

2:1 Transformer 3 - 300 MHz

V3

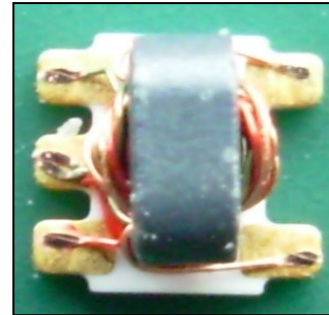
Features

- 2:1 impedance
- Surface mount
- Available on tape and reel
- 260° reflow compatible
- RoHS Compliant and Pb free

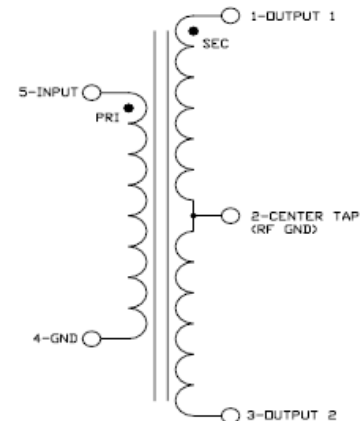
Description

MABA-009250-CT0068 is a RoHS Compliant 2:1 RF transformer in a low cost, surface mount package. Typical applications include single to balanced mode conversion and impedance matching.

The MABA-009250-CT0068 is available in a SM-22 surface mount package and is designed to be utilized in both RoHS and standard reflow profiles. Parts are packaged in tape & reel.



Schematic



Ordering Information

Part Number	Description
MABA-009250-CT0068	Tape & Reel

Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Centre Tap
3	Secondary
4	Primary
5	Primary Dot

* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

2:1 Transformer
3 - 300 MHz

V3

Electrical Specifications

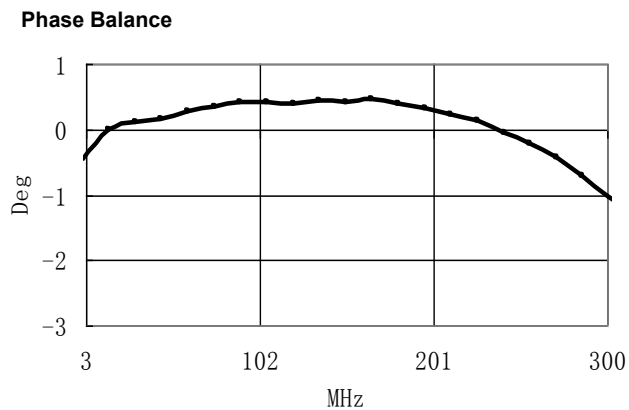
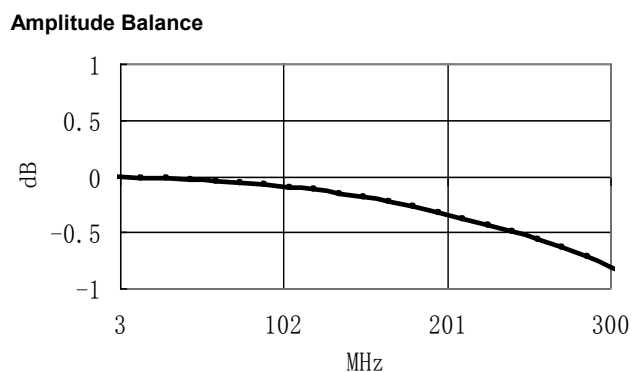
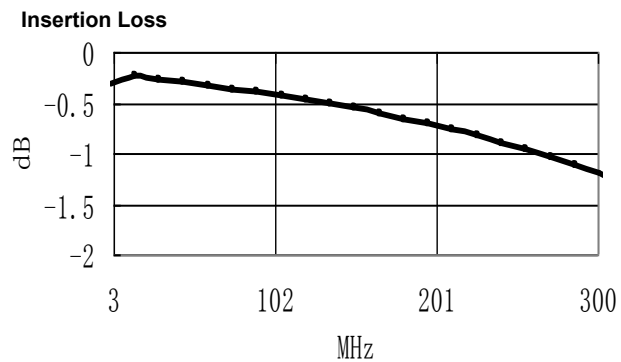
Parameter	Conditions	Units	Min	Typ	Max
Frequency Range	—	MHz	3	—	300
Impedance	—	Ω	—	50	—
Impedance Ratio	—	ratio	—	2:1	—
Insertion Loss	3 - 300 MHz	dB	—	0.7	1.6
Amplitude Balance	3 - 300 MHz	dB	—	0.4	±1.2
Phase Balance	3 - 300 MHz	°	—	—	±2.0

Recommended Maximum Ratings

Parameter	Rating
Input Power	250 mW
DC Current	240 mA
Operating Temperature	-40°C to +85°C

2:1 Transformer 3 - 300 MHz

V3

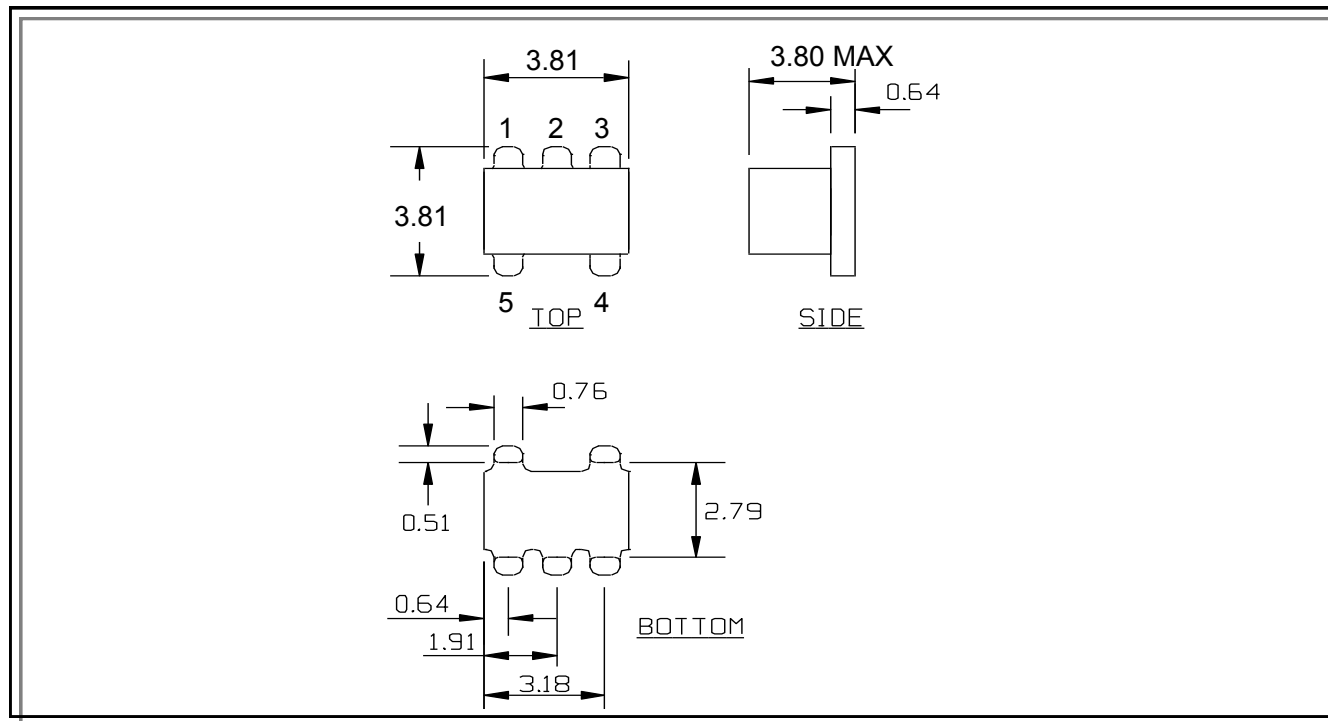


Full temperature plots available on request

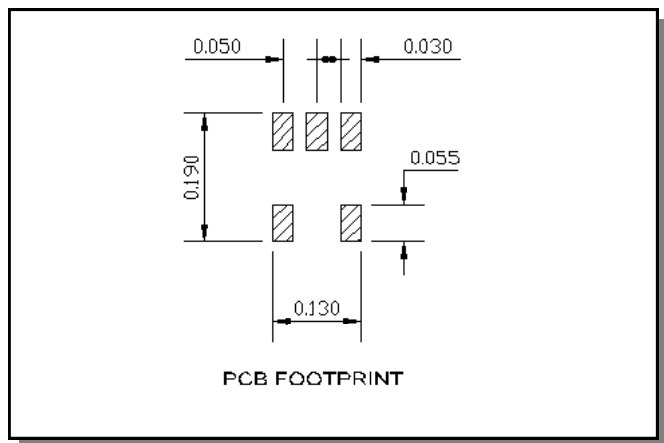
Electrical Specifications: $Z_0 = 50\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

2:1 Transformer
3 - 300 MHz

V3

Outline Drawing

1. Dimensions in mm.
2. Tolerance: ± 0.2 mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electroless nickel immersion gold (ENIG)

Recommended Footprint**Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.00
Bo	mm	4.00
Ko	mm	2.90
Orientation	-	F5
Reference Application Note ANI-019 for orientation		

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.