## **MABACT0022**

1:1 RF Flux Coupled Transformer 5-50 MHz



M/A-COM Products Released - Rev. V1

### Features

- Surface Mount
- 1:1 Impedance
- Available on Tape and Reel.

## Description

M/A-COM's MABACT0022 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. The windings of the MABACT0022 are welded to the package substrate for improved reliability and reduced lead content. This Transformer is ideally suited for CATV and Satellite STB/ Subscriber applications.

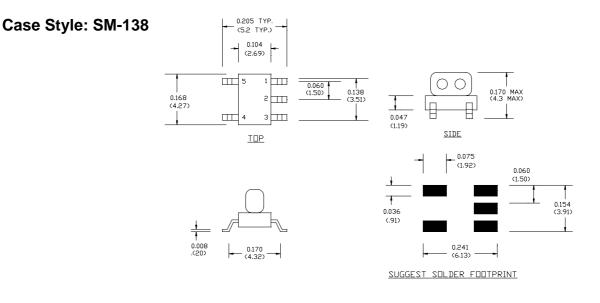


## **Pin Configuration**

Pin No.	Function			
1	Secondary (Output Port 1)			
2	Center Tap (Ground)			
3	Secondary Dot (Output Port 2)			
4	Primary Dot (Input)			
5	5 Primary (Ground)			

## **Ordering Information**

Part Number	Package
MABACT0022	2000



Note: Reference Application Note M513 for reel size information.

1

volume is not guaranteed.

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

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

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been fixed. Engineering samples and/or test data may be available. Commitment to produce in

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# MABACT0022



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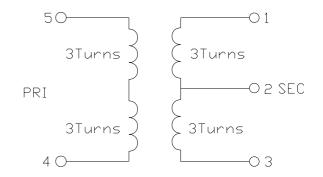
### Electrical Specifications @ 25°C, Z<sub>0</sub> = 75 Ohms

Frequency Range 5 - 50 MHz	Test Conditions	Nominal	Units	Min.	Тур.	Max.
Insertion Loss (Above 3dB)	5 - 50 MHz		dB	_	0.3	0.5
Amplitude Unbalance	5 - 50 MHz	_	dB	_	0.04	0.10
Phase Unbalance	5 - 50 MHz	_	0	_	0.3°	2.0°
Input Return Loss	5 - 50 MHz	_	dB	20	25	—

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

Parameter	Absolute Maximum			
RF Power	1 Watt			
Internal Load Dissipation	0.125 Watt			
Storage Temperature	-40° C to +85°C			
Operating Temperature	-40° C to +80°C			

## Schematic



- 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.

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2

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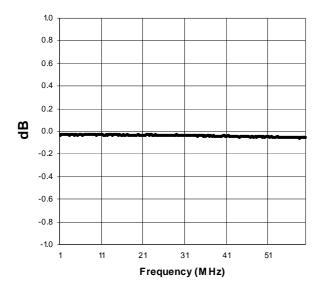
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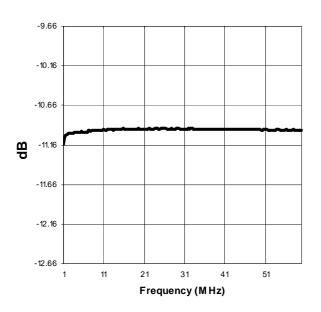


#### Typical Performance @ +25° C

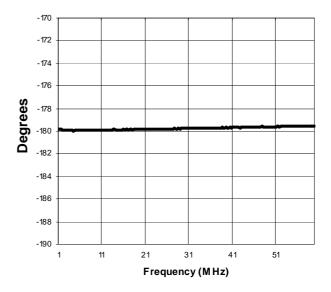
### Amplitude Unbalance



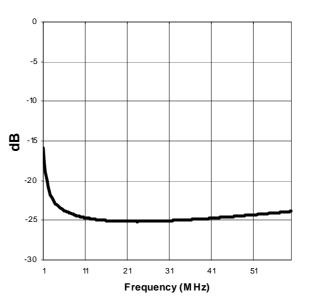
#### Insertion Loss (reference value -10.66dB)



### **Phase Unbalance**



#### Input Return Loss



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3

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