

**1:1 Tx Line Balun Transformer
4.5-3000MHz**

**MABA-007327-CT1A40
V1P**

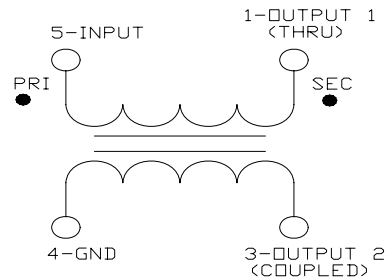
Features

- Surface Mount
- 1:1 Impedance
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MABACT0034.
- Available on Tape and Reel. Reel quantity 2000

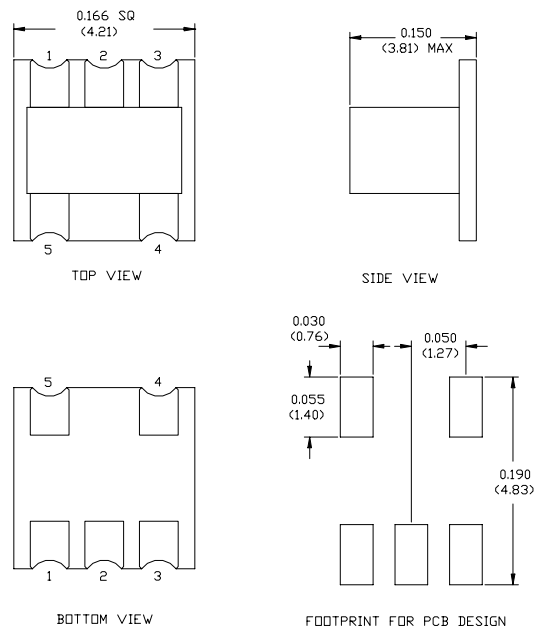
Description

M/A-COM's MABA-007327-CT1A40 is a 1:1 Tx Balun transformer in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.

Schematic



Case Style: SM-164



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

Pin Configuration

| Pin No. | Function |
|---------|--------------------------|
| 1 | Secondary (output 1) |
| 2 | Not Connected (Ground) |
| 3 | Secondary Dot (output 2) |
| 4 | Primary (Ground) |
| 5 | Primary Dot (Input) |

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

Ordering Information

| Part Number | Package |
|----------------------|---------------------|
| MABA-007327-CT1A40TR | 2000 piece reel |
| MABA-007327-CT1ATB | Customer Test Board |

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

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

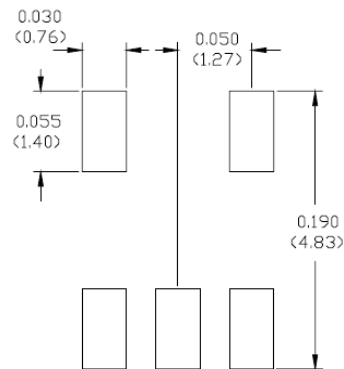
| Parameter | Test Conditions | Units | Min | Typ | Max |
|---------------------|-----------------|----------|-----|-----------|-----------|
| Insertion Loss | 4.5 - 1000 MHz | dB | - | 0.8 | 1.0 |
| | 1000 - 2000 MHz | dB | - | 1.6 | 2.0 |
| | 2000 - 3000 MHz | dB | - | 2.5 | 3.5 |
| Amplitude Unbalance | 4.5 - 3000 MHz | dB | - | ± 0.5 | ± 1.0 |
| Phase Unbalance | 4.5 - 3000 MHz | $^\circ$ | - | ± 10 | ± 20 |

Absolute Maximum Ratings ^{1,2}

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

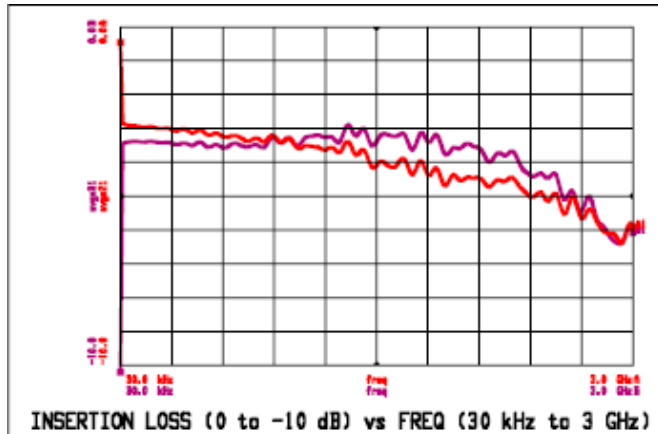


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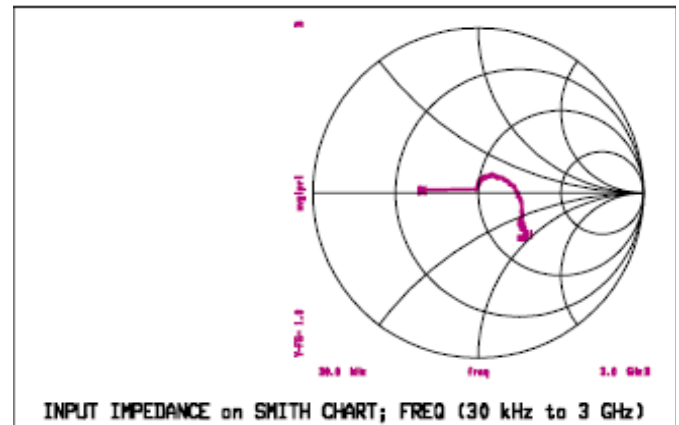
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Typical Performance Curves: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

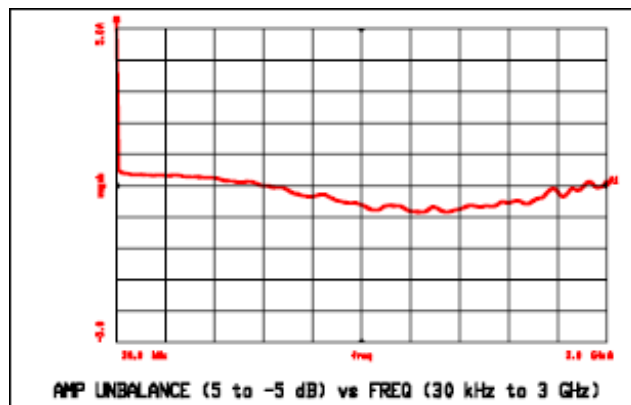
Insertion Loss



Input Return Loss



Amplitude Unbalance



Phase Balance

