#### Transformer, 1:3 40 MHz - 1000MHz

#### 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



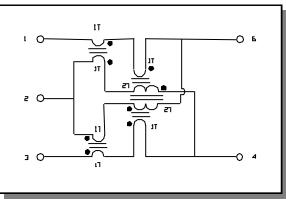
#### **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25^{\circ}C$ , $P_{in} = 0dBm$

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 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



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Rev. V2

Insertion Loss: Pin4—Pin3

Transformer, 1:3 40 MHz - 1000MHz

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#### For further information and support please visit: https://www.macom.com/support

**Return Loss: Input** 

1.0

0.5

0.0 -0.5

- 1.0

-1.5

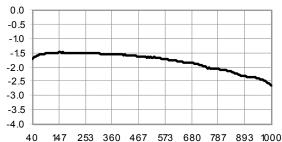
-2.0 40

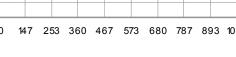
B





147 253



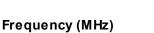


360 467 573 680

Frequency (MHz)

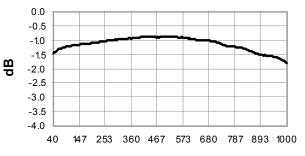
787 893 1000

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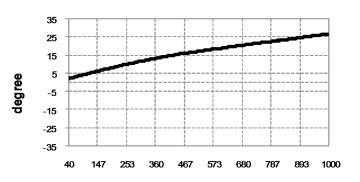




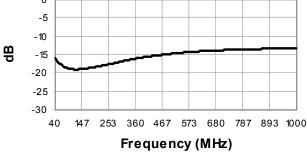
Phase Balance



Frequency (MHz)



Frequency (MHz)

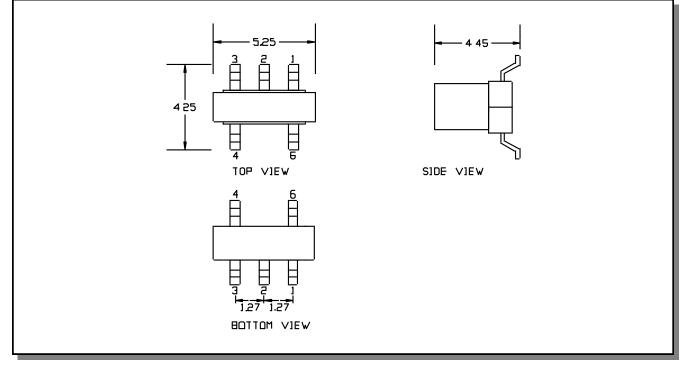




### Transformer, 1:3

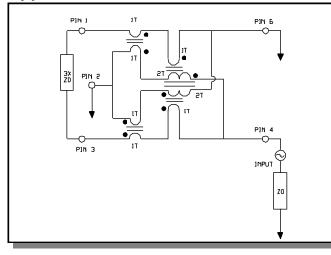
40 MHz - 1000MHz

### **Outline Drawing**

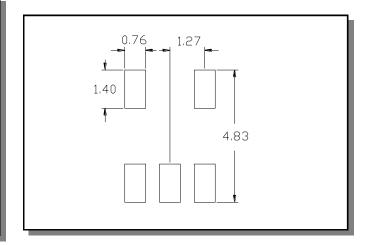


- Dimensions in mm. 1.
- 2. 3. Tolerance: ±0.2mm unless otherwise noted.
- Model number and lot code are printed on the reel.
- 4. Finish: CuSn6

#### **Application Circuit**



#### **Recommended Footprint**



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Rev. V2

#### Transformer, 1:3 40 MHz - 1000MHz



Rev. V2

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

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width	mm	12.00
Pitch	mm	8.00
A <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

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Transformer, 1:3 40 MHz - 1000MHz



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