

## Features

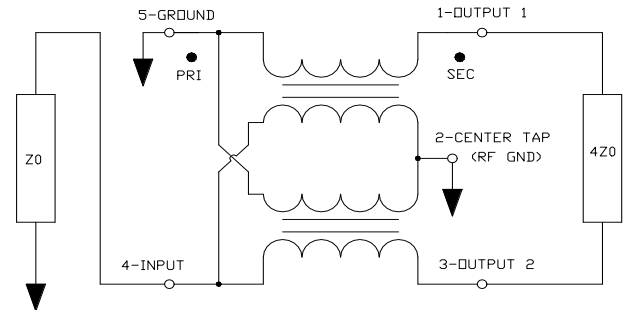
- Surface mount
- 4:1 Impedance ratio
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems
- 260°C reflow compatible
- RoHS\* compliant, Pb free
- Available on tape and reel.

## Description

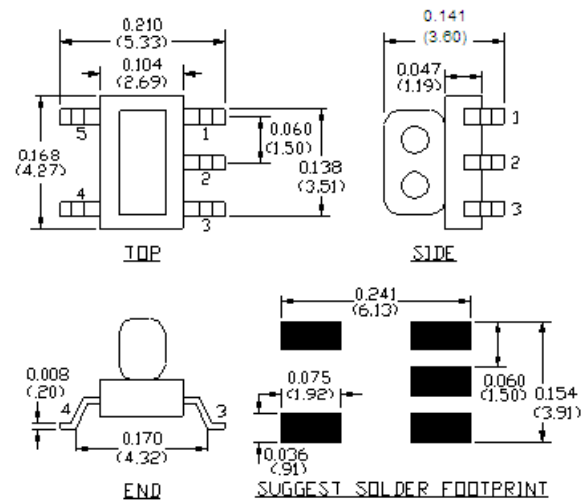
M/A-Com Technology Solutions MABACT0066 is a 4:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for broadband CATV Broadband applications.



## 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 $180^\circ$ )	5 - 500 MHz	$^\circ$	-	$\pm 4$	$\pm 8$
	500 - 1000 MHz	$^\circ$	-	$\pm 8$	$\pm 12$

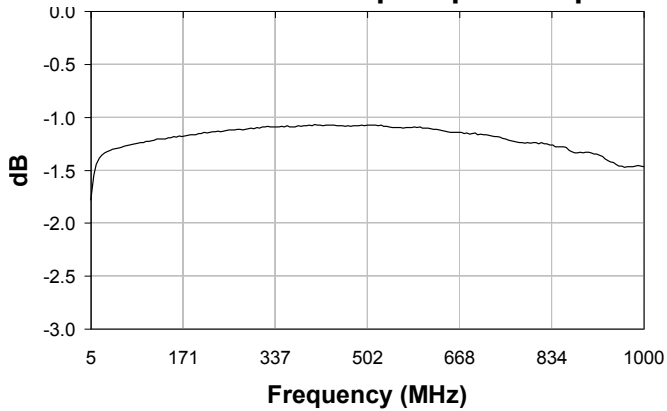
**Recommended Maximum Ratings<sup>1,2</sup>**

Parameter	Value
Max input power	250mW
DC current	120mA
Operating Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Storage Temperature	$-40^\circ\text{C}$ to $+85^\circ\text{C}$

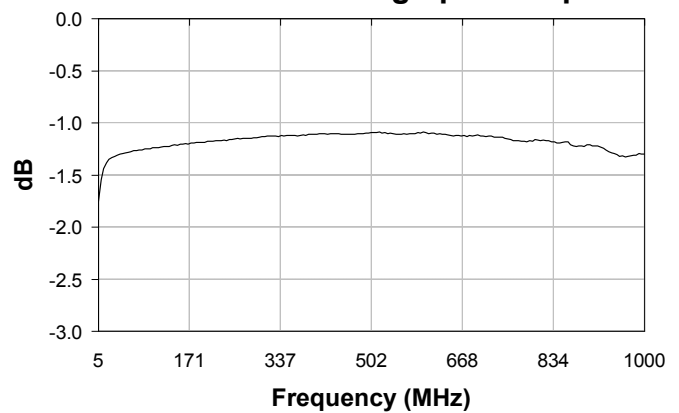
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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

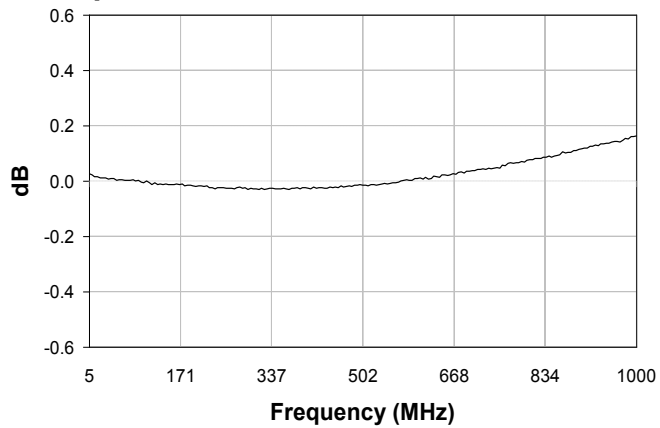
**Insertion Loss 1: coupled pin 4 to pin 1**



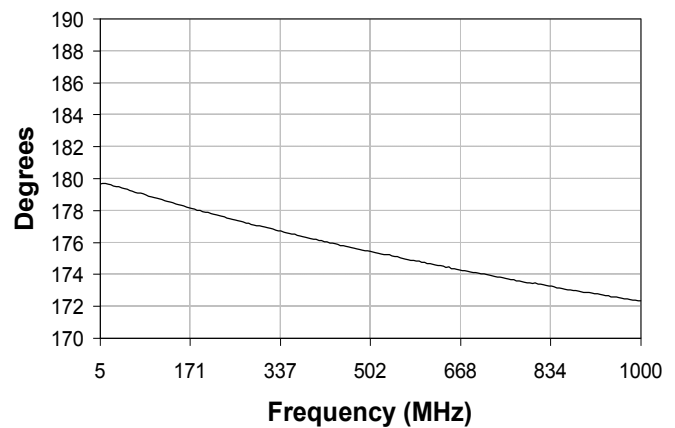
**Insertion Loss 2: through pin 4 to pin 3**

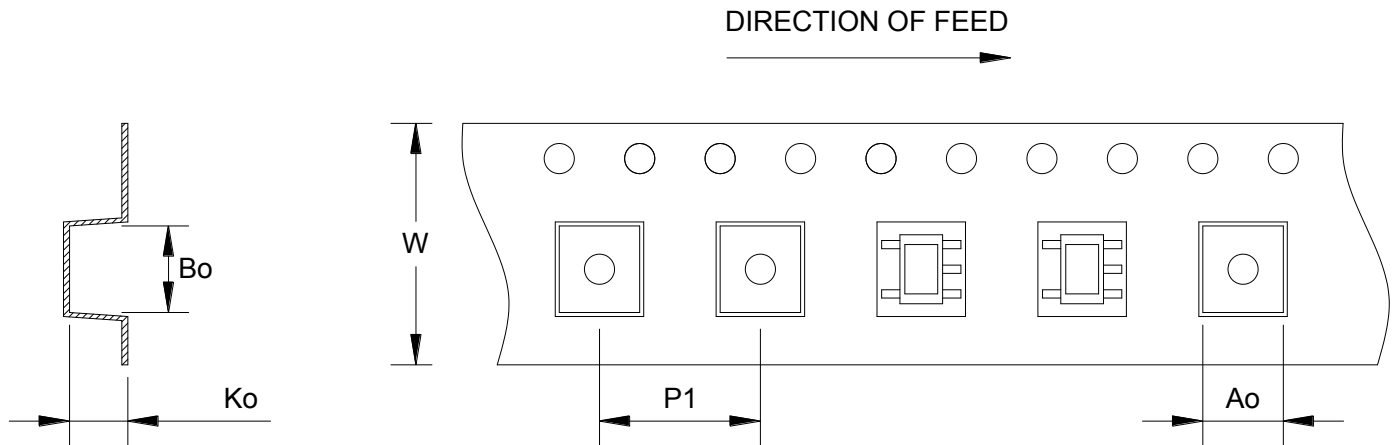


**Amplitude Balance**



**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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