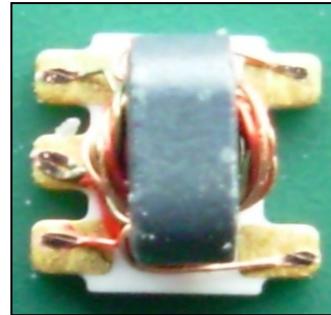


2:1 Transformer
3 - 300 MHz

V3

Features

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

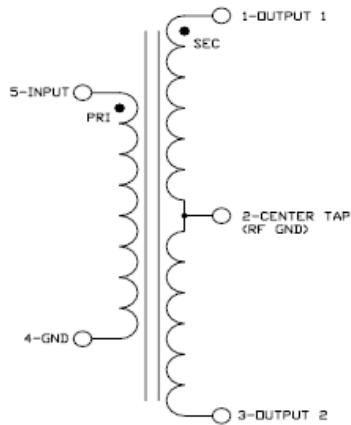


Description

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.

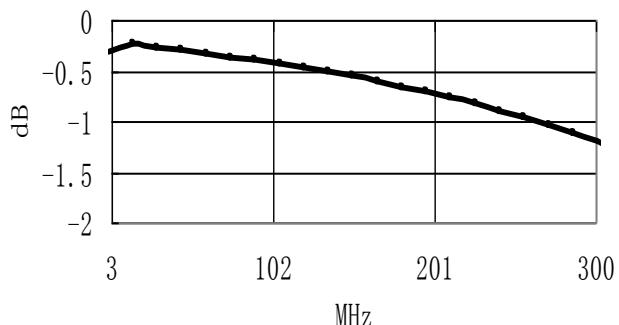
**2:1 Transformer
3 - 300 MHz****V3****Electrical Specifications**

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

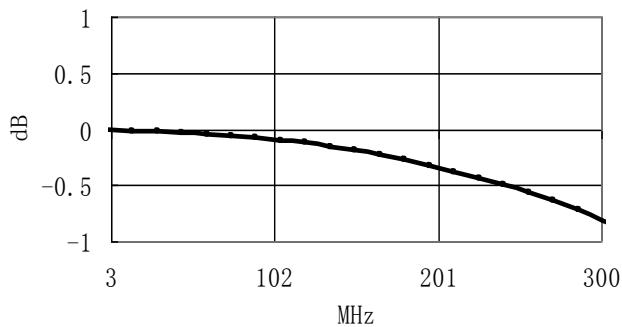
Recommended Maximum Ratings

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

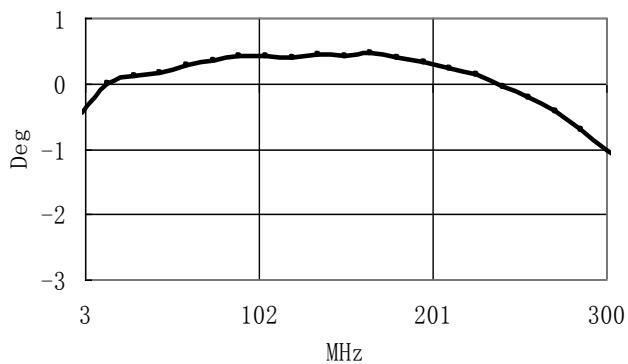
Insertion Loss



Amplitude Balance



Phase Balance



Full temperature plots available on request

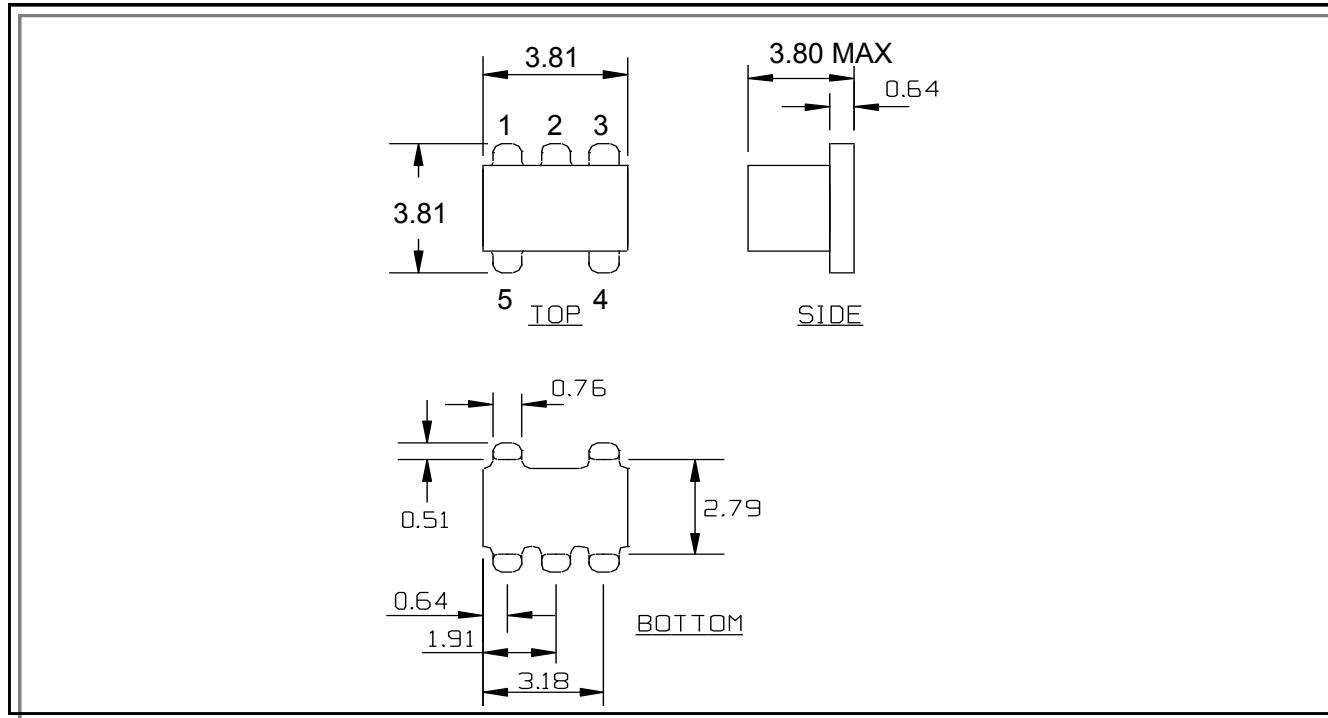
Electrical Specifications: $Z_0 = 50\Omega$, $T_A = 25^\circ\text{C}$, $P_{\text{in}} = 0\text{dBm}$

3

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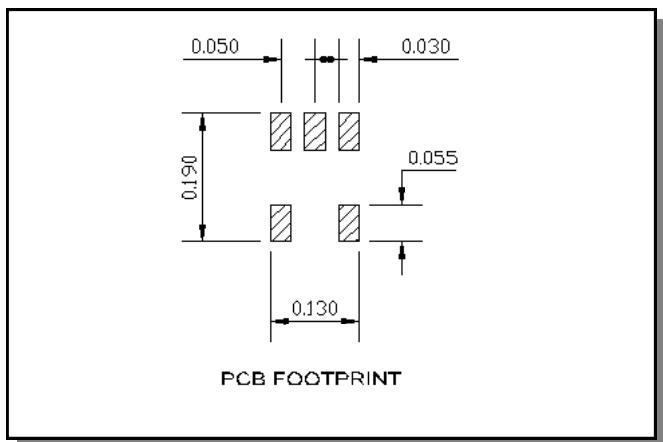
For further information and support please visit:
<https://www.macom.com/support>

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

2:1 Transformer
3 - 300 MHz

V3

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