



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## Features

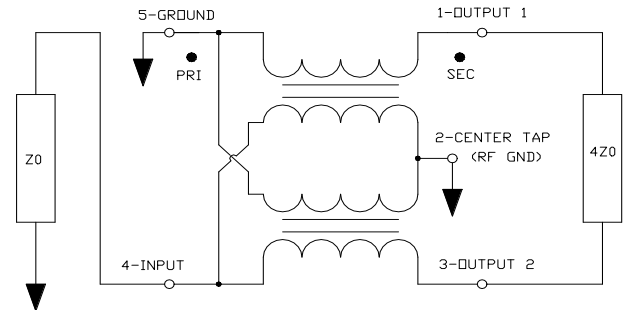
- Surface mount
- 4:1 Impedance ratio
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems
- 260°C reflow compatible
- RoHS\* compliant, Pb free
- Available on tape and reel.

## Description

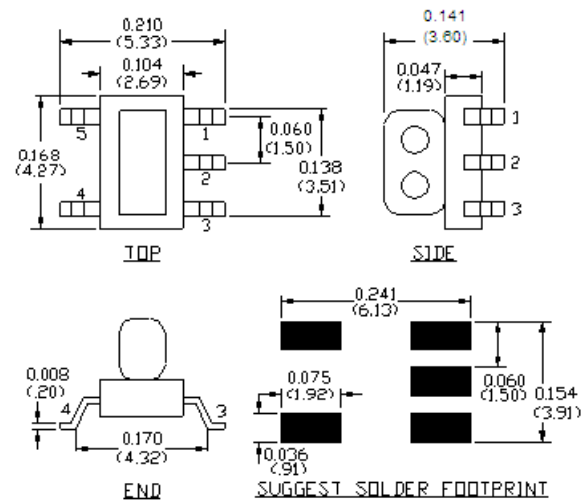
M/A-Com Technology Solutions MABACT0066 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for broadband CATV Broadband applications.



## Schematic



## Component Dimensions



## Pin configuration

Pin no.	Function
1	Secondary dot (Output 1)
2	Centre tap (Ground)
3	Secondary (Output 2)
4	Primary (Input)
5	Primary dot (Ground)

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

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

**Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ ,  $P_{in} = 0\text{dBm}$**

Parameter	Test Conditions	Units	Min	Typ	Max
Insertion Loss 1	5 - 50 MHz	dB	-	1.5	2.0
	50 - 879 MHz	dB	-	1.0	1.5
	879 - 1000 MHz	dB	-	1.5	2.0
Amplitude Unbalance (Nominal 0dB)	5 - 1000 MHz	dB	-	$\pm 0.25$	$\pm 0.5$
Phase Unbalance (Nominal 180°)	5 - 500 MHz	°	-	$\pm 4$	$\pm 8$
	500 - 1000 MHz	°	-	$\pm 8$	$\pm 12$

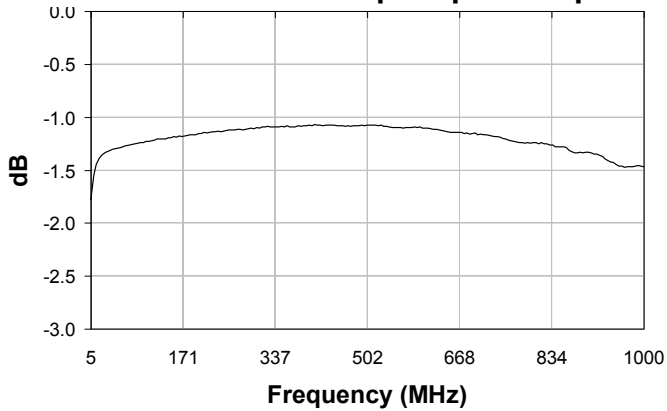
**Recommended Maximum Ratings<sup>1,2</sup>**

Parameter	Value
Max input power	250mW
DC current	120mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

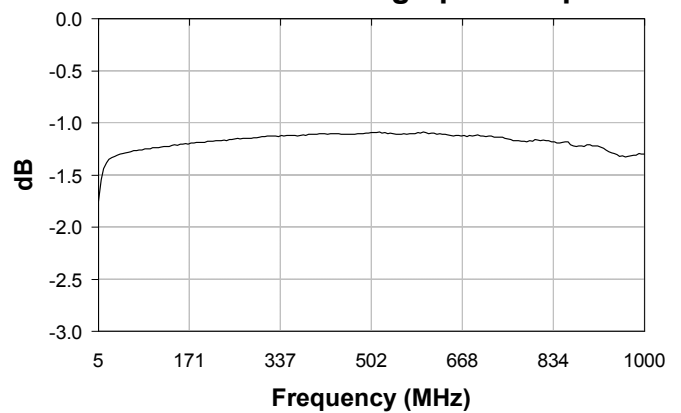
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$ ,  $P_{in} = 0\text{dBm}$

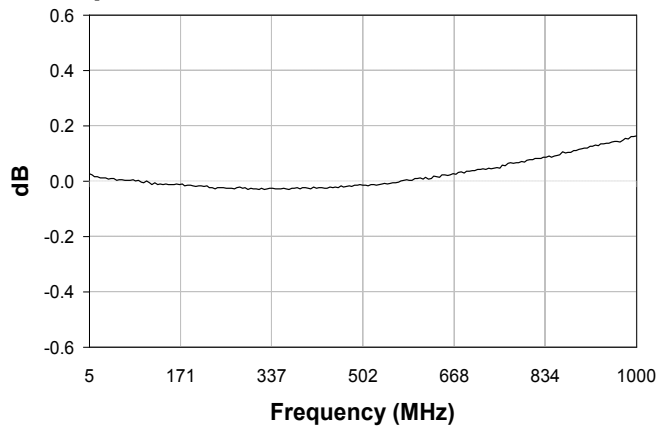
Insertion Loss 1: coupled pin 4 to pin 1



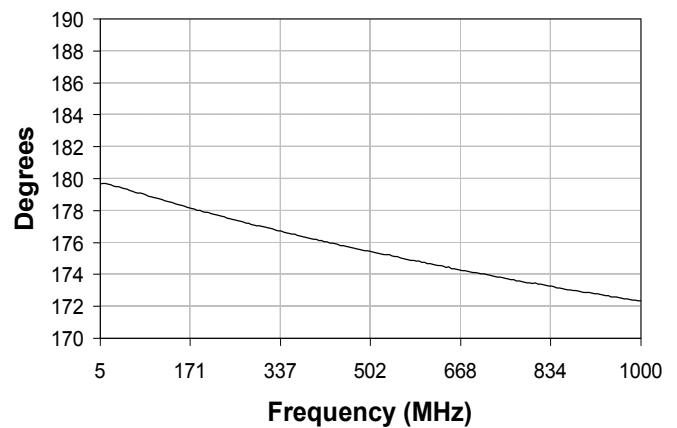
Insertion Loss 2: through pin 4 to pin 3



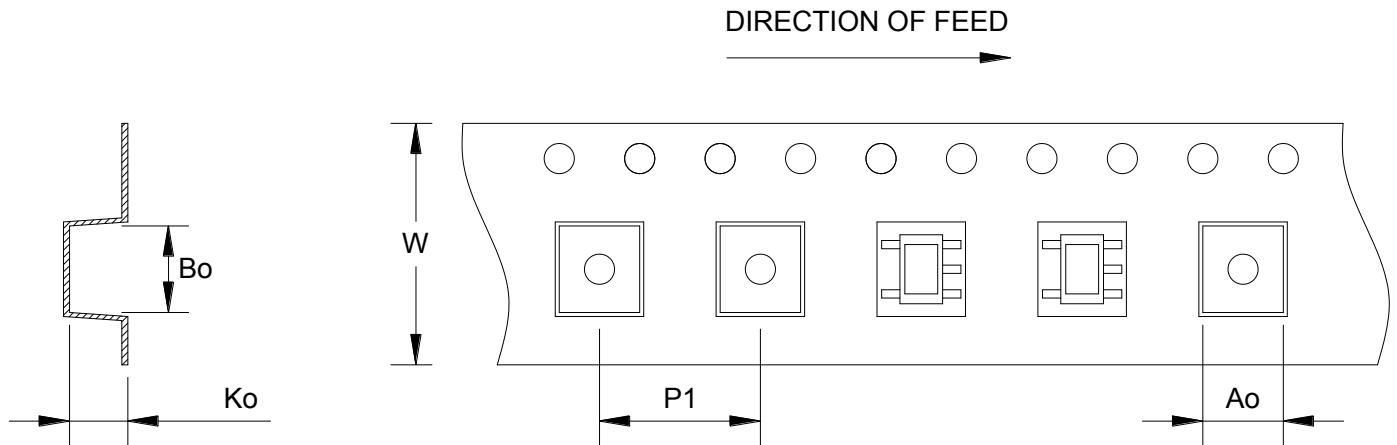
Amplitude Balance



Phase Balance







Item	Dimension
Ao	6.10mm +/- 0.1mm
Bo	4.60mm +/- 0.1mm
Ko	4.00mm +/- 0.1mm
W	12.00mm +/- 0.3mm
P1	8.00mm +/- 0.1mm

## Ordering information

Part number	Description
MABACT0066	2000 piece reel
MABA-007968-CT66TB	Customer Test Board

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