

MABA-008282-CFGA40

16:1 Flux Coupled Transformer
5—90 MHz

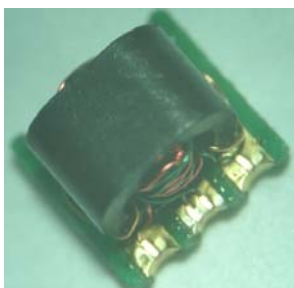
M/A-COM Products
Released, Rev. V1

Features

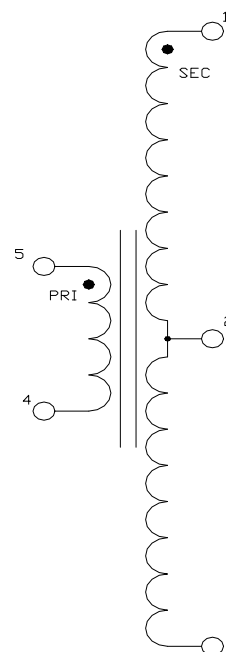
- Surface Mount
- 16:1 Flux Coupled
- 260°C Reflow Compatible
- RoHS* Compliant, Pb Free
- RoHS version of MABACT0046

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



Schematic



Case style: SM-164

Pin configuration

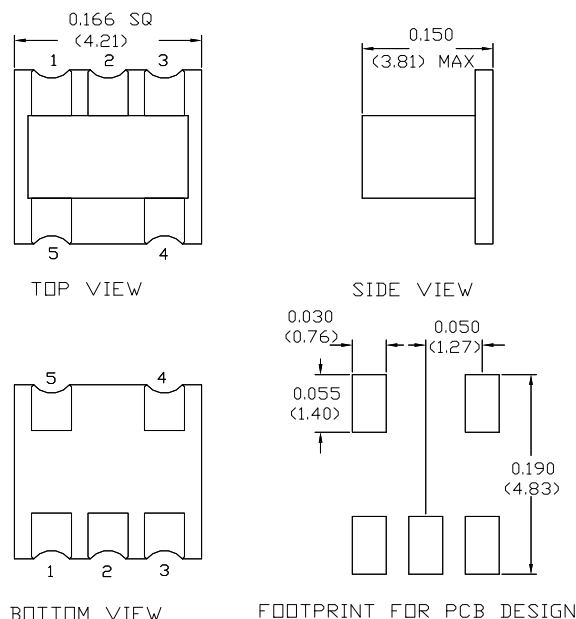
Pin No.	Function
1	Secondary Dot (output 2)
2	Centre Tap
3	Secondary (output 1)
4	Primary (ground)
5	Primary Dot

Ordering information

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

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

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



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

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

16:1 Flux Coupled Transformer
5—90 MHz

M/A-COM Products
Released, Rev. V1

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

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 15 MHz	dB	-	1.3	1.8
	15 - 63 MHz	dB	-	1.1	1.7
	63 - 90 MHz	dB	-	1.9	2.5
Amplitude Balance	5 - 90 MHz	dB	-	± 0.03	± 0.15
Phase Balance	5 - 90 MHz	$^{\circ}$	-	± 0.1	± 1.0
Input Return Loss	5 - 63 MHz	dB	7	13	-
	63 - 90 MHz	dB	4	6	-

Absolute Maximum Ratings

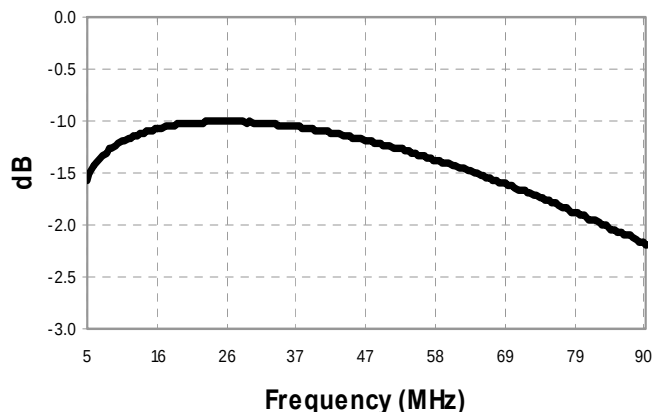
Parameter	Absolute Maximum
RF Power	250 mW
DC current	30mA
Operating Temperature	-40°C to $+85^{\circ}\text{C}$
Storage Temperature	-40°C to $+85^{\circ}\text{C}$

16:1 Flux Coupled Transformer
5—90 MHz

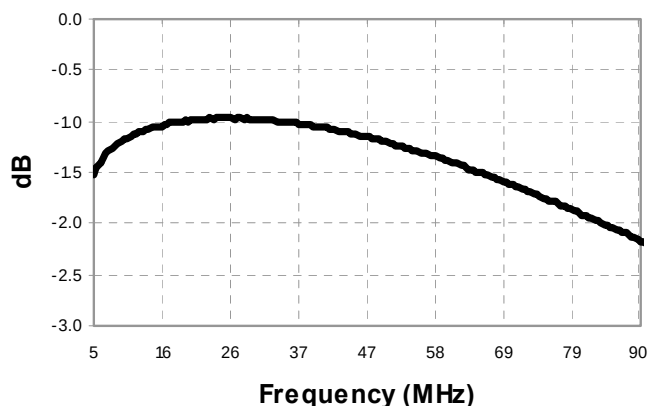
M/A-COM Products
Released, Rev. V1

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

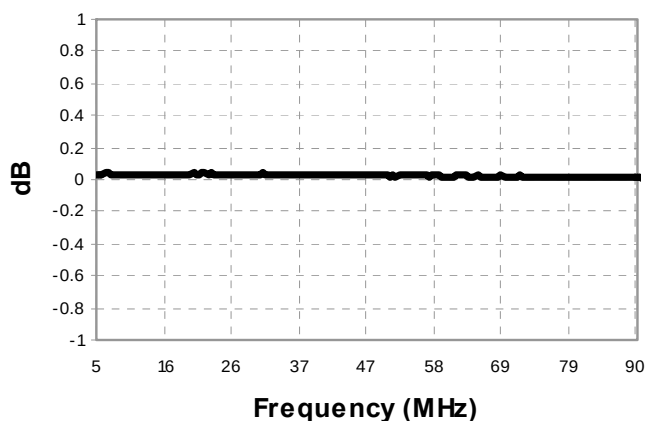
Insertion Loss 1 (Pin5—Pin3)



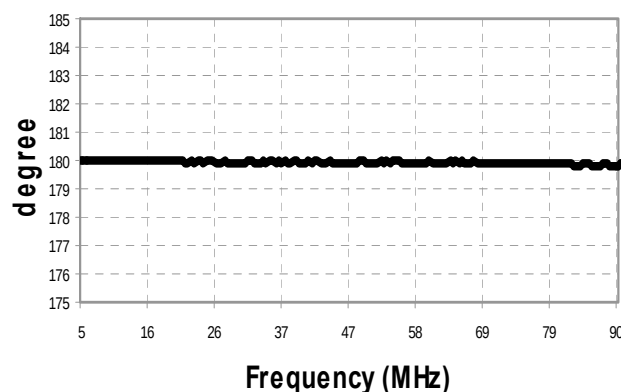
Insertion Loss 2 (Pin5—Pin1)



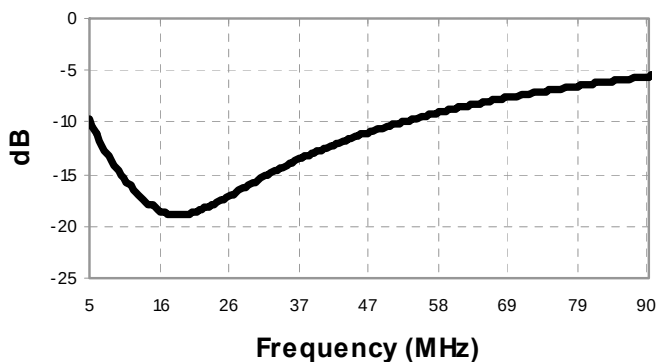
Amplitude Balance



Phase Balance



Return Loss: Input



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.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.