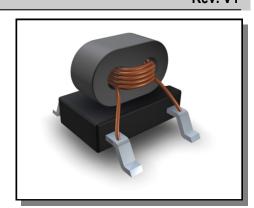


Transformer, 1:3 40 MHz - 1000MHz

Rev. V1

#### **Features**

- 1:3 impedance ratio
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant and Pb free
- **Excellent temperature stability**
- Can be used on  $50\Omega$  and  $75\Omega$  systems



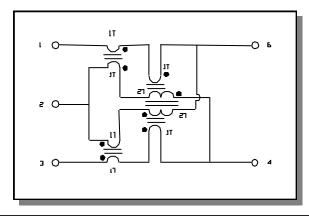
**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25$ °C,  $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	40		1000
Impedance		Ω		75	
Impedance Ratio				1:3	
Insertion Loss1 (Pin4 to Pin3)	40 - 500 MHz 500 - 1000 MHz	dB dB		1.0 1.2	1.7 2.5
Insertion Loss2 (Pin4 to Pin1)	40 - 500 MHz 500 - 1000 MHz	dB dB	-	1.5 2.0	2.0 3.2
Amplitude Unbalance	40 - 500 MHz 500 - 1000 MHz	dB dB	-	0.5 0.8	± 1.3 ± 1.7
Phase Balance	40 - 500 MHz 500 - 1000 MHz	0	- -	11 22	±21 ±32
Input Return Loss	40 - 500 MHz 500 - 1000 MHz	dB dB	13 11	17 13	-

## **Pin Configuration**

Pin No.	Function	
1	Output 2	
2	Centre tap	
3	Output 1	
4	Input	
6	Ground	

### **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 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 • Europe Tel: +353.21.244.6400

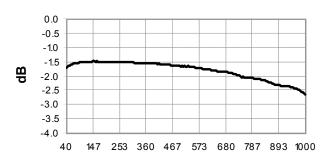
• India Tel: +91.80.43537383 • China Tel: +86.21.2407.1588 Visit www.macomtech.com for additional data sheets and product information.



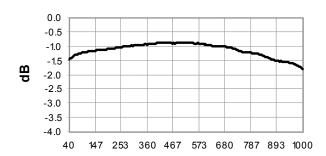
Transformer, 1:3 40 MHz - 1000MHz

Rev. V1

#### Insertion Loss: Pin4—Pin3



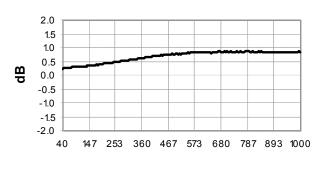
### Insertion Loss: Pin4—Pin1



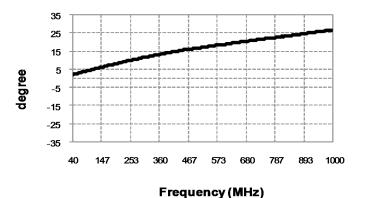
Frequency (MHz)

Frequency (MHz)

### Amplitude Balance

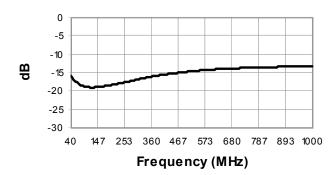


Phase Balance



Frequency (MHz)

### Return Loss: Input



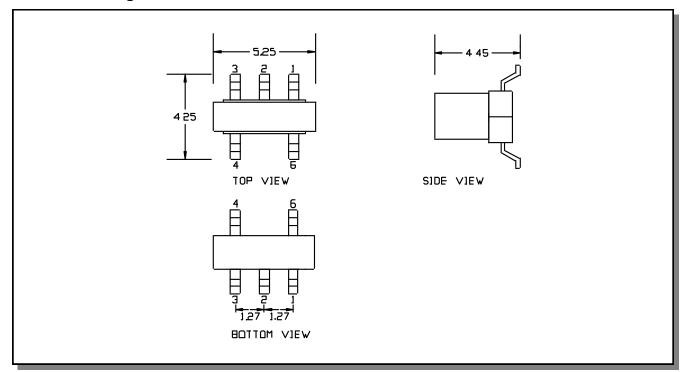
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Transformer, 1:3 40 MHz - 1000MHz

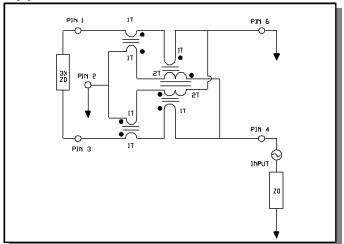
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### **Outline Drawing**

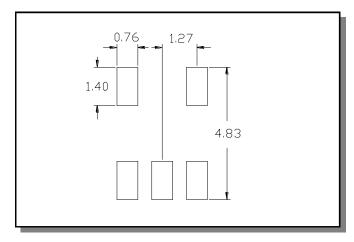


- 1. Dimensions in mm.
- Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Finish: CuSn6

## **Application Circuit**



### **Recommended Footprint**



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Visit www.macomtech.com for additional data sheets and product information.



Transformer, 1:3 40 MHz - 1000MHz

Rev. V1

### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width	mm	12.00
Pitch	mm	8.00
<b>A</b> <sub>0</sub>	mm	4.50
B <sub>0</sub>	mm	5.40
K <sub>0</sub>	mm	4.70
Orientation	-	F28

### **Ordering Information**

Part Number	Description		
MABA-011032	Tape & Reel		

### **Recommended Maximum Ratings**

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

Temperature data available on request