# MABA-008282-CFGA40



16:1 Flux Coupled Transformer 5—90 MHz

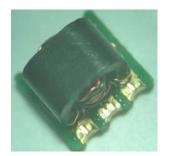
M/A-COM Products Released, Rev. V1

#### **Features**

- Surface Mount
- 16:1 Flux Coupled
- 260°C Reflow Compatible
- RoHS\* Compliant, Pb Free
- RoHS version of MABACT0046

#### Description

M/A-COM's MABA-008282-CFGA40 is a 16:1 Flux Coupled 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



## Pin configuration

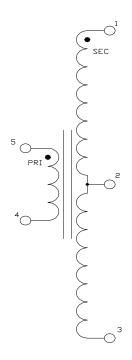
Pin No.	Function		
1	Secondary Dot (output 2)		
2	Centre Tap		
3	Secondary (output 1)		
4	Primary (ground)		
5	Primary Dot		

# **Ordering information**

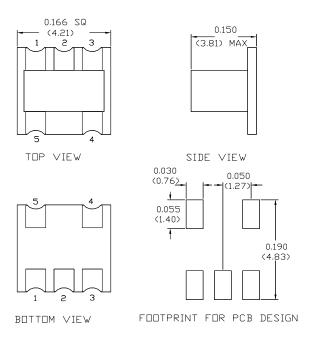
Part number	Description		
MABA-008282-CFGA40	Reel quantity_ 2000		
MABA-008282-CFGATB	Customer Test Board		

Note: Reference Application Note  $\bf M513$  for reel size information.

#### **Schematic**



#### Case style: SM-164



Dimensions in inches [mm] Tolerance: .xx  $\pm$  .02, .xxx  $\pm$  .010, unless otherwise stated

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

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

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

Parameter	Frequency	Units	Min	Тур	Max
Insertion Loss	5 - 15 MHz 15 - 63 MHz 63 - 90 MHz	dB dB dB	- - -	1.3 1.1 1.9	1.8 1.7 2.5
Amplitude Balance	5 - 90 MHz	dB	-	± 0.03	± 0.15
Phase Balance	5 - 90 MHz	0	-	± 0.1	± 1.0
Input Return Loss	5 - 63 MHz 63 - 90 MHz	dB dB	7 4	13 6	-

## **Absolute Maximum Ratings**

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

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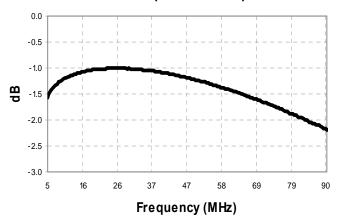


16:1 Flux Coupled Transformer 5-90 MHz

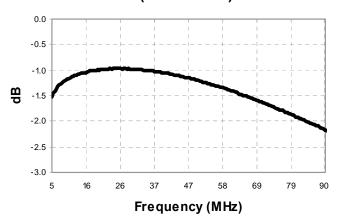
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## Typical Performance Curves: $T_A = 25^{\circ}C$ , $Z_0 = 75\Omega$ , $P_{in} = 0$ dBm

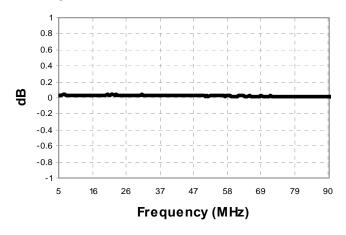
### Insertion Loss 1 (Pin5—Pin3)



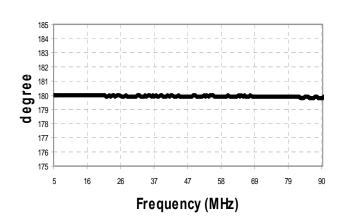
### Insertion Loss 2 (Pin5—Pin1)



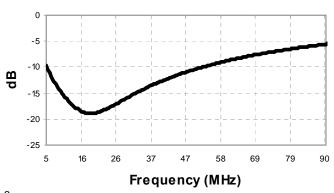
#### **Amplitude Balance**



#### **Phase Balance**



### **Return Loss: Input**



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