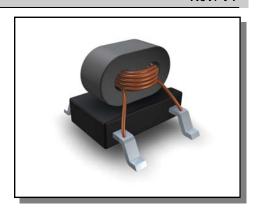


Transformer, 1:1 75 $\Omega$  30 MHz - 60 MHz

Rev. V1

#### **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
- ◆ Suitable for all CATV, Broadband and FTTx applications.



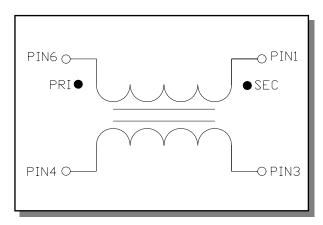
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	30		60
Impedance		Ω		75	
Impedance Ratio				1:1	
Insertion Loss 1 (Pin6 - 1)	30 - 60 MHz	dB	-	0.2	0.0
Insertion Loss 2 (Pin6 - 3)	30 - 60 MHz	dB	-	0.8	1.1
Amplitude Balance	30 - 60 MHz	dB	0.5	0.1	1.5
Phase Balance	30 - 60 MHz	Degree	-	0.2	±2
Input Return Loss (Pin6)	30 - 60 MHz	dB	20	32	-

### **Pin Configuration**

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

### **Schematic**



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology

**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

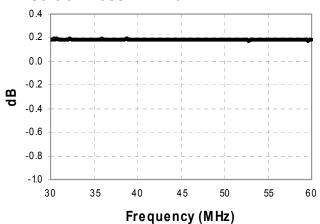
North America Tel: 800.366.2266
 India Tel: +91.80.43537383
 Europe Tel: +353.21.244.6400
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



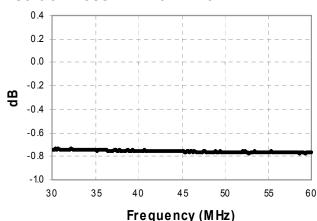
Transformer, 1:1 75 $\Omega$  30 MHz - 60 MHz

Rev. V1

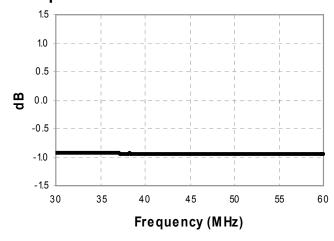
#### Insertion Loss 1: Pin6 - Pin1



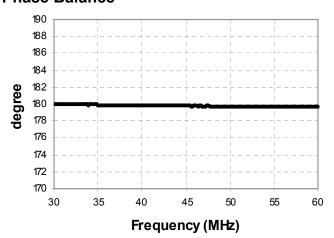
#### Insertion Loss 2: Pin6 - Pin3



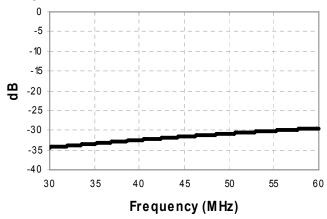
### **Amplitude Balance**



### **Phase Balance**



### **Input Return Loss: Pin6**



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

2

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

<sup>•</sup> North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400 • India Tel: +81.80.43537383 • China Tel: +88.21.2407.1588

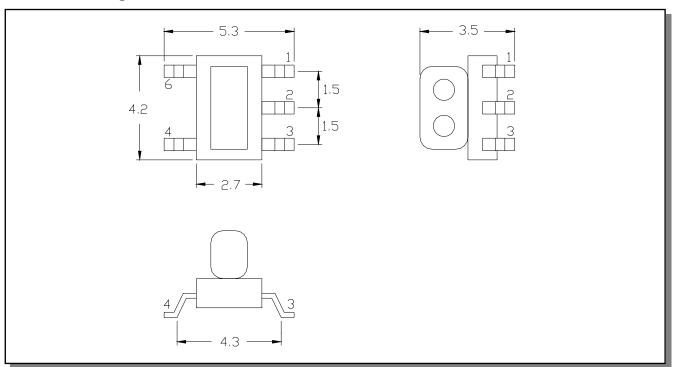
India Tel: +91.80.43537383
 China Tel: +86.21.2407.1588
 Visit www.macomtech.com for additional data sheets and product information.



Transformer, 1:1 75 $\Omega$ 30 MHz - 60 MHz

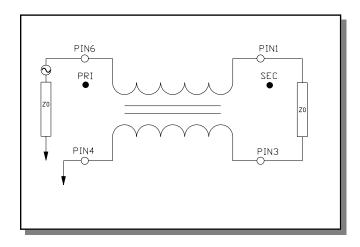
Rev. V1

### **Outline Drawing**

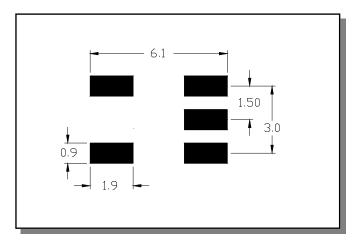


- Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code printed on reel.
- Pin material CuSn6

## **Application Circuit**



## **Recommended Footprint**



• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400 • India Tel: +91.80.43537383 • China Tel: +86.21.2407.1588



Transformer, 1:1 75 $\Omega$ 30 MHz - 60 MHz

Rev. V1

### **Tape & Reel Information**

Parameter	Units	Value	
Qty per reel	-	2000	
Reel size	mm	330	
Tape width (W)	mm	12.0	
Pitch (P <sub>1</sub> )	mm	8.0	
A <sub>0</sub>	mm	5.6	
B <sub>0</sub>	mm	4.5	
K <sub>0</sub>	mm	4.0	
Orientation	-	F-26	
Reference Application Note ANI-019 for orientation			

### **Ordering Information**

Part Number	Description
MABA -010411-CT1160	Tape & Reel
MABA -010411-CT11TB	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

Temperature data available on request

# **ECO History**

Rev	Date	Description	ECO
V1	5 July 2010	Created datasheet	20100819

typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.