**RoHS Compliant**

4:1 flux Coupled Transformer
5-200MHz

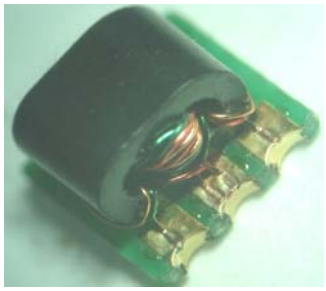
MABA-008260-CF4A40
V1

## Features

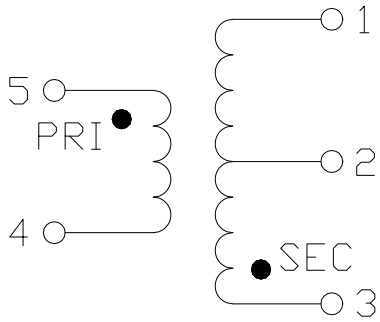
- SMT unit.
- 4:1 Impedance
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABACT0045
- Available on Tape and Reel. Reel quantity 2000

## Description

M/A-COM's MABA-008260-CF4A40 is a low cost surface mount 4:1 flux coupled transformer. Ideally suited for high volume CATV/Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems.



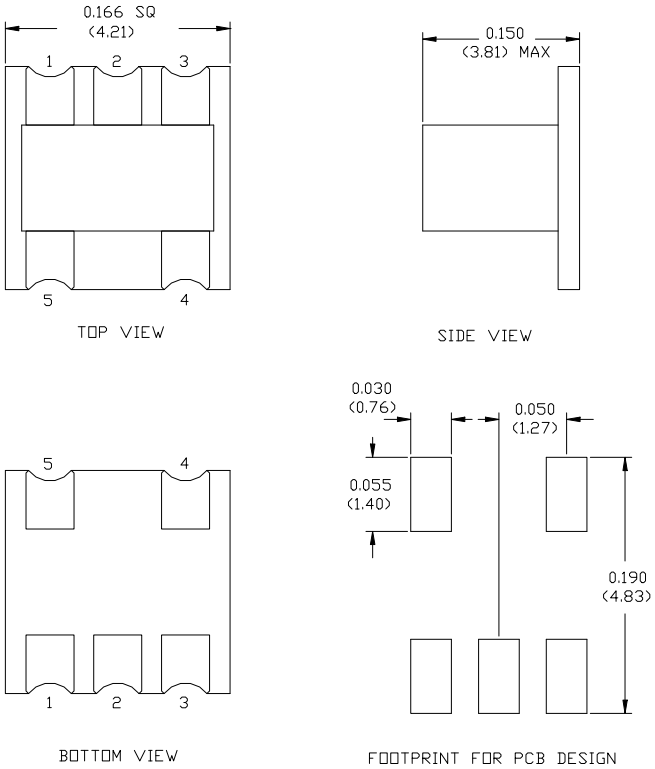
## Schematic




## Pin Configuration

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

## Case Style: SM-164




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

## Ordering Information

| Part Number | Package |
|---|---|
| MABA-008260-CF4A40 | 2000 |
| MABA-008260-CF4ATB | Customer Test Board |

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

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





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4:1 flux Coupled Transformer
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## Electrical Specifications: $T_A$ = 25°C, $Z_0$ = 75Ω [1]

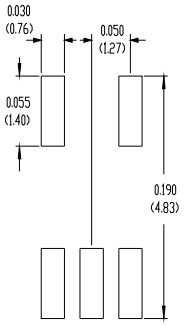
| Parameter | Frequency | Units | Min | Typ | Max |
|---|---|---|---|---|---|
| Insertion Loss | 5 - 65 MHz<br>65 - 200 MHz | dB<br>dB | -<br>- | 0.6<br>0.8 | 1.0<br>1.0 |
| Amplitude Balance | 5 - 200 MHz | dB | - | 0.2 | 0.3 |
| Phase Balance | 5 - 65 MHz<br>65 - 200 MHz | dB<br>dB | -<br>- | 0.1<br>0.3 | 2.0<br>3.0 |
| Input Return Loss | 5 - 65 MHz<br>65 - 200 MHz | dB<br>dB | 15<br>12 | 25<br>17 | -<br>- |

## Absolute Maximum Ratings [1,2]

| Parameter | Absolute Maximum |
|---|---|
| RF Power | 250 mW |
| 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




FOOTPRINT FOR PCB DESIGN





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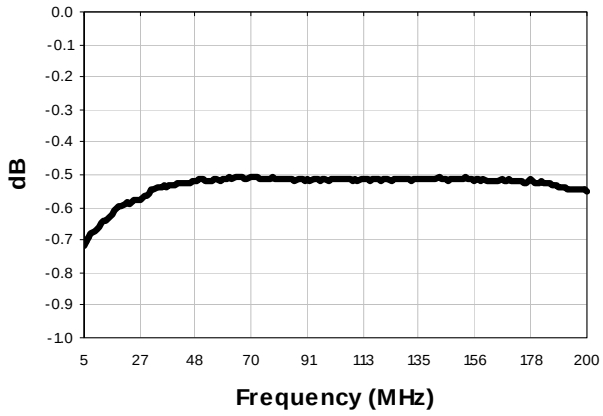
4:1 flux Coupled Transformer
5-200MHz

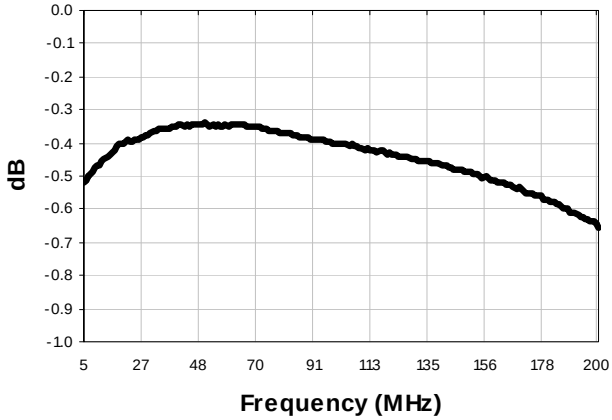
MABA-008260-CF4A40
V1

## Typical Performance Curves: $T_A$ = 25°C, $Z_0$ = 75Ω [1]

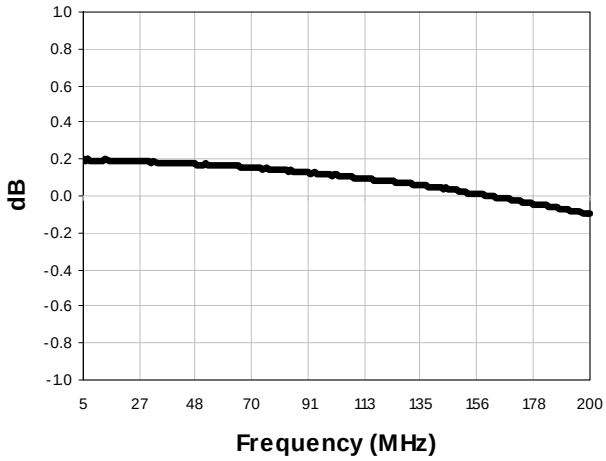
### Insertion Loss 1: pin 5-3



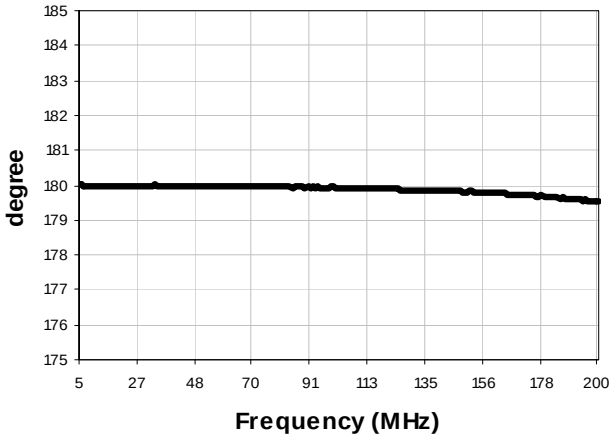

### Insertion Loss 2: pin 5-1



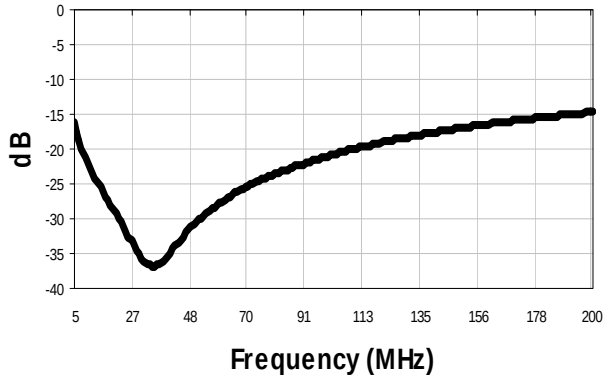

### Amplitude Balance




### Phase Balance




### Return Loss: Input





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