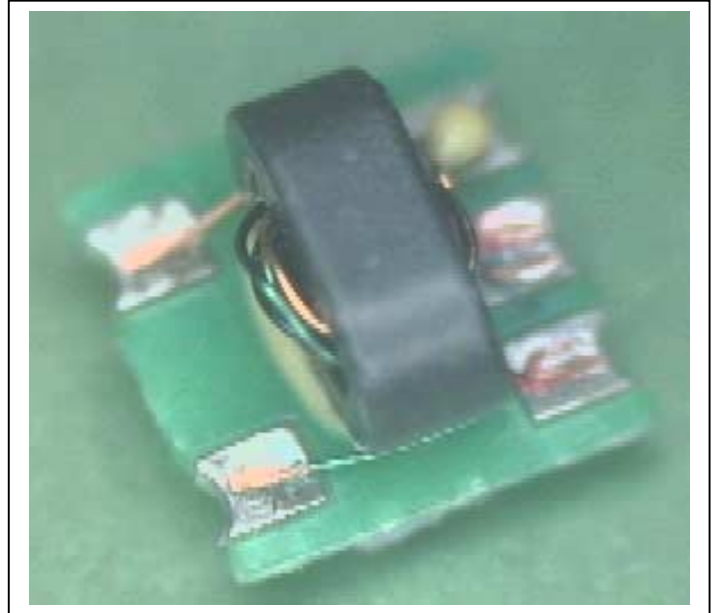


Features

- SMT unit
- 1:1 impedance
- Available on tape & reel
- Excellent temperature stability

Description

M/A-COM's MABACT0036 is a low cost SMT 1:1 RF flux coupled transformer designed for high volume CATV Broadband applications. Suitable for use in 50 Ohm and 75 Ohm systems



Electrical Specifications @ 25°C, 75 Ohm

| Parameter | Test Conditions | Units | Min. | Typ. | Max. |
|------------------------------|-----------------|-------|------|-------|-------|
| Frequency Range: 0.3-200 MHz | | | | | |
| Insertion Loss (Pin 1 – 5) | 0.3 - 5 MHz | dB | — | 1.0 | 2.6 |
| | 5 - 200 MHz | dB | — | 0.5 | 0.9 |
| Insertion Loss (Pin 3 – 5) | 0.3 –10 MHz | dB | — | 1.0 | 2.6 |
| | 10 – 200 MHz | dB | — | 0.4 | 0.7 |
| Amplitude Balance | 0.3–200 MHz | dB | — | ± 0.1 | ± 0.5 |
| Phase Balance (ref 180°) | 0.3–200 MHz | ° | — | ± 0.3 | ±3.0 |
| Input Return Loss | 0.3 - 5 MHz | dB | 5 | 13 | — |
| | 5 - 100 MHz | dB | 19 | 27 | — |
| | 100 - 200 MHz | dB | 15 | 21 | — |

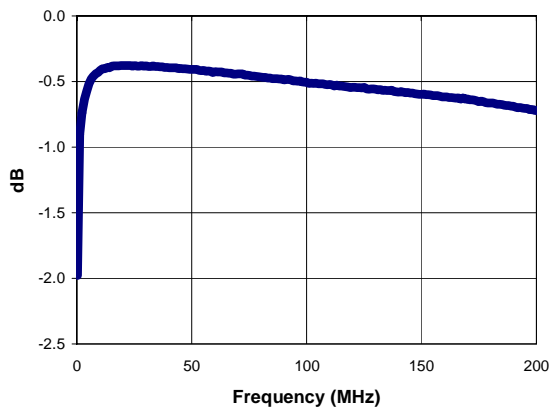
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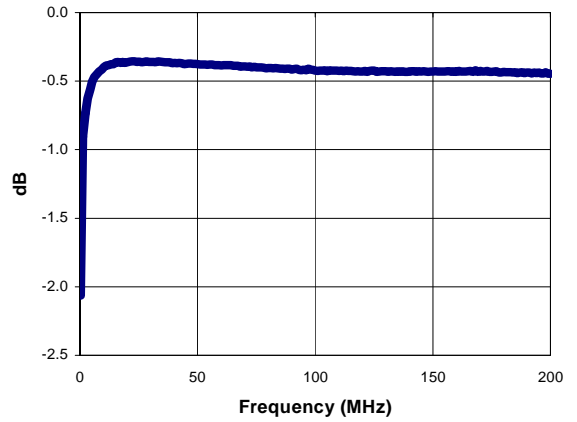
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 ■ Asia/Pacific: Tel.+ 81-44-844-8296, Fax+81-44-844-8298
 ■ Europe: Tel. +44(1908) 574 200, Fax +44(1908) 574 300

Typical Performance @ +25°C, 75 Ohm

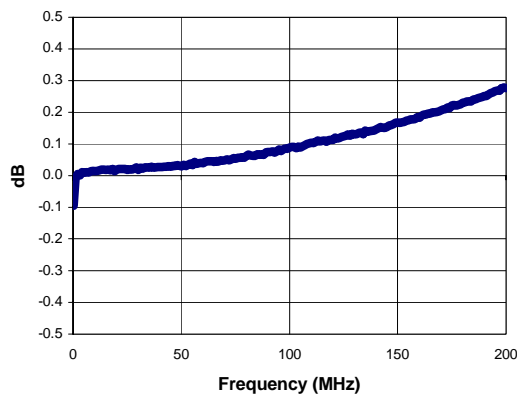
Insertion loss 1: pin 5-1



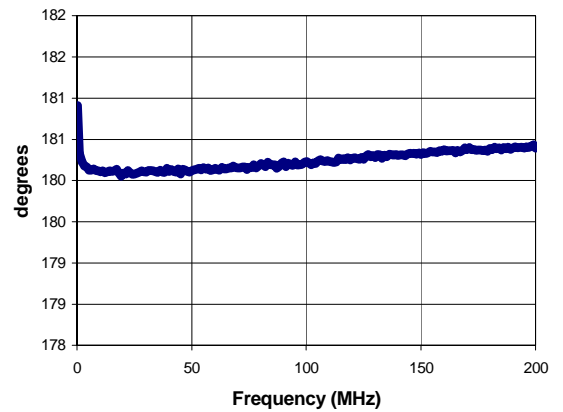
Insertion loss 2: pin 5-3



Amplitude balance



Phase balance



Absolute Maximum Ratings ¹

| | Absolute Maximum |
|-------------------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Operating/Storage Temperature | -40° C to +85° C |

¹ Exceeding one or a combination of these settings may cause permanent damage to the unit

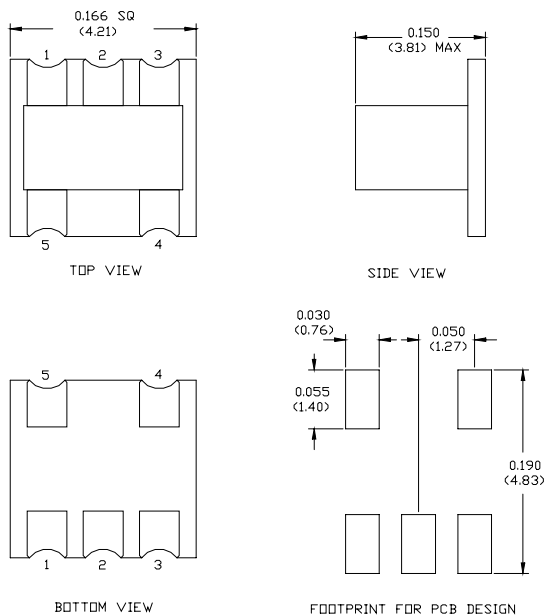
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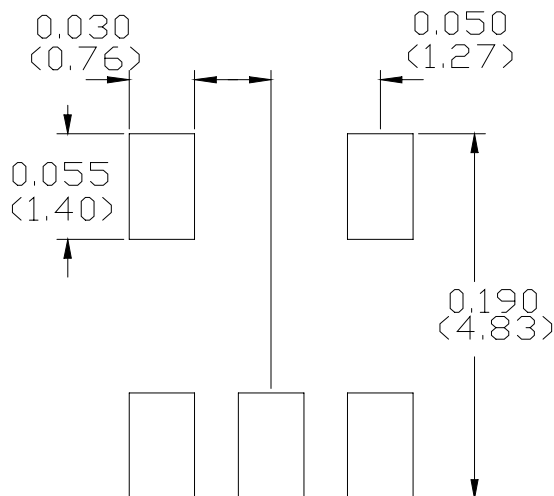
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SM-164 Case Style



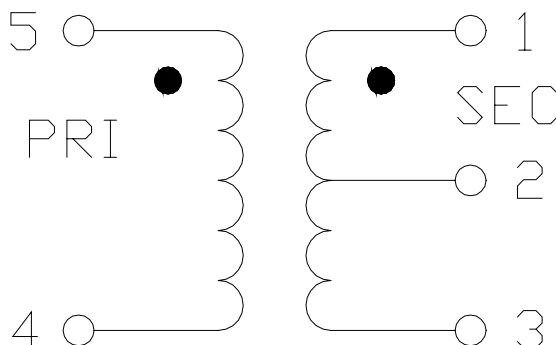
Suggested Footprint



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Functional Schematic



Pin Configuration

| Function | Pin No. |
|-----------------------|---------|
| Primary Dot (input) | 5 |
| Primary (ground) | 4 |
| Secondary Dot (o/p 1) | 1 |
| Center Tap | 2 |
| Secondary (o/p 2) | 3 |

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