

4:1 Auto Transformer 5-1200MHz

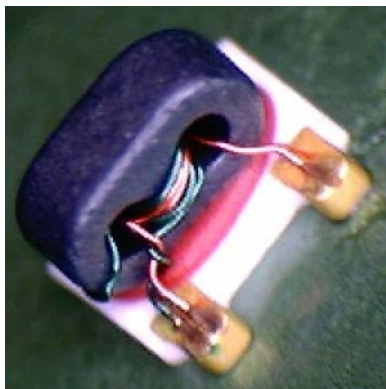
**MABACT0061
V1P**

Features

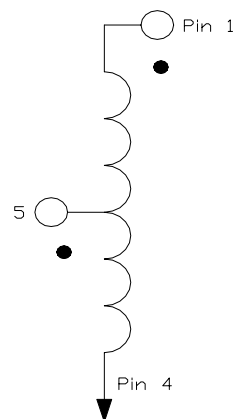
- Surface Mount
- 4:1 Impedance, unbalanced to unbalanced
- 260°C Reflow Compatible
- RoHS* Compliant
- Available on Tape and Reel. Reel quantity 2000

Description

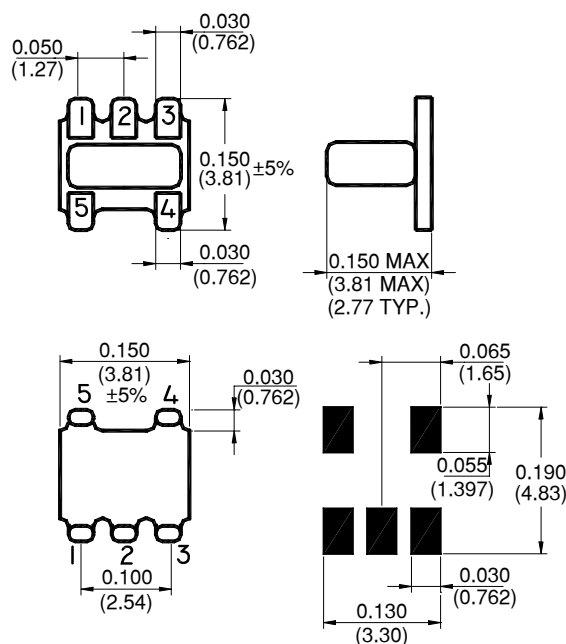
M/A-COM's MABACT0061 is a 4:1 Auto transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



Schematic



Case Style: SM-22



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

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.

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

**4:1 Auto Transformer
5-1200MHz**

**MABACT0061
V1P**

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

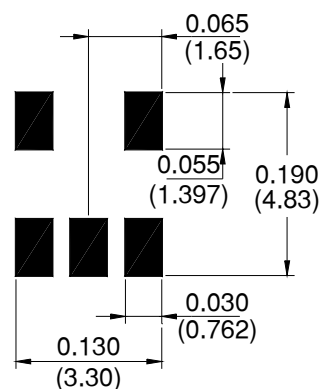
Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss	5 - 600 MHz	dB	-	1.2	1.5
Insertion Loss	600 - 1000 MHz	dB	-	1.6	2.1
Insertion Loss	1000 - 1200 MHz	dB	-	2.1	2.6
Input Return Loss	5 - 20 MHz	dB	9	11	-
Input Return Loss	20 - 120 MHz	dB	11	13	-
Input Return Loss	120 - 1000 MHz	dB	5	10	-
Input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

Absolute Maximum Ratings ^{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

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

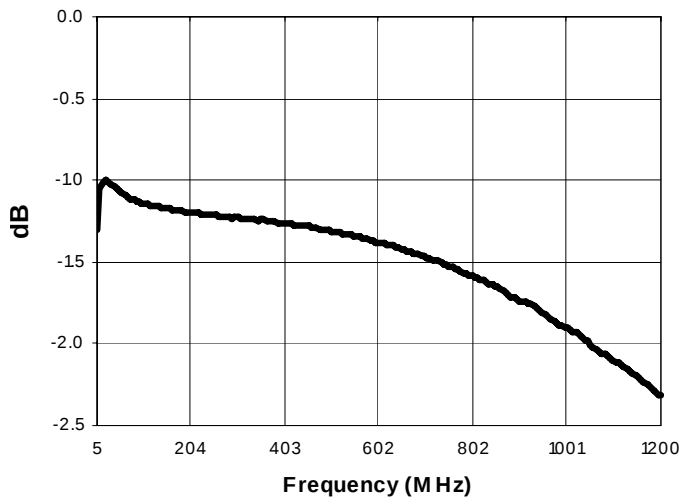


**4:1 Auto Transformer
5-1200MHz**

**MABACT0061
V1P**

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

Insertion Loss (Pin 5 to Pin 1)



Input Return Loss

