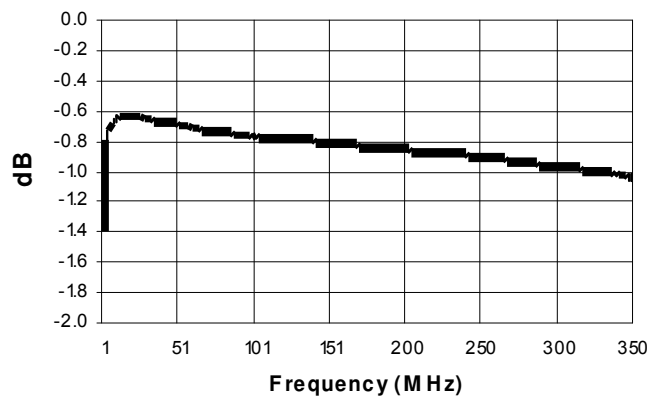
**MABACT0067  
V1P**

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

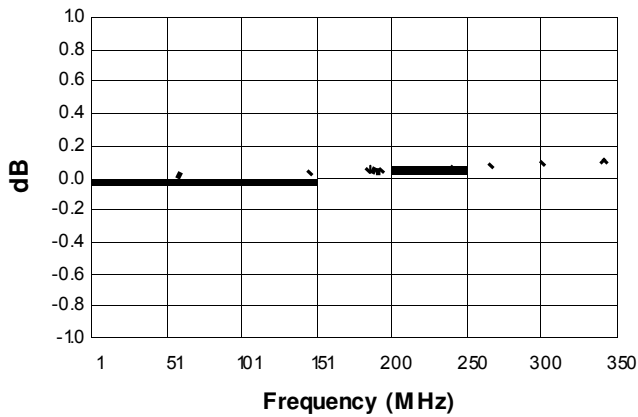
**Insertion Loss 1 (pin 4 to pin 1)**



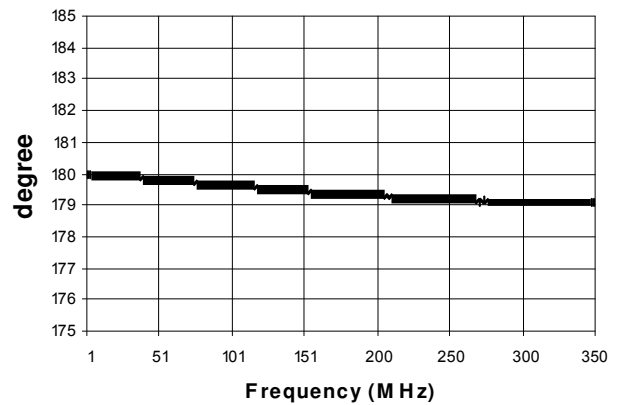
**Insertion Loss 2 (pin 4 to pin 3)**



**Amplitude Unbalance**



**Phase Balance**



**Input Return Loss**

