

Features

- 1:1 Impedance ratio
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- Excellent temperature stability
- Excellent amplitude and phase balance
- Can be used in both 50Ω and 75Ω systems

Description

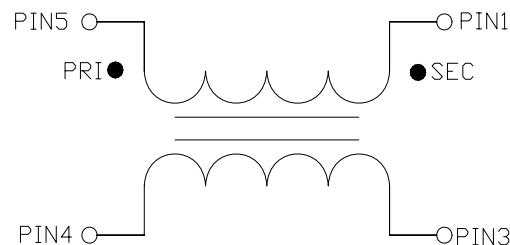
M/A-Com Technology Solutions MABACT0034 is a 1:1 RF transmission line transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications.



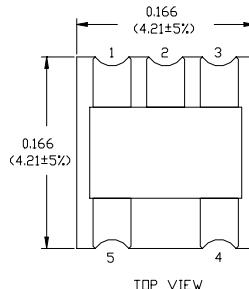
Pin Configuration

Pin no.	Function
1	Secondary Dot
2	Not connected
3	Secondary
4	Primary
5	Primary Dot

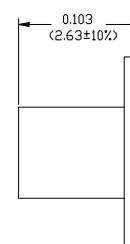
Schematic



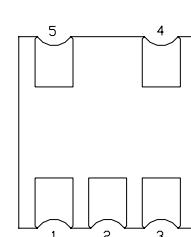
Component dimensions



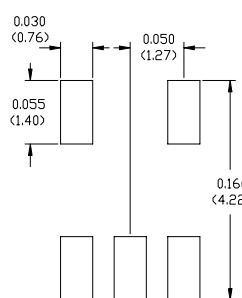
TOP VIEW



SIDE VIEW



BOTTOM VIEW



FOOTPRINT FOR PCB DESIGN

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

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.

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Visit www.macomtech.com for additional data sheets and product information.

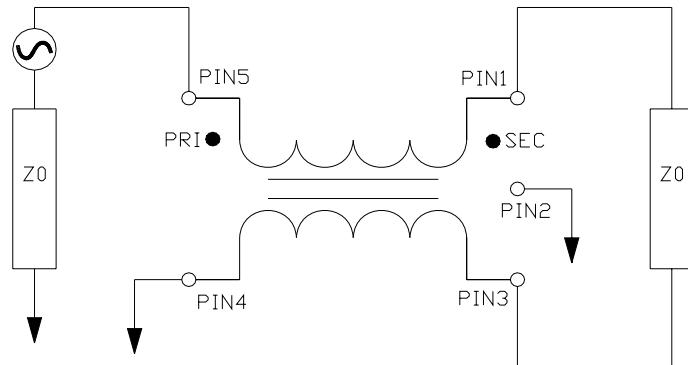
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Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 75\Omega$, $P_{\text{in}} = 0\text{dBm}$

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss 1	4.5 - 1000MHz	dB	-	0.8	1.0
	1000 - 2000MHz	dB	-	1.6	2.0
	2000 - 3000 MHz	dB	-	2.5	3.5
Amplitude Balance (Nominal 0dB)	4.5 - 3000 MHz	dB	-	± 0.50	± 1.0
Phase Balance (Nominal 180°)	4.5 - 3000 MHz	°	-	± 10.0	± 20.0

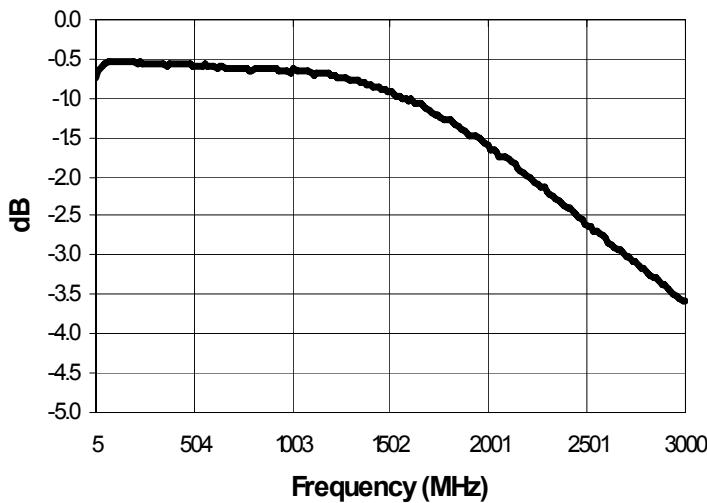
Recommended Maximum Ratings

Parameter	Value
Input power	At least 250mW
DC current	At least 30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

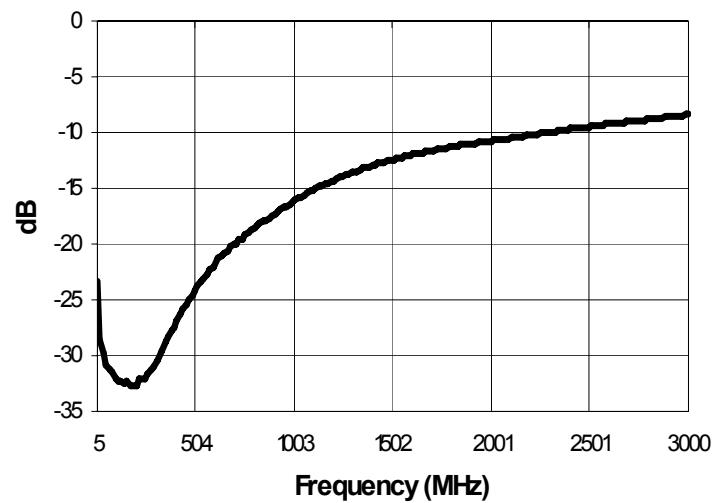
Application Circuit


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

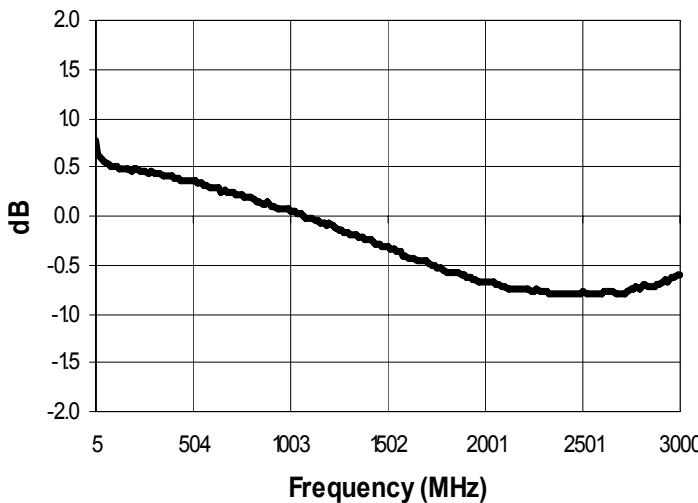
Insertion Loss



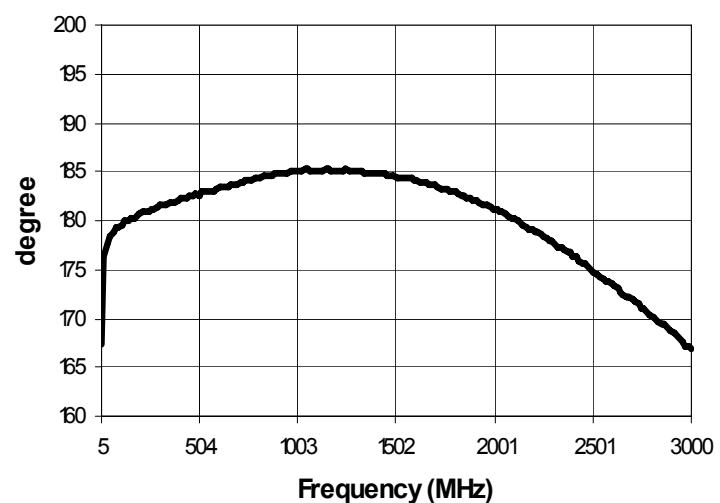
Return Loss: Input



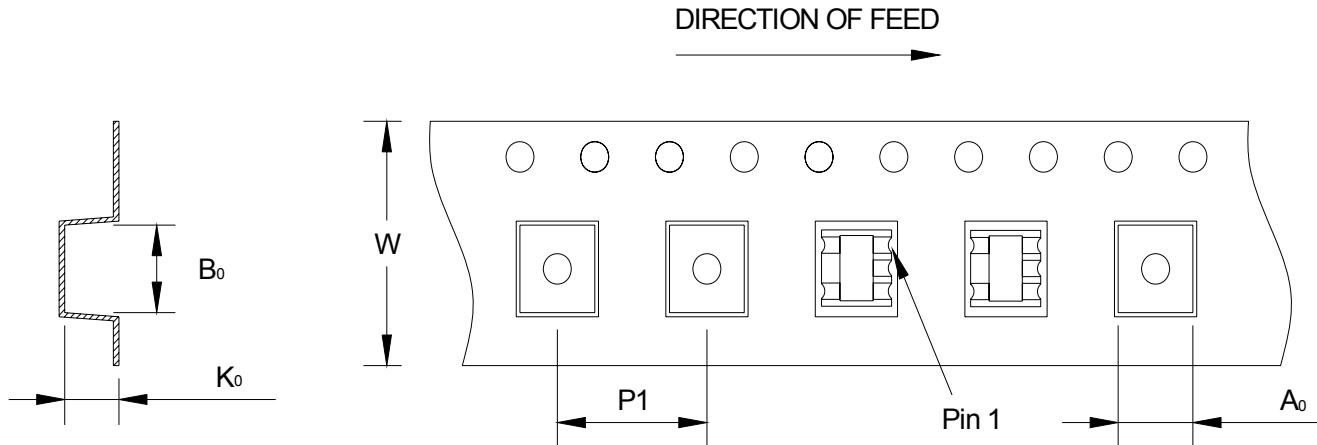
Amplitude Balance



Phase Balance



Tape & Reel Information



Item	Dimension
A0	4.50mm +/- 0.1mm
B0	4.50mm +/- 0.1mm
K0	2.73mm +/- 0.1mm
W	12.0mm +/- 0.3mm
P1	8.0mm +/- 0.1mm

Ordering Information

Part number	Description
MABACT0034	2000 piece reel

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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