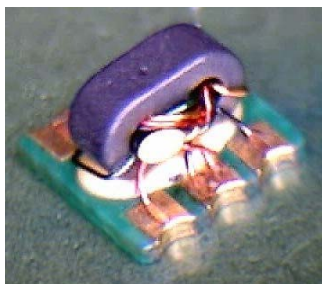


**1:1 Flux Coupled Transformer**  
**0.3-200MHz**
**MABACT0071**  
**V2P**
**Features**

- Surface Mount
- 1:1 Impedance
- Centre tap on secondary
- 260°C Reflow Compatible
- RoHS\* Compliant
- Available on Tape and Reel. Reel quantity 2000

**Description**

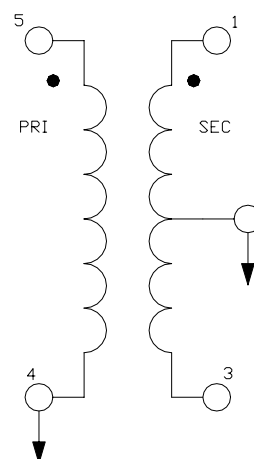
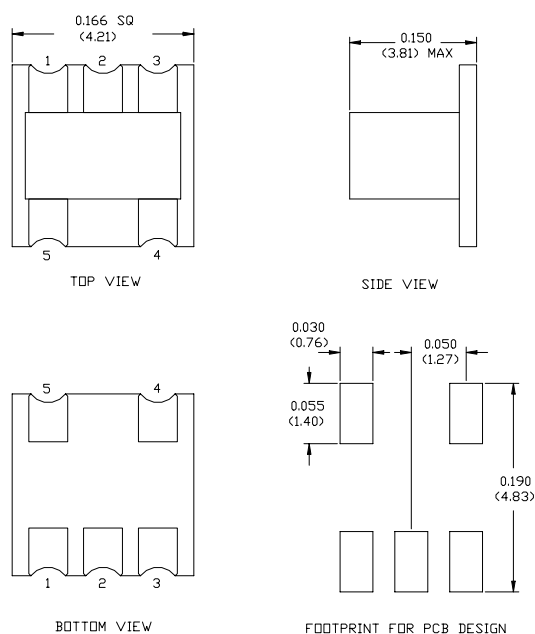
M/A-COM's MABACT0071 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.


**Pin Configuration**

Pin No.	Function
1	Secondary Dot
2	Secondary centre tap
3	Secondary
4	Primary
5	Primary Dot

**Ordering Information**

Part Number	Package
MABACT0071TR	2000 piece reel

**Schematic**

**Case Style: SM-164**


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

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

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

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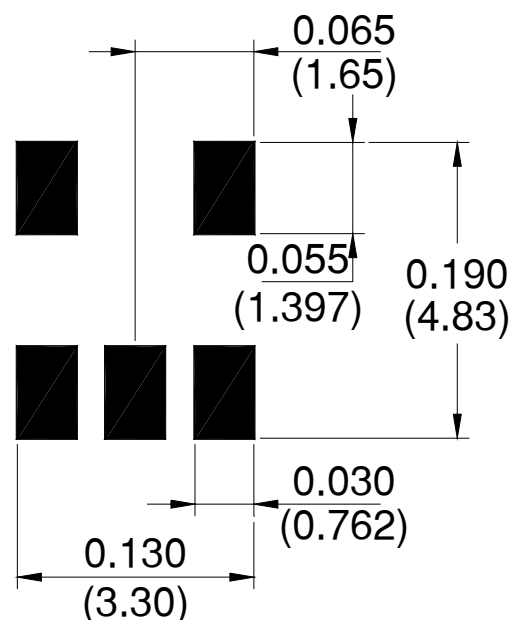
**1:1 Flux Coupled Transformer**  
**0.3-200MHz**
**MABACT0071**  
**V2P**
**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$ <sup>1</sup>**

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss (Pin 1-5)	-	0.3 - 5 MHz	dB	-	1.0	2.6
Insertion Loss (Pin 1-5)	-	5 - 200 MHz	dB	-	0.5	0.9
Insertion Loss (Pin 3-5)	-	0.3 - 10 MHz	dB	-	1.0	2.6
Insertion Loss (Pin 3-5)	-	10 - 200 MHz	dB	-	0.4	0.75
Amplitude Unbalance (Nominal 0dB)	-	0.3 - 200 MHz	dB	-	±0.1	±0.3
Phase Unbalance (Nominal 180°)	-	0.3 - 200 MHz	°	-	±0.3	±3.0
Input Return Loss	-	0.3 - 5 MHz	dB	5	13	-
Input Return Loss	-	5 - 120 MHz	dB	19	27	-
Input Return Loss	-	120 - 200 MHz	dB	15	21	-

**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

- 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**


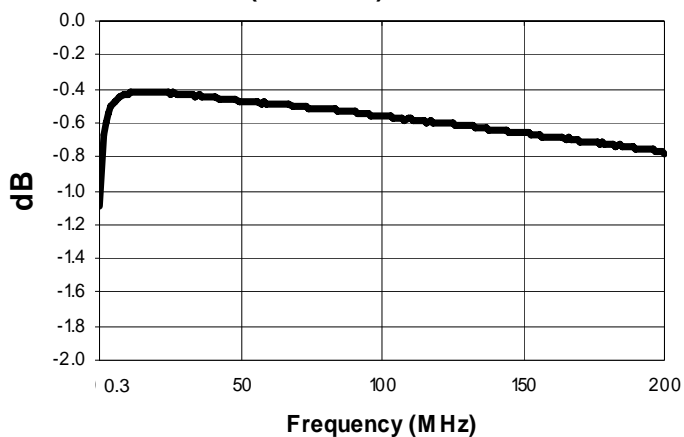
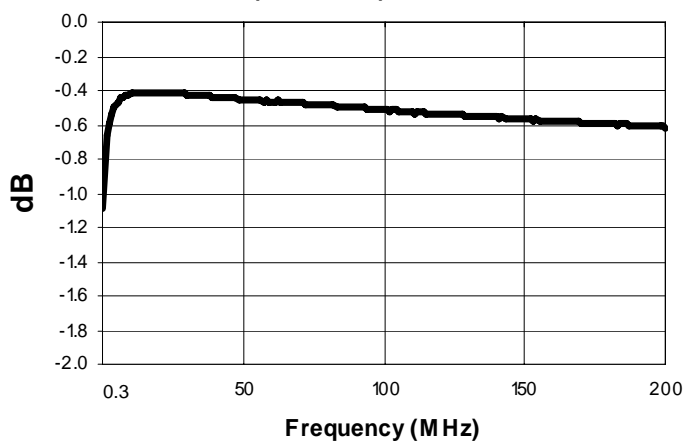
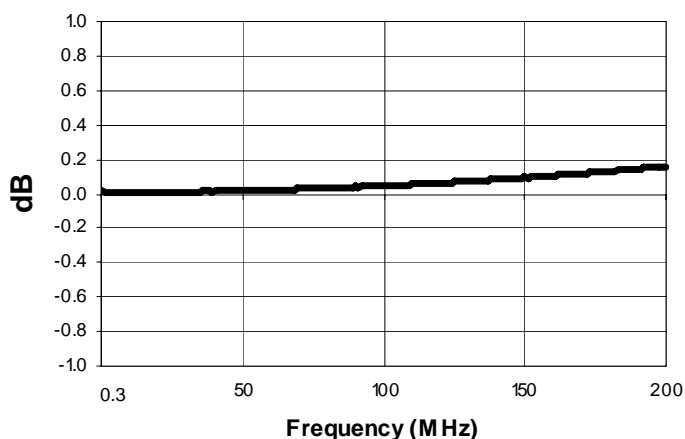
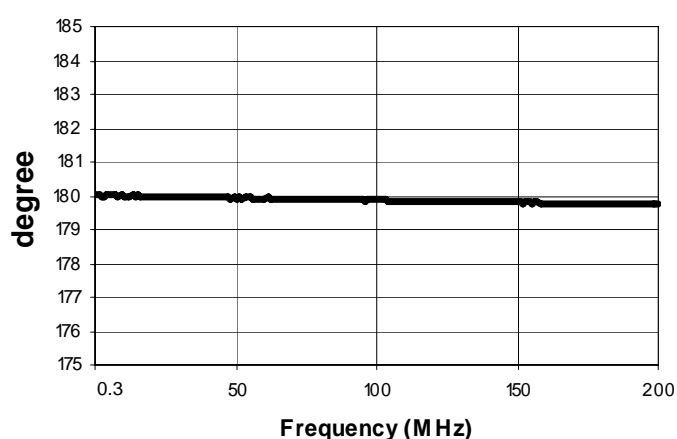
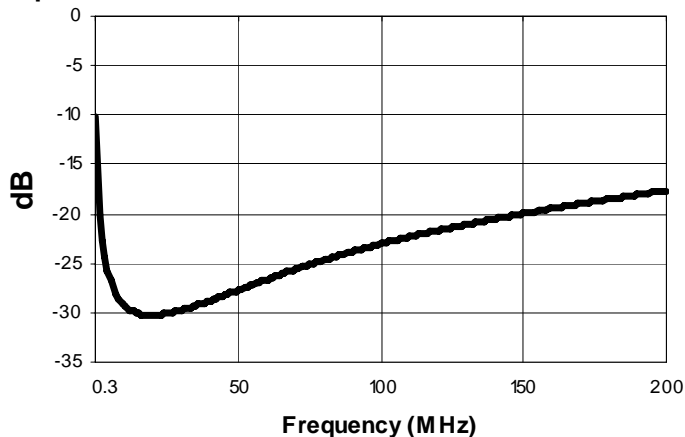
2

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**0.3-200MHz**
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**V2P**
**Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75\Omega$  <sup>1</sup>**
**Insertion Loss 1: (Pin 5 to 1)**

**Insertion Loss 2: (Pin 5 to 3)**

**Amplitude Unbalance**

**Phase Balance**

**Input Return Loss**


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