MABA-007493-CF4160

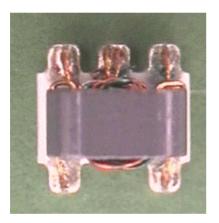
4:1 Flux Coupled Step-up Transformer 1-350MHz

Features

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

Description

MABA-007493-CF4160 is a 4:1 flux coupled stepup transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



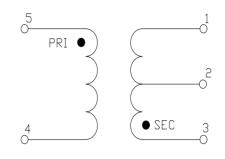
Pin Configuration

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

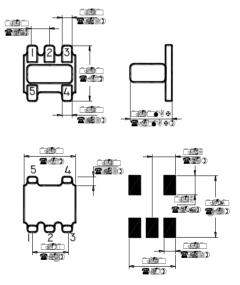
Note: Reference Application Note **M513** for reel size information.

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

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			

1

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

Rev. V2

MABA-007493-CF4160



4:1 Flux Coupled Step-up Transformer 1-350MHz

Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 50\Omega$

Parameter	Test Conditions	Units	Min	Тур	Мах	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 0	-	-	±1.0 ±5.0	-	

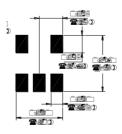
Absolute Maximum Ratings ^{1,2}

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.

 M/A-COM does not recommend sustained operation near these survivability limits.

Recommended PCB Configuration



2

M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

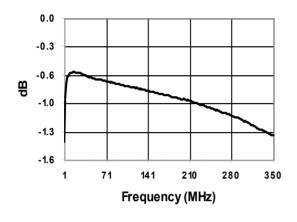
Rev. V2

MABA-007493-CF4160

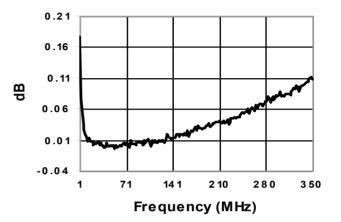
4:1 Flux Coupled Step-up Transformer 1-350MHz

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

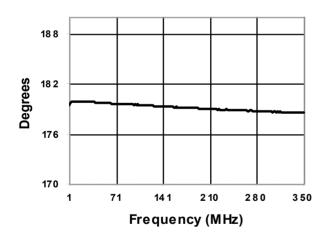
Insertion Loss



Amplitude Unbalance



Phase Balance



M/A-COM Technology Solutions Inc. (MACOM) and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. Visit <u>www.macom.com</u> for additional data sheets and product information.

MACOM

Rev. V2