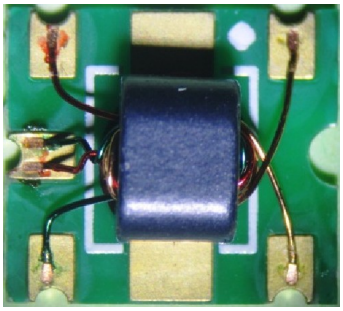
MABA-011050

1:2 Transformer
5 – 300 MHz

Rev. V2

Features

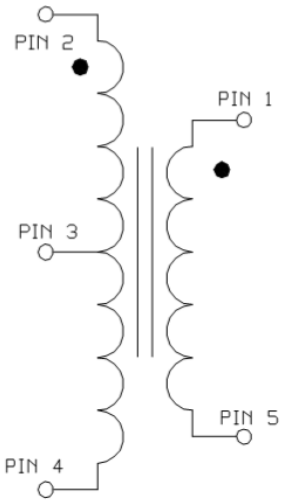
- 1:2 impedance
- Surface mount
- Available on tape and reel
- 260º reflow compatible
- RoHS compliant and Pb free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTX applications.



Description

MACOM's MABA-011050 is a 1:2 transformer. This transformer is ideally suited for CATV Broadband applications.

Functional Schematic



Ordering Information

Part Number	Package
MABA-011050	Tape & Reel
MABA-011050-TB	Customer test board

Pin Configuration

Pin No.	Function
1	Primary Dot (input)
2	Secondary Dot (output 1)
3	Centre tap (RF ground)
4	Secondary (output 2)
5	Primary (ground)

• **North America** Tel: 800.366.2266 / Fax: 978.366.2266
• **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
• **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

1:2 Transformer
5 – 300 MHz

Rev. V2

Electrical Specifications: T_A = 25°C, Z_0 = 75 Ω, P_{in} = 0dBm

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	5		300
Impedance		Ω		75	
Impedance Ratio				1:2	
Insertion Loss 1 (Pin1 - Pin2)	5 - 150 MHz 150 - 300 MHz	dB dB	- -	0.6 0.8	0.8 1.0
Insertion Loss 2 (Pin1 - Pin4)	5 - 300 MHz	dB	-	0.5	0.7
Amplitude Balance	5 - 150 MHz 150 - 300 MHz	dB dB	- -	0.1 0.2	0.2 0.5
Phase Balance (Ref value 180˚)	5 - 150 MHz 150 - 300 MHz	° °	- -	0.06 0.1	1.0 2.5
Input Return Loss (Pin1)	5 - 150 MHz 150 - 300 MHz	dB dB	18 16	19 18	- -

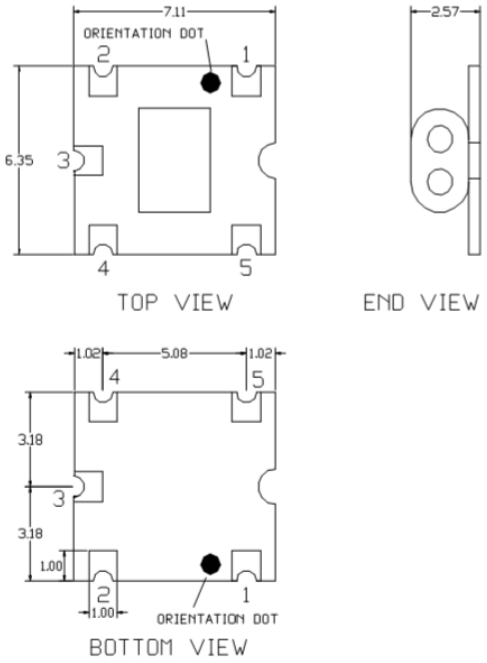
Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		600
Operating Temperature Range	ºC	-40	+125

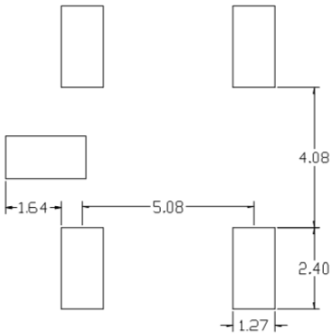
Full temperature plots available on request

• **North America** Tel: 800.366.2266 / Fax: 978.366.2266
• **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
• **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Outline Drawing



PCB Layout



1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Lead plating: ENIG.

Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel Size	mm	330
Tape Width	mm	16.00
Pitch	mm	12.00
Ao	mm	6.60
Bo	mm	7.40
Ko	mm	2.90
Orientation	-	F33
Reference Application Note ANI-019 for orientation		

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Typical Performance Curves