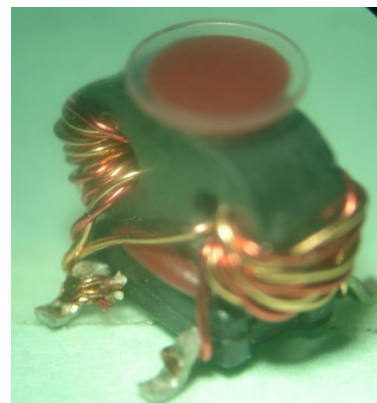


## Features

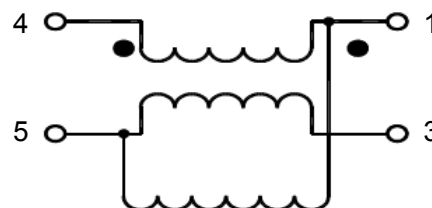
- Surface Mount.
- 1:1 impedance ratio.
- Wires welded to SOT carrier leads.
- Excellent amplitude and phase balance
- Available on Tape and Reel.

## Description

MABA-008979-CF0290 is a 1:1 RF transmission line transformer with a tap, in a low cost surface mount SOT package. Ideally suited for high volume CATV applications.



## Schematic



## Ordering Information

Part Number	Package
MABA-008979-CF0290	1500 piece reel

## Pin Configuration

Pin No.	Function
1	Output 1: Through (Secondary dot)
2	Ground, not used
3	Output 2: Coupled (Secondary)
4	Input (Primary dot)
5	Ground (Primary)

## Electrical Specifications @ 25°C, 0 dBm, 75 Ohms

Parameter	Test Conditions	Units	Min	Typ	Max
Frequency Range	50 - 1200 MHz	MHz	—	—	—
Insertion Loss 1: Pin 4-1 (Through)	50 - 600 MHz 600 - 1200 MHz	dB	—	0.5 0.8	1.0 1.5
Insertion Loss 2: Pin 4-3 (Coupled)	50 - 600 MHz 600 - 1000 MHz 1000 - 1200 MHz	dB	—	0.5 1.2 1.5	1.0 1.5 2.0
Amplitude Imbalance	50 - 600 MHz 600 - 1200 MHz	dB	—	0.1 0.0	0.3 1.0
Phase Imbalance	50 - 600 MHz 600 - 1000 MHz 1000 - 1200 MHz	Degrees	—	1 4 11	3 10 13

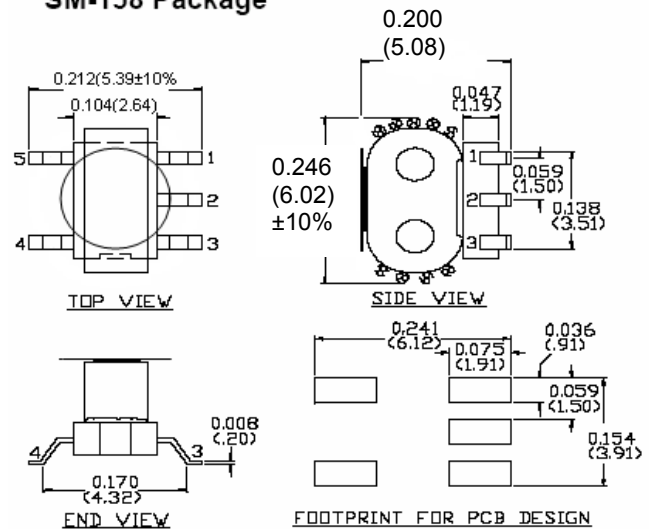
## Absolute Maximum Ratings<sup>1,2</sup>

Parameter	Absolute Maximum
RF Power	250mW
Current DC	50 mA
Current RMS	10 mA
Current P-P for 1hr	80 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

- Exceeding any one or combination of these limits may cause permanent damage to this device.
- MACOM does not recommend sustained operation near these survivability limits.

## Case Style

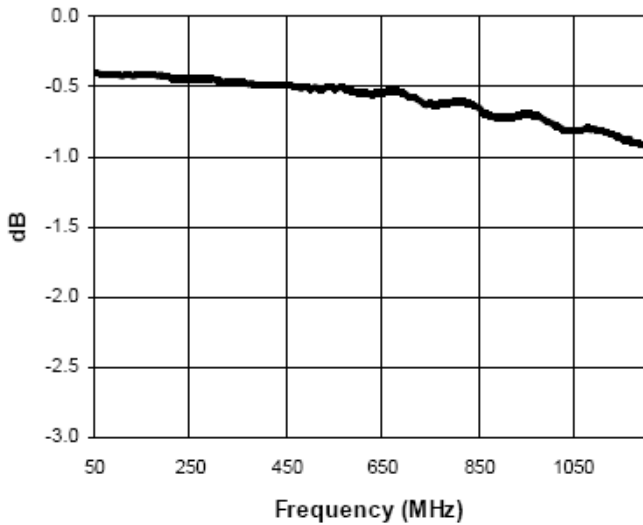
### SM-158 Package



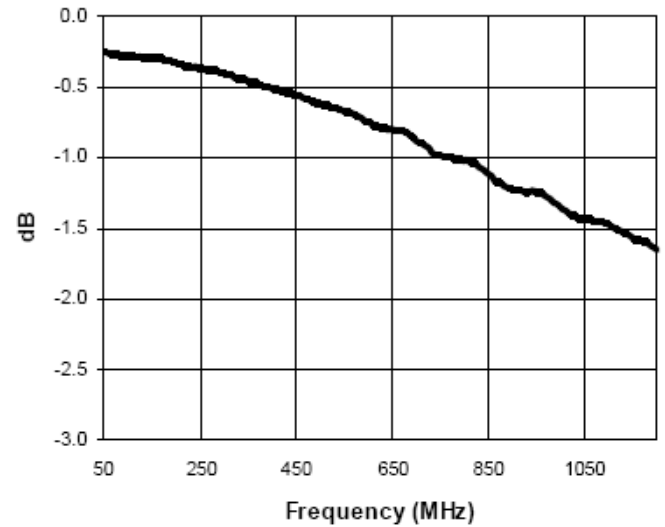
\* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

## Typical Performance @ +25°C, 75 Ohms

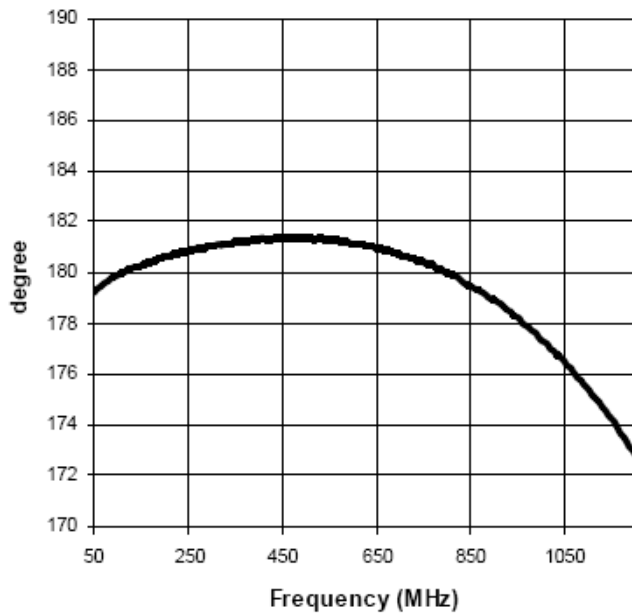
Insertion Loss Pin 4-1



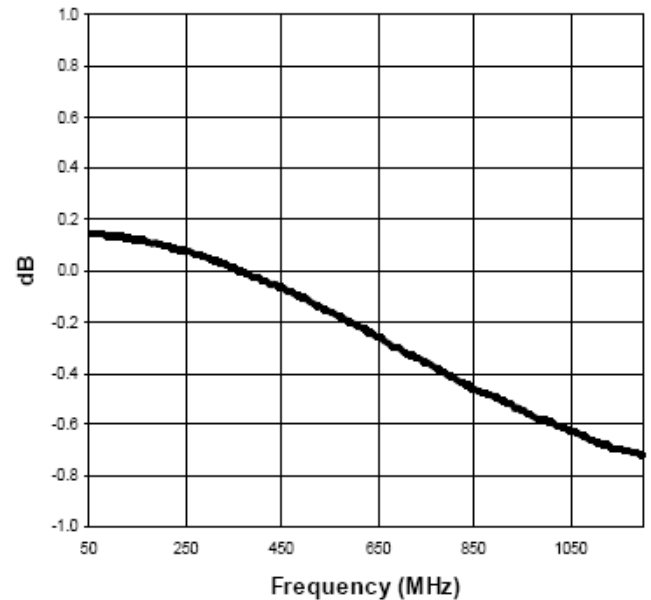
Insertion Loss Pin 4-3



Phase Imbalance



Amplitude Imbalance



M/A-COM Technology Solutions Inc. All rights reserved.

Information in this document is provided in connection with M/A-COM Technology Solutions Inc ("MACOM") products. These materials are provided by MACOM as a service to its customers and may be used for informational purposes only. Except as provided in MACOM's Terms and Conditions of Sale for such products or in any separate agreement related to this document, MACOM assumes no liability whatsoever. MACOM assumes no responsibility for errors or omissions in these materials. MACOM may make changes to specifications and product descriptions at any time, without notice. MACOM makes no commitment to update the information and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to its specifications and product descriptions. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document.

THESE MATERIALS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, RELATING TO SALE AND/OR USE OF MACOM PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, CONSEQUENTIAL OR INCIDENTAL DAMAGES, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. MACOM FURTHER DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. MACOM SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS, WHICH MAY RESULT FROM THE USE OF THESE MATERIALS.

MACOM products are not intended for use in medical, lifesaving or life sustaining applications. MACOM customers using or selling MACOM products for use in such applications do so at their own risk and agree to fully indemnify MACOM for any damages resulting from such improper use or sale.