

Rev: V1P

# 4:1 Flux Coupled Step-up Transformer

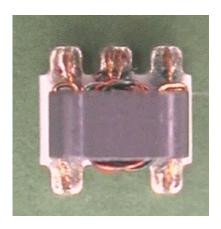
## 1-350MHz

#### **Features**

- Surface Mount
- 4:1 Impedance
- 260°C Reflow Compatible
- RoHS\* Compliant
- RoHS version of ETC4-1 and MABACT0011.
- Available on Tape and Reel. Reel quantity 2000

### **Description**

M/A-COM's MABA-007493-CF4160 is a 4:1 flux coupled step-up transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



### **Pin Configuration**

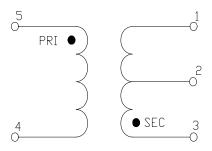
Pin No.	Function		
1	Secondary		
2	Secondary CT		
3	Secondary Dot		
4	Primary		
5	Primary Dot		

Note: Reference Application Note M513 for reel size information.

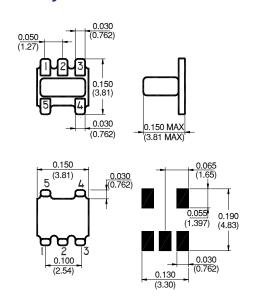
\* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

Commitment to produce in volume is not guaranteed.

#### **Schematic**



#### Case Style: SM-22



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

### **Ordering Information**

Part Number	Package			
MABA-007493-CF4160TR	2000 piece reel			
MABA-007493-CF41TB	Customer test board			

- ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions
- North America Tel: 800.366.2266 Europe Tel: +353.21.244.6400
  - India Tel: +91.80.43537383
- China Tel: +86.21.2407.1588

### MABA-007493-CF4160



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Rev: V1P 1-350MHz

#### Electrical Specifications: $T_A = 25$ °C, $Z_0 = 50\Omega$

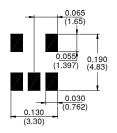
Parameter	Test Conditions	Units	Min	Тур	Max	Mean (x)	Sigma (x)
Insertion Loss 1	5 - 100 MHz 2 - 300 MHz 1 - 350 MHz	dB dB dB	- - -	0.8 1.6 2.0	1.0 2.0 3.0	- 1.21 -	0.032
Amplitude Unbalance	5 - 100 MHz 1 - 350 MHz	dB db	-		±0.1 ±0.5		-
Phase Unbalance	5 - 100 MHz 1 - 350 MHz	0	-		±1.0 ±5.0		-

## **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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## MABA-007493-CF4160

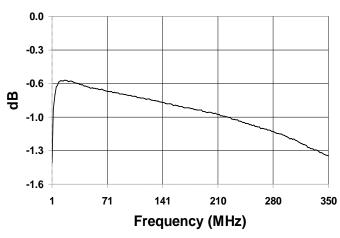


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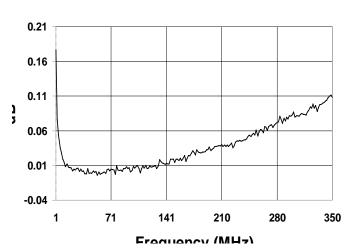
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#### Typical Performance Curves: $T_A = 25^{\circ}C$ , $Z_0 = 50\Omega$

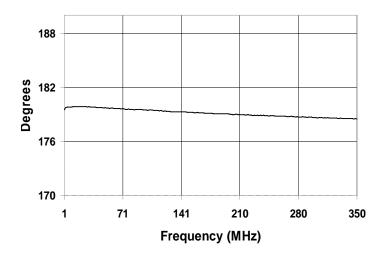
#### **Insertion Loss**



#### **Amplitude Unbalance**



#### **Phase Balance**



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