



# 2.56:1 Impedance Ratio Center Tapped Transformer 5-65 MHz

MABA-007902-CF38A0 V<sub>1</sub>P

#### **Features**

- Surface Mount
- 2.56:1 Impedance
- 260°C Reflow Compatible
- RoHS\* Compliant
- RoHS version of MABAES0017
- Available on Tape and Reel. Reel quantity 2000

### **Description**

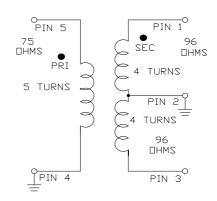
M/A-COM's MABA-007902-CF38A0 is a 2.56:1 RF flux coupled step up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



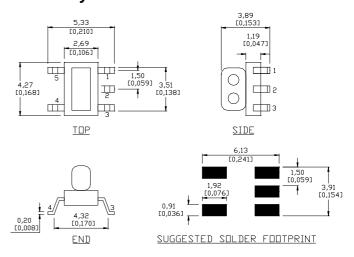
## **Pin Configuration**

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

#### **Schematic**



### Case Style: SM-138



Dimensions in mm [inches] Tolerance: .xx ± .02, .xxx ± .010

## **Ordering Information**

Part Number	Package		
MABA-007902-CF38A0	2000 piece reel		
MABA-007902-CF38TB	Customer Test Board		

Note: Reference Application Note M513 for reel size information.

\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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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
- China Tel: +86.21.2407.1588 • India Tel: +91.80.4155721 Visit www.macomtech.com for additional data sheets and product information.

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Electrical Specifications:  $T_A = 25$ °C,  $Z_0 = 75\Omega$ 

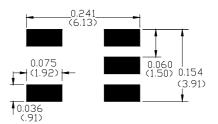
Parameter	Test Conditions	Units	Min	Тур	Max
Insertion Loss	5 - 65 MHz	dB	-	0.8	1.0
Amplitude Unbalance (Nominal 0dB)	5 - 65 MHz	dB	-	±0.02	±0.1
Phase Unbalance (Nominal 180º)	5 - 65 MHz	0	-	±0.2	±1.0

# **Absolute Maximum Ratings <sup>1,2</sup>**

Parameter	Absolute Maximum		
RF Power	250mW		
DC current	30mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-40°C to +85°C		

- 1. Exceeding any one or combination of these limits may cause permanent damage to this device.
- 2. M/A-COM does not recommend sustained operation near these survivability limits.

# **Recommended PCB Configuration**



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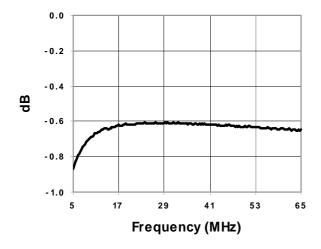


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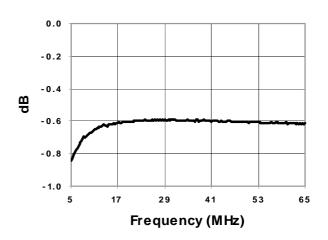
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Typical Performance Curves:  $T_A = 25^{\circ}C$ ,  $Z_0 = 75\Omega$ 

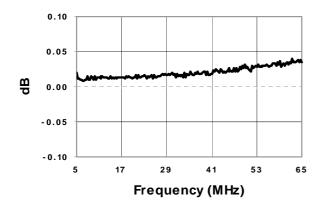
### Insertion Loss 1 (pin 5 to pin 3)



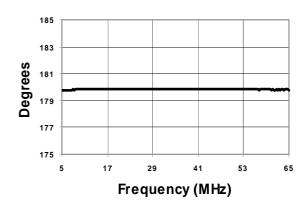
### Insertion Loss 2 (pin 5 to pin 1)



#### **Amplitude Unbalance**



### **Phase Balance**



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<sup>3</sup> 

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