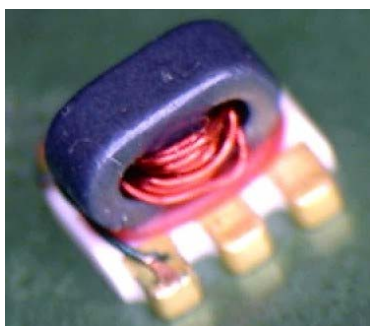


## Features

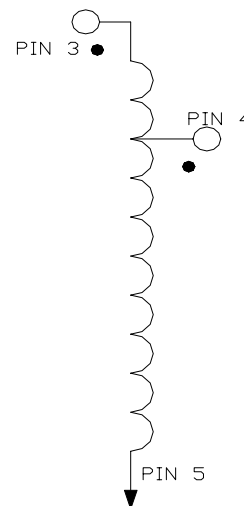
- Surface Mount
- 1.5:1 Impedance
- 260°C Reflow Compatible
- RoHS\* Compliant
- Available on Tape and Reel.

## Description

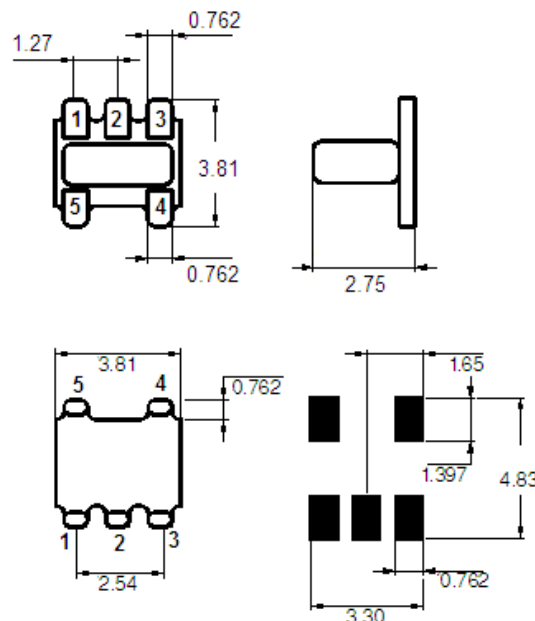
M/A-COM Technology Solutions MABACT0063 is a 1.5:1 Auto Transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



## Schematic



## Component Dimensions:



Dimensions in mm, Tolerance: .xx ± .2, .xxx ± .1  
Drawing not to scale

## Pin Configuration

| Pin No. | Function                       |
|---------|--------------------------------|
| 1       | Not Connected                  |
| 2       | Not Connected                  |
| 3       | Primary Dot (e.g. 75 Ohms)     |
| 4       | Secondary Dot (e.g. 50 Ohms)   |
| 5       | Primary and Secondary (Ground) |

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

# 1.5:1 Auto Transformer 5-1000MHz

Rev V2

**Electrical Specifications:**  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$  <sup>1</sup>

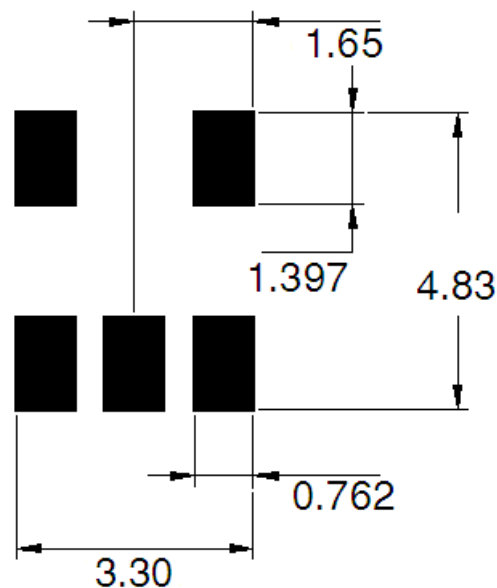
| Parameter         | Test Conditions | Frequency      | Units | Min | Typ | Max |
|-------------------|-----------------|----------------|-------|-----|-----|-----|
| Insertion Loss    | -               | 5 - 1000 MHz   | dB    | -   | 0.5 | 1.0 |
| Input Return Loss | -               | 5 - 500 MHz    | dB    | 24  | 30  | -   |
| Input Return Loss | -               | 500 - 1000 MHz | dB    | 16  | 26  | -   |
|                   |                 |                |       |     |     |     |
|                   |                 |                |       |     |     |     |

## Recommended Maximum Ratings <sup>1,2</sup>

| Parameter             | Value           |
|-----------------------|-----------------|
| Max Input Power       | 250mW           |
| DC current            | 100mA           |
| Operating Temperature | -40°C to +85°C  |
| Storage Temperature   | -55°C to +100°C |

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

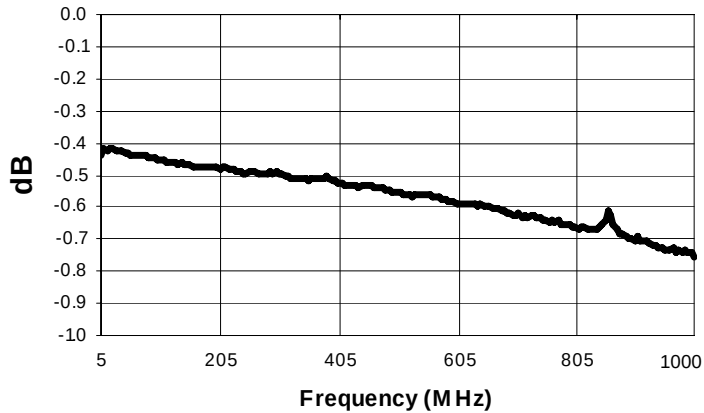
## Recommended PCB Configuration



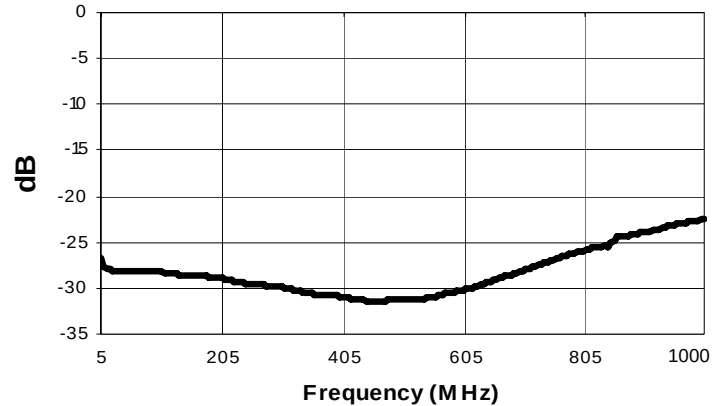
Dimensions in mm, Tolerance: .xx ± .2, .xxx ± .1  
Drawing not to scale

## Typical Performance Curves

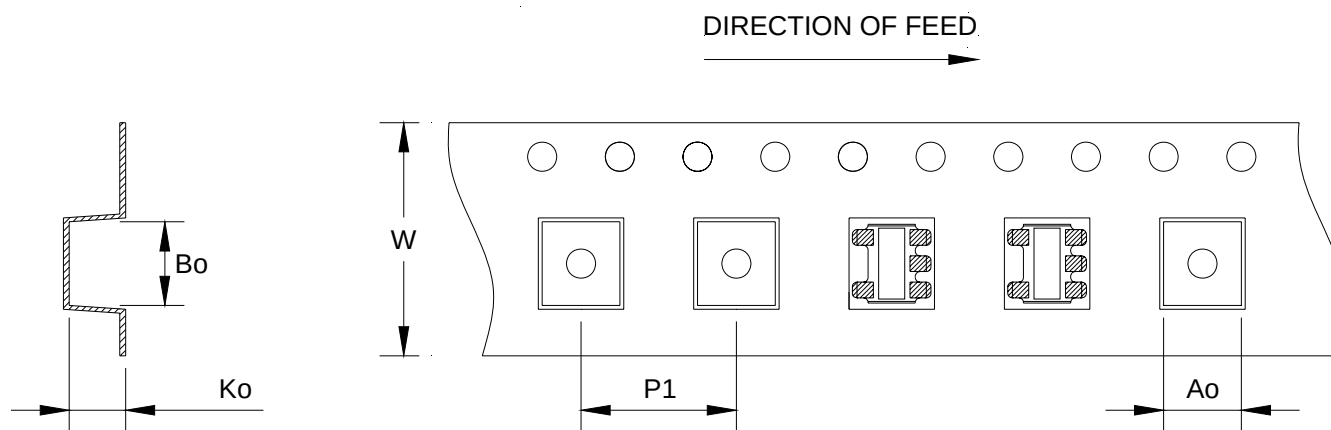
Insertion Loss: pin 4 to 3



Input Return Loss: pin 4



## Tape Specification:



| Item | Dimension        |
|------|------------------|
| Ao   | 4.00mm +/-0.1mm  |
| Bo   | 4.00mm +/-0.1mm  |
| Ko   | 2.90mm +/-0.1mm  |
| W    | 12.00mm +/-0.3mm |
| P1   | 8.00mm +/-0.1mm  |

## Ordering Information

| Part Number  | Package         |
|--------------|-----------------|
| MABACT0063TR | 2000 piece reel |