

1.5:1 Auto Transformer 5-1000MHz

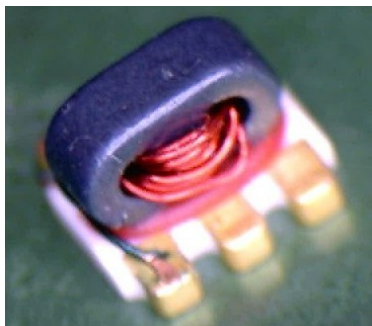
Rev. V3

Features

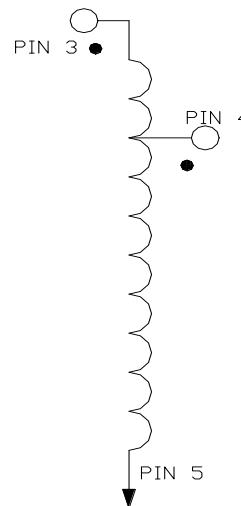
- Surface Mount
- 1.5:1 Impedance
- 260°C Reflow Compatible
- RoHS* Compliant
- Available on Tape and Reel.

Description

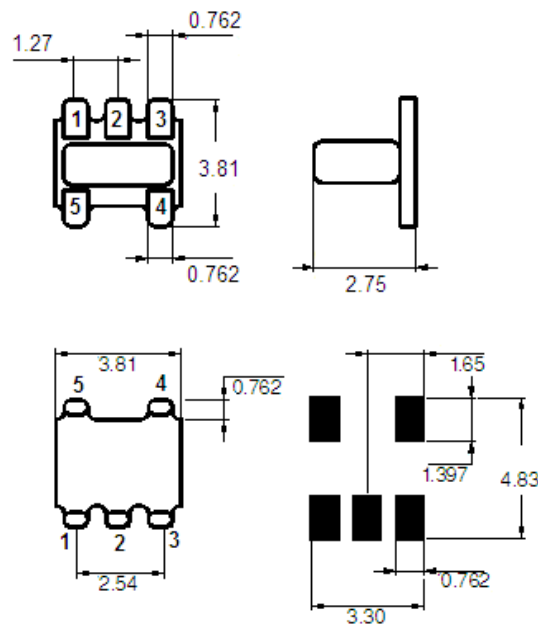
M/A-COM Technology Solutions MABACT0063 is a 1.5:1 Auto Transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



Schematic



Component Dimensions:



Dimensions in mm, Tolerance: .xx ± .2, .xxx ± .1
Drawing not to scale

Pin Configuration

Pin No.	Function
1	Not Connected
2	Not Connected
3	Primary Dot (e.g. 75 Ohms)
4	Secondary Dot (e.g. 50 Ohms)
5	Primary and Secondary (Ground)

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

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Rev. V3

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

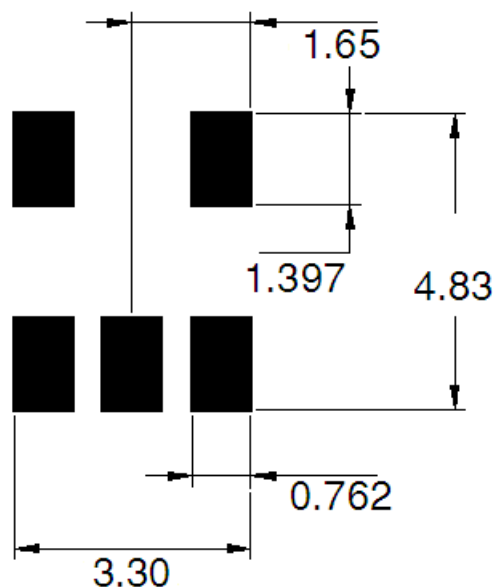
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	-	5 - 1000 MHz	dB	-	0.5	1.0
Input Return Loss	-	5 - 500 MHz	dB	24	30	-
Input Return Loss	-	500 - 1000 MHz	dB	16	26	-

Recommended Maximum Ratings ^{1,2}

Parameter	Value
Max Input Power	250mW
DC current	100mA
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 Technology Solutions does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration



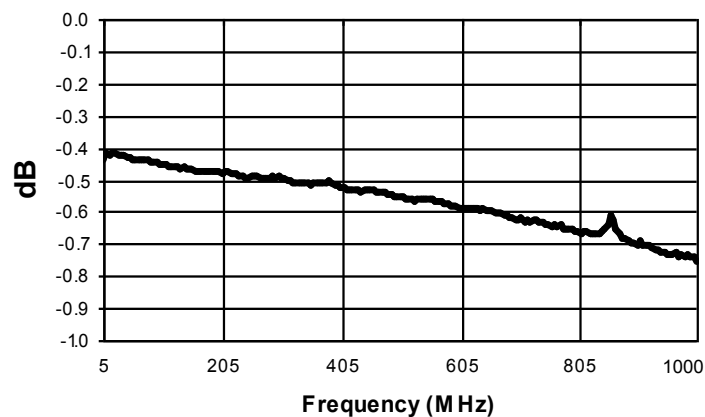
Dimensions in mm, Tolerance: .xx ± .2, .xxx ± .1
Drawing not to scale

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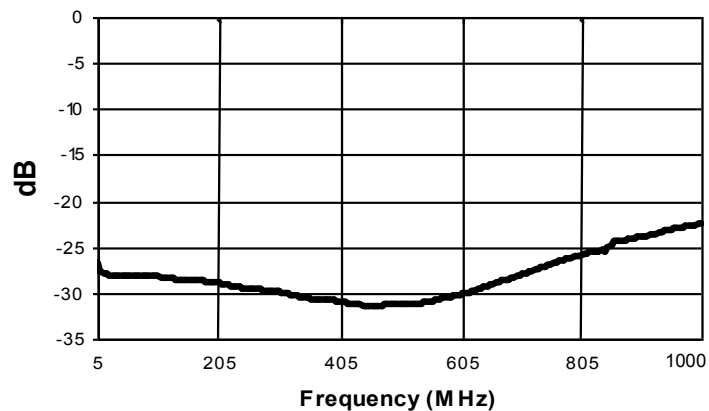
Rev. V3

Typical Performance Curves

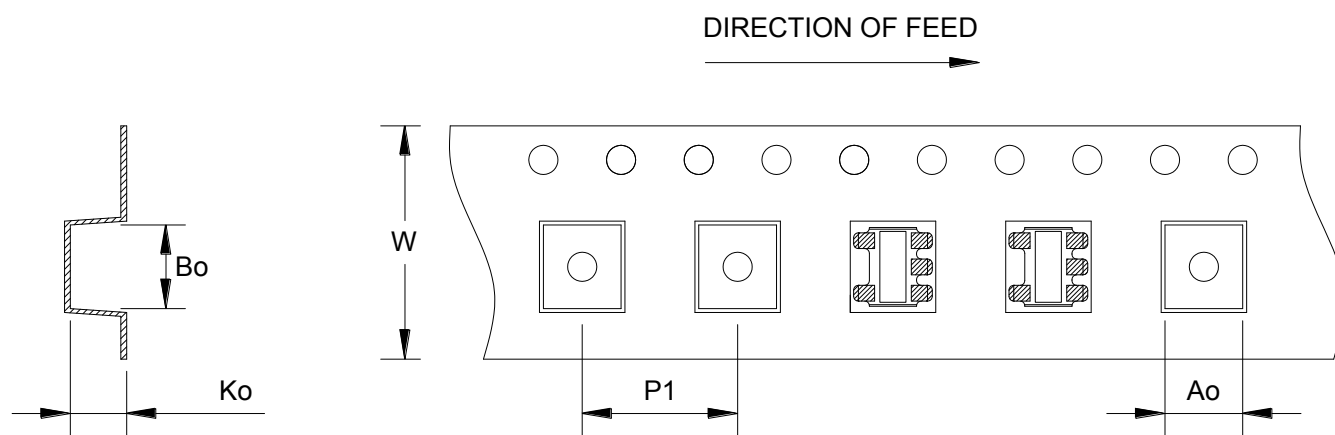
Insertion Loss: pin 4 to 3



Input Return Loss: pin 4



Tape Specification:



Item	Dimension
Ao	4.00mm +/-0.1mm
Bo	4.00mm +/-0.1mm
Ko	2.90mm +/-0.1mm
W	12.00mm +/-0.3mm
P1	8.00mm +/-0.1mm

Ordering Information

Part Number	Package
MABACT0063TR	2000 piece reel

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