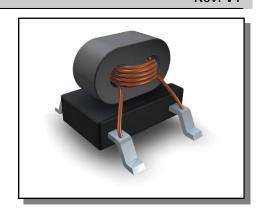


Transformer, Transmission Line 5 MHz - 1200 MHz

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:** $Z_0 = 50\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

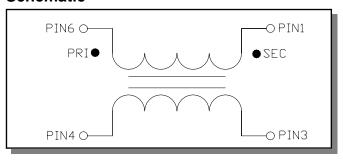
Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	5		1200
Impedance		Ω		50	
Impedance Ratio				1:1	
Insertion Loss 1 Pin4 - Pin1	5 - 870 MHz 870 – 1000 MHz 1000 - 1200 MHz	dB dB dB	- - -	-0.4 -0.7 -1.5	-0.7 -1.1 -2.6
Insertion Loss 2 Pin4 - Pin3	5 - 870 MHz 870 – 1000 MHz 1000 - 1200 MHz	dB dB dB	- - -	-0.9 -1.2 -2.1	-1.2 -1.6 -3.0
Phase Balance	5 - 1000 MHz 1000 - 1200 MHz	Degree	-	2.0 -6.0	±4 ±12
Input Return Loss Pin 4	5 - 300 MHz 300 - 800 MHz 800 -1200 MHz	dB dB dB	-15 -10 -5	17 -12 -8	- - -

## **Pin Configuration**

Commitment to produce in volume is not guaranteed.

Pin No.	Function	
1	Secondary Dot	
2	Not Connected	
3	Secondary	
4	Primary	
6	Primary Dot	

#### **Schematic**



typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available.

Solutions has under development. Performance is based on engineering tests. Specifications are

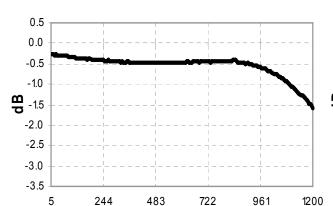
• North America Tel: 800.366.2266 • Europe Tel: +353.21.244.6400



Transformer, Transmission Line 5 MHz - 1200 MHz

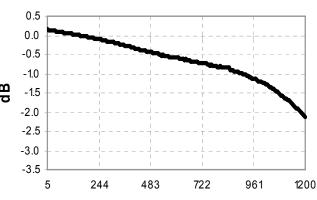
Rev. V1

#### Insertion Loss 1: Pin4 - Pin1



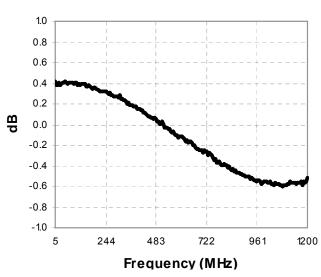
Frequency (MHz)

#### Insertion Loss 2: Pin4 - Pin3

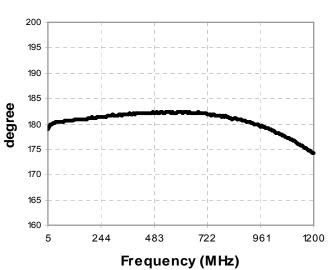


Frequency (MHz)

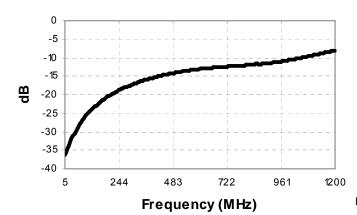
### **Amplitude Balance:**



Phase Balance:



### **Input Return Loss: Pin4**



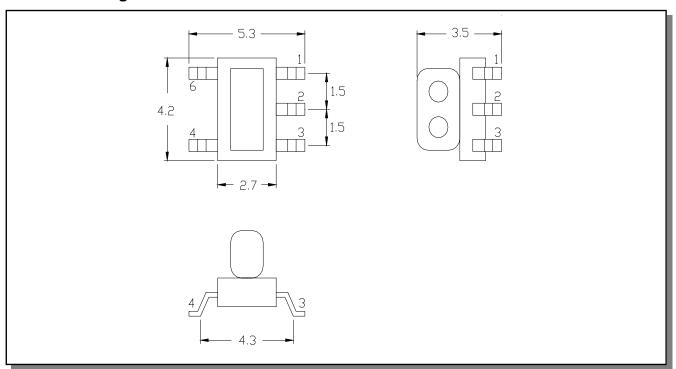
Electrical Specifications:  $Z_0 = 50\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm



Transformer, Transmission Line 5 MHz - 1200 MHz

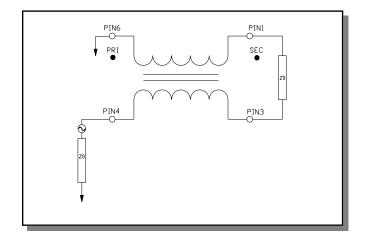
Rev. V1

### **Outline Drawing**

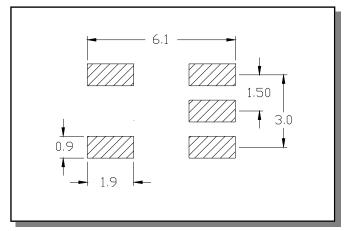


- Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code printed on reel.
- 4. Pin material CuSn6

## **Application Circuit**



## **Recommended Footprint**





Transformer, Transmission Line 5 MHz - 1200 MHz

## **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
A <sub>0</sub>	mm	5.6
B <sub>0</sub>	mm	4.5
K <sub>0</sub>	mm	4.0
Orientation	-	F26

## **Ordering Information**

Part Number	Description
MABA-010392-CT18A0	Tape & Reel
MABA-010392-CT18TB	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	13 April 2010	Created datasheet	20100751