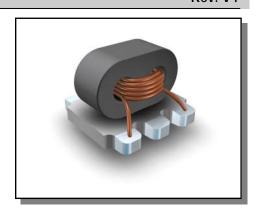
# MABACT0062



Transformer, 1:1
3 MHz - 200 MHz
RELEASED
Rev. V4

#### **Features**

- ♦ 1:1 impedance ratio
- ♦ Surface mount
- Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- Excellent temperature stability
- $\bullet$  Can be used on 50Ω and 75Ω systems
- ♦ RoHS version of ETC1-1T and MABACT0012



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

Parameter	Frequency	Units	Min	Тур	Max
Insertion Loss	3 - 50 MHz 50 - 160 MHz 160 - 200 MHz	dB dB dB	- - -	0.2 0.5 0.8	0.5 1.0 1.2
Amplitude Balance (Nominal 0dB)	3 - 50 MHz 50 - 200 MHz	dB dB	-	0.02 0.06	± 0.1 ± 0.5
Phase Balance (Nominal 180°)	3 - 50 MHz 50 - 200 MHz	0	-	0.2 0.5	± 1.5 ± 5.0
Input Return Loss	3 - 200 MHz 5 - 100 MHz	dB dB	10 15	20 25	-

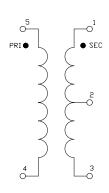
## Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega$ , $P_{in} = 0$ dBm

Parameter	Frequency	Units	Min	Тур	Max
Insertion Loss	3 - 5 MHz 5 - 65 MHz 65 - 200 MHz	dB dB dB	- - -	0.5 0.4 0.6	1.0 0.6 1.0
Amplitude Balance (Nominal 0dB)	3 - 65 MHz 65 - 200 MHz	dB dB	-	0.02 0.04	± 0.2 ± 0.3
Phase Balance (Nominal 180°)	3 - 65 MHz 65 - 200 MHz	0	-	0.4 1.2	± 2.0 ± 5.0
Input Return Loss	3 - 5MHz 5 - 65 MHz 65 - 100 MHz 100 - 200 MHz	dB dB dB dB	18 21 19 14	24 29 25 20	- - -

## **Pin Configuration**

Pin No.	Function
1	Secondary Dot
2	Secondary Center Tap
3	Secondary
4	Primary
5	Primary Dot

#### **Schematic**



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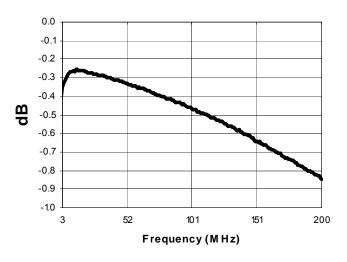
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.

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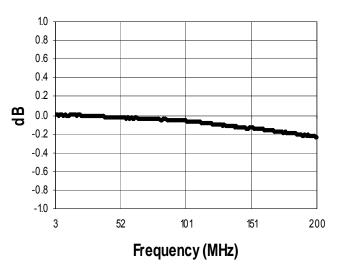


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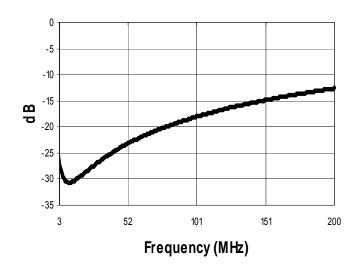
#### **Insertion Loss**



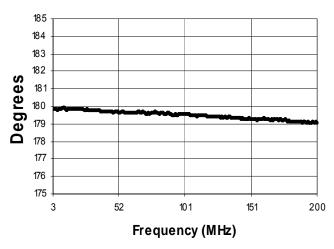
### **Amplitude Balance**



### **Input Return Loss**



#### **Phase Balance**



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

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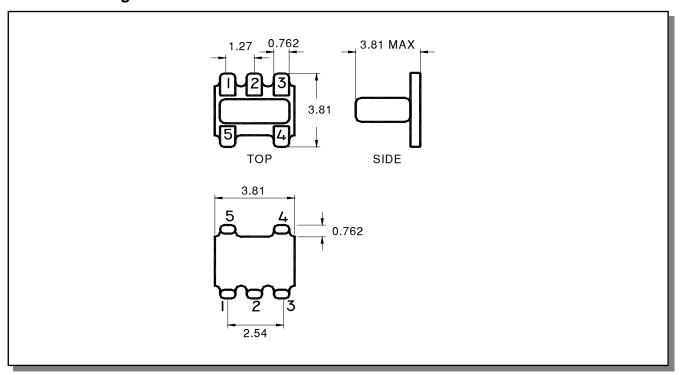
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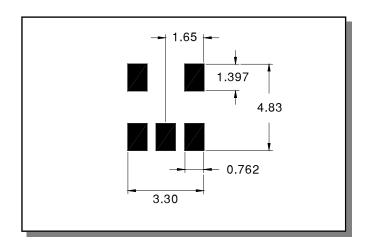
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#### **Outline Drawing**



- Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.

## **Recommended Footprint**



and/or prototype measurements. Commitment to develop is not guaranteed.

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#### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.00
Во	mm	4.00
Ko	mm	2.90
Orientation	-	F5
	•	

Reference Application Note ANI-019 for orientation

### **Ordering Information**

Part Number	Description
MABA CT0062	Tape & Reel
MABA-008115-CT62TB	Customer Evaluation Board

## **Recommended Maximum Ratings**

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

## **ECO History**

Rev	Date	Description	Ву
V4	10 May 2010	Corrected the case style drawing and changed to the new format	MOC

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