

4:1 step down Flux Coupled Transformer 5-200MHz

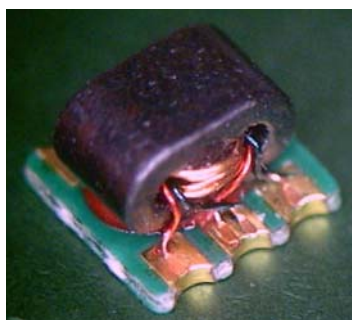
MABA-008354-CF4A40
V1

Features

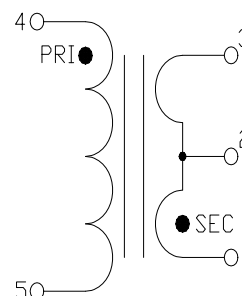
- Surface Mount
- 4:1 step-down Flux Coupled
- 260°C Reflow Compatible
- RoHS* Compliant
- All wires are welded to the PCB carrier
- Available on Tape and Reel. Reel quantity 2000

Description

M/A-COM's MABA-008354-CF4A40 is a 4:1 Flux Coupled step down transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems



Schematic



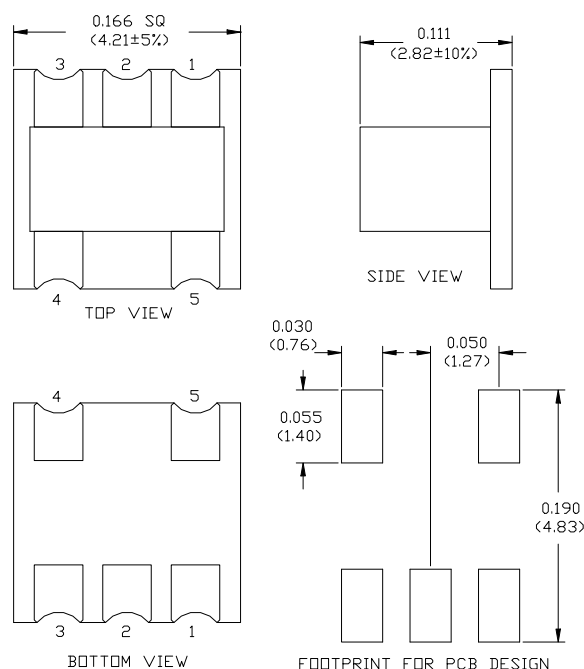
Pin Configuration

Pin No.	Function
1	Secondary Dot (output 1)
2	Centre Tap
3	Secondary (output 2)
4	Primary Dot (input)
5	Primary (ground)

Ordering Information

Part Number	Package
MABA-008354-CF4A40	2000
MABA-008354-CF4ATB	Customer Test Board

Case Style: SM-164



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

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

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

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.

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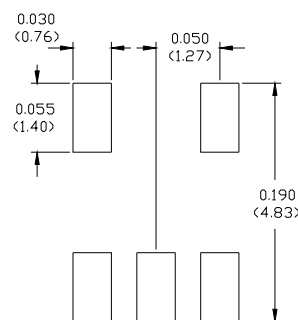
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 35 MHz	dB	-	0.8	1.1
	35 - 85 MHz	dB	-	1.1	1.6
	85-200 MHz	dB	-	2.2	3.6
Amplitude Balance	5 - 85 MHz	dB	-	± 0.01	± 0.4
	85 - 200 MHz	dB	-	± 0.09	± 0.8
Phase Balance	5 - 85 MHz	$^\circ$	-	± 0.2	± 4
	85 - 200 MHz	$^\circ$	-	± 0.4	± 5
Input Return Loss	5 - 35 MHz	dB	15	19	-
	35 - 85 MHz	dB	10	13	-
	85 - 200 MHz	dB	5	8	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
Max RF Power	1W
Max DC current	250mA per arm
Operating Temperature	-40°C to +60°C
Storage Temperature	-40°C to +85°C

Recommended PCB Configuration



FOOTPRINT FOR PCB DESIGN

- 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.

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Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

