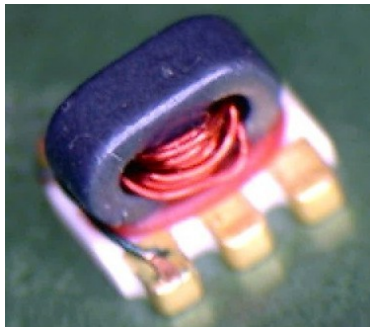


Features

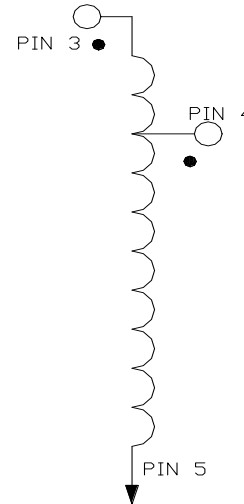
- Surface Mount
- 1.5:1 Impedance
- 260°C Reflow Compatible
- RoHS* Compliant
- Available on Tape and Reel.

Description

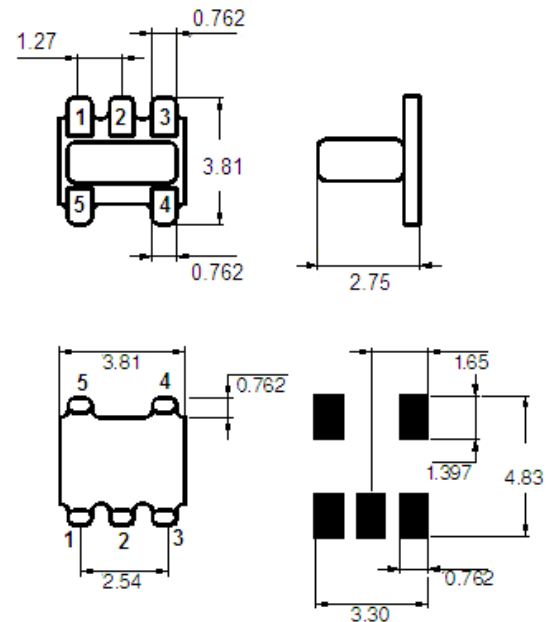
M/A-COM Technology Solutions MABACT0063 is a 1.5:1 Auto Transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



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.

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit www.macom.com for additional data sheets and product information.

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

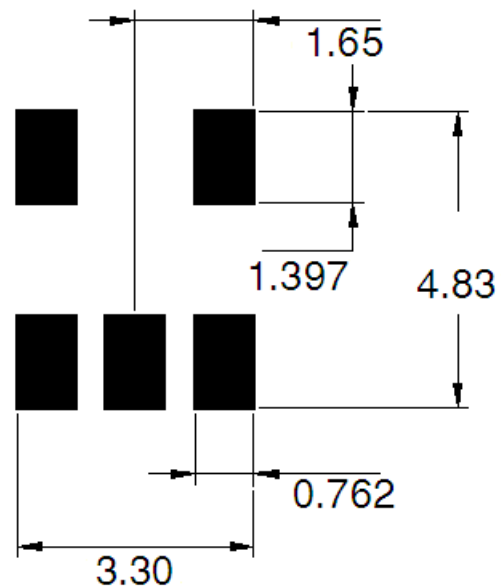
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	-	5 - 1000 MHz	dB	-	0.5	1.0
Input Return Loss	-	5 - 500 MHz	dB	24	30	-
Input Return Loss	-	500 - 1000 MHz	dB	16	26	-

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

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

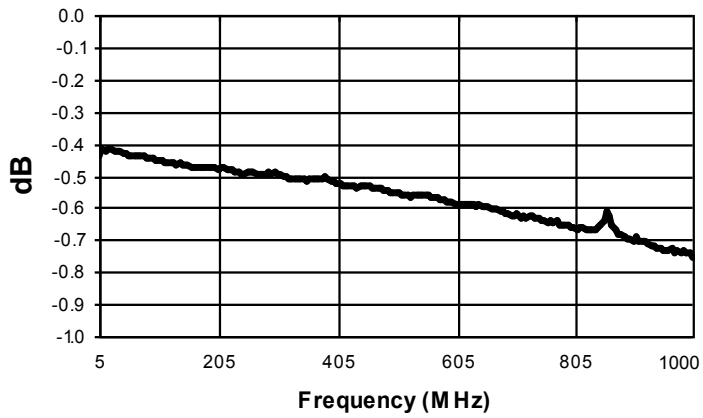
Recommended PCB Configuration



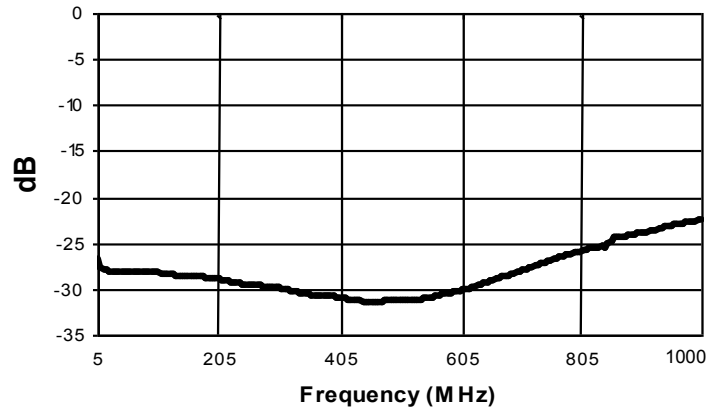
Dimensions in mm, Tolerance: .xx ± .2, .xxx ± .1
Drawing not to scale

Typical Performance Curves

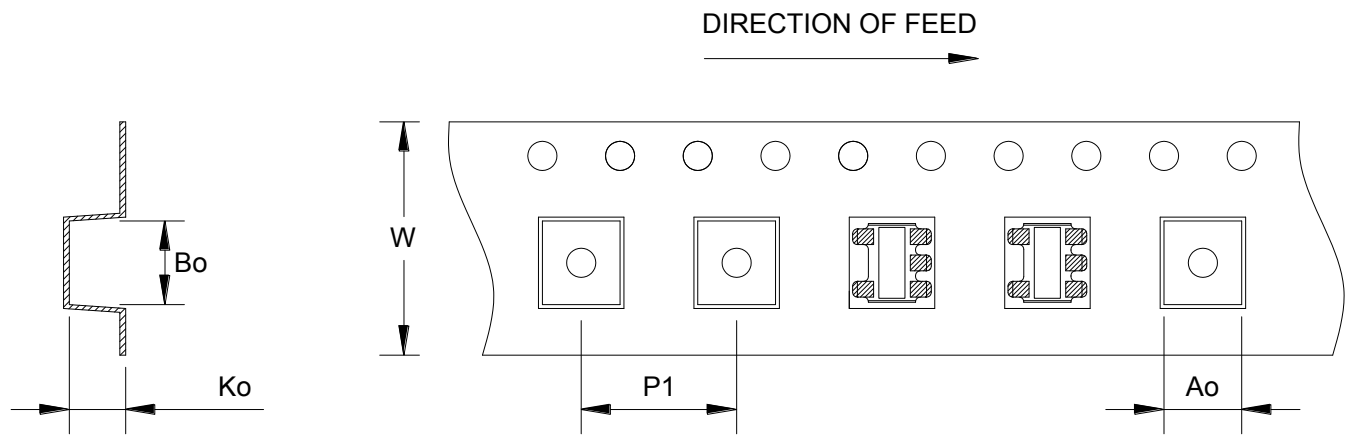
Insertion Loss: pin 4 to 3



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

M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.