

Features

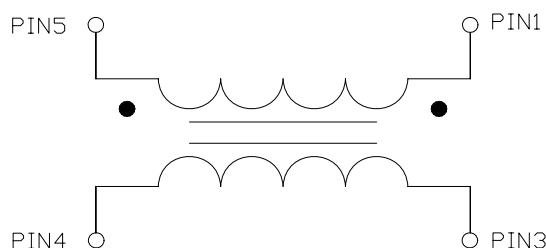
- Surface mount
- 1:1 Impedance ratio
- 260°C reflow compatible
- RoHS* compliant and lead free
- Available on tape and reel

Description

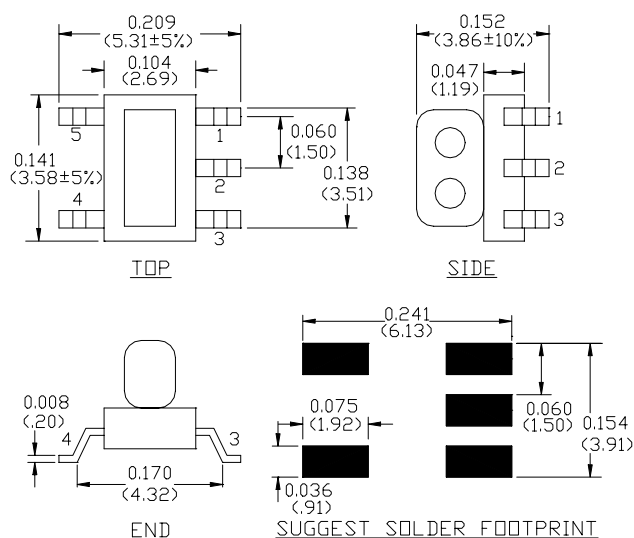
M/A Com's MABAES0032 is a 1:1 RF Transmission Line transformer in a low cost, surface mount package. Ideally suited for broadband CATV applications. Typical applications include single to balances mode conversion and impedance matching.



Schematic



Case style: SM-138



Pin Configuration

Pin no.	Function
1	Secondary dot
2	Not used (Ground)
3	Secondary
4	Primary
5	Primary Dot

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

Ordering Information

Part number	Description
MABAES0032	2000 piece reel

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

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

Transformer, 1:1 Transmission Line Transformer
5 to 1000 MHz

M/A-COM Products
Rev. V3

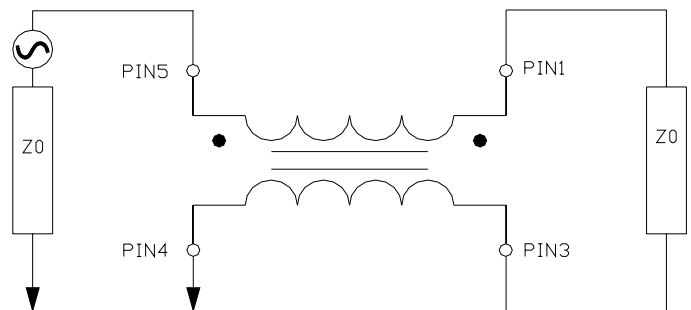
Electrical Specifications: $T_A = 25^\circ\text{C}$, 0dBm, $Z_0 = 50\Omega$, $P_{in} = 0\text{dBm}$

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 300 MHz	dB	-	0.7	1.0
	300 - 1000 MHz	dB	-	1.3	1.8
Amplitude Unbalance (Nominal 0dB)	5 - 1000 MHz	dB	-	0.4	± 0.8
Phase Unbalance (Nominal 180°)	5 - 300 MHz	°	-	3.0	± 5.0
	300 - 1000 MHz	°	-	7.0	± 10.0

Recommended Maximum Ratings

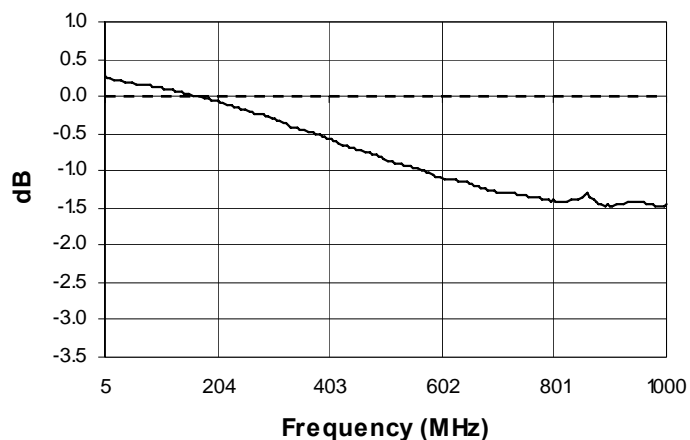
Parameter	Value
Input power	At least +24dBm (250mW)
DC current	At least 30mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

Application Circuit

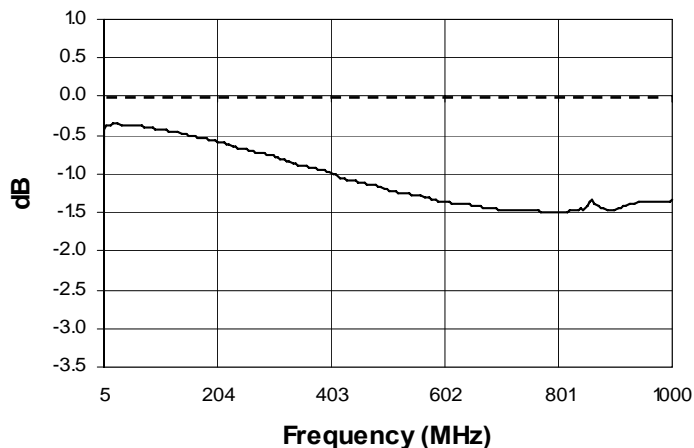


Typical Performance Curves: $T_A = 25^\circ\text{C}$, 0dBm , $Z_0 = 50\Omega$, $P_{in} = 0\text{dBm}$

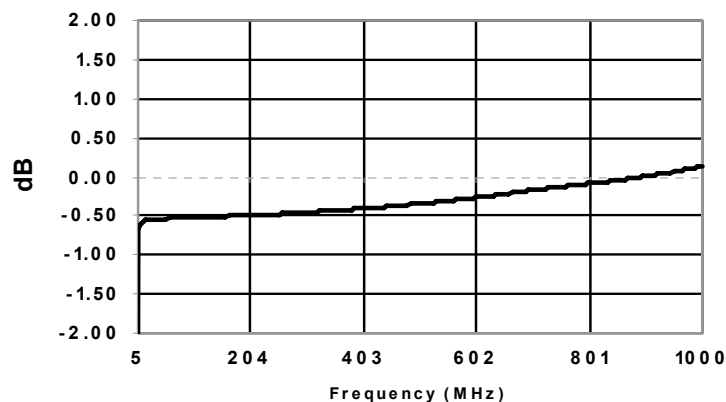
Insertion Loss 1: (Pin 4 to 1)



Insertion Loss 2: (Pin 4 to 3)



Amplitude Balance



Phase Balance

