



MABACT0061 V<sub>1</sub>P

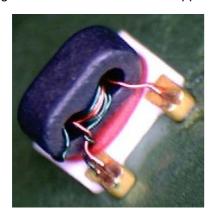
4:1 Auto Transformer 5-1200MHz

#### **Features**

- Surface Mount
- 4:1 Impedance, unbalanced to unbalanced
- 260°C Reflow Compatible
- RoHS\* Compliant
- Available on Tape and Reel. Reel quantity 2000

### **Description**

M/A-COM's MABACT0061 is a 4:1 Auto transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



## **Pin Configuration**

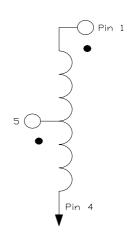
Pin No.	Function	
1	Secondary Dot (e.g. 200 Ohm)	
2	Not connected (ground)	
3	Not connected (ground)	
4	Primary & Secondary (ground)	
5	Primary Dot (e.g. 50 Ohms)	

## **Ordering Information**

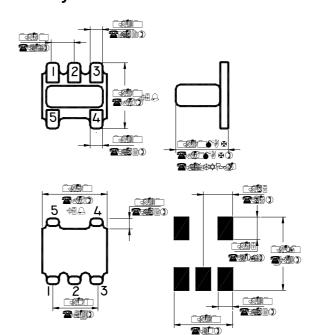
Part Number	Package		
MABACT0061TR	2000 piece reel		

Note: Reference Application Note M513 for reel size information.

#### **Schematic**



Case Style: SM-22



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

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

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400

<sup>•</sup> India Tel: +91.80.4155721





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MABACT0061

# Electrical Specifications: $T_A = 25$ °C, $Z_0 = 50\Omega^1$

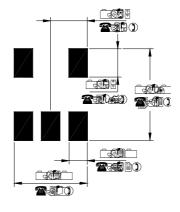
Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 600 MHz	dB	-	1.2	1.5
Insertion Loss	600 - 1000 MHz	dB	-	1.6	2.1
Insertion Loss	1000 - 1200 MHz	dB	-	2.1	2.6
Input Return Loss	5 - 20 MHz	dB	9	11	-
Input Return Loss	20 - 120 MHz	dB	11	13	-
Input Return Loss	120 - 1000 MHz	dB	5	10	-
Input Return Loss	1000 - 1200 MHz	dB	4	5	-

# **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**



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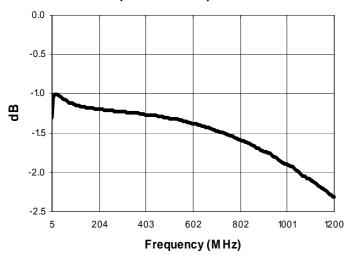


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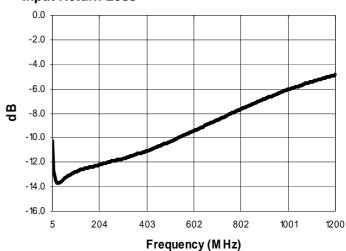
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Typical Performance Curves:  $T_A = 25^{\circ}C$ ,  $Z_0 = 50\Omega^{1}$ 

### Insertion Loss (Pin 5 to Pin 1)



### **Input Return Loss**



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