

Features

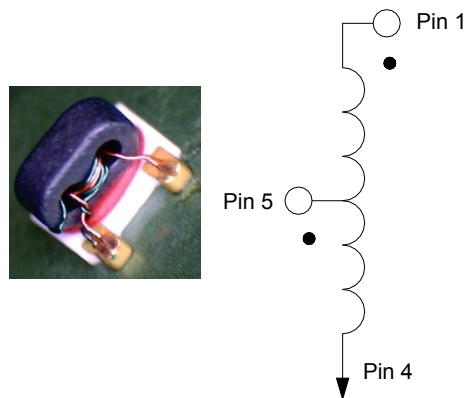
- 4:1 Impedance Ratio (unbalanced to unbalanced)
- Surface Mount Package
- Excellent Temperature Stability
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Available on Tape and Reel
- Suitable for all CATV, Broadband and FTTx Applications

Description

The MABACT0061 is a 4:1 auto transformer in a surface mount package.

Ideally suited for high volume CATV Broadband applications.

Functional Schematic



Pin Configuration

Pin #	Function
1	Secondary Dot (e.g. 200 Ohms)
2, 3	Not connected (ground)
4	Primary & Secondary (ground)
5	Primary Dot (e.g. 50 Ohms)

Electrical Specifications: Freq. = 5 - 1200 MHz, T_A = +25°C, Z₀ = 50 Ω, P_{IN} = 0 dBm

Parameter	Frequency Test Conditions (MHz)	Units	Min.	Typ.	Max.
Impedance Ratio	—	ratio	—	4:1	—
Insertion Loss	5 - 600	dB	—	1.2	1.5
	600 - 1000			1.6	2.1
	1000 - 1200			2.1	2.6
Input Return Loss	5 - 20	dB	9	11	—
	20 - 120		11	13	
	120 - 1000		5	10	
	1000 - 1200		4	5	

Ordering Information

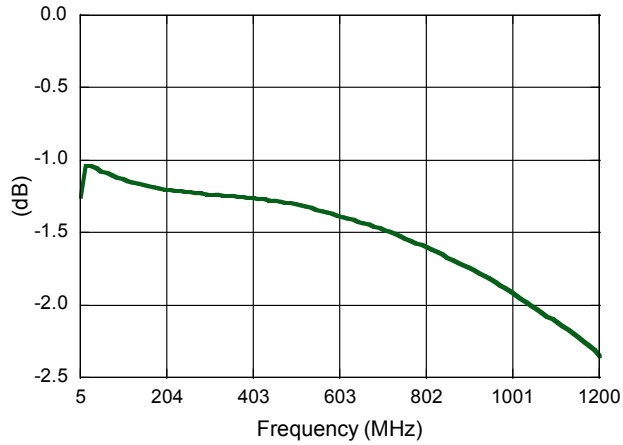
Part Number	Package
MABACT0061	2000 piece reel

Recommended Maximum Ratings

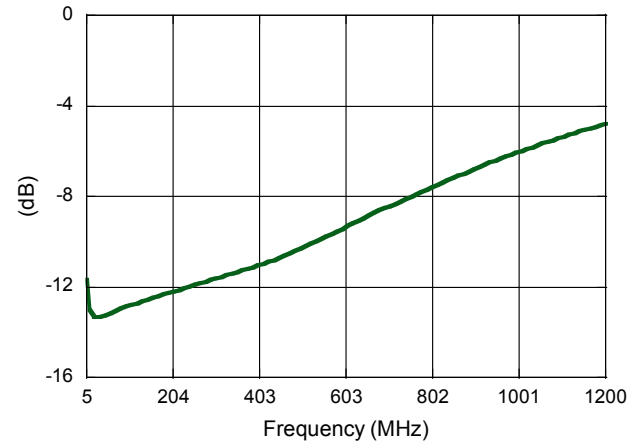
Parameter	Units
RF Input Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

Typical Performance Curves

Insertion Loss (Pin 5 to Pin 1)

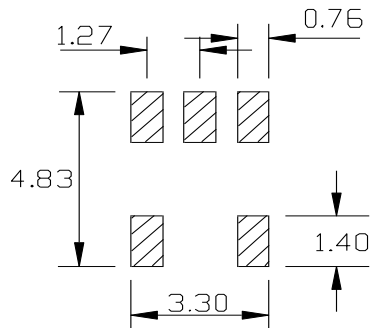


Input Return Loss

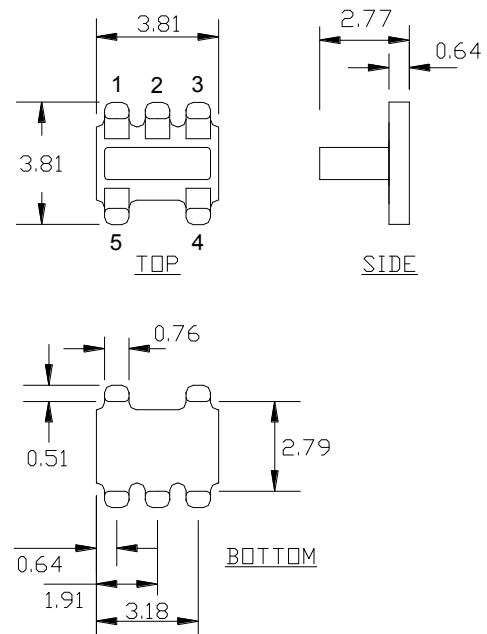


Full temperature plots available on request.

Recommended PCB Configuration



Outline Drawing (SM-22)



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

MACOM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with MACOM 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.