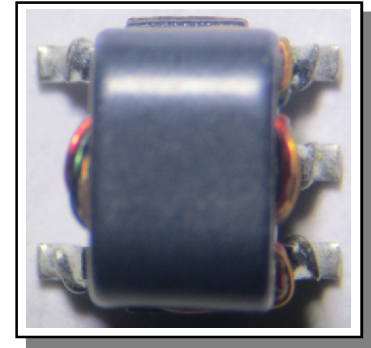


1:4 Flux Coupled Balun Transformer 1 - 300 MHz

V1

Features

- 1:4 impedance
- Surface mount
- Available on tape and reel
- 260° reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTX applications



Description

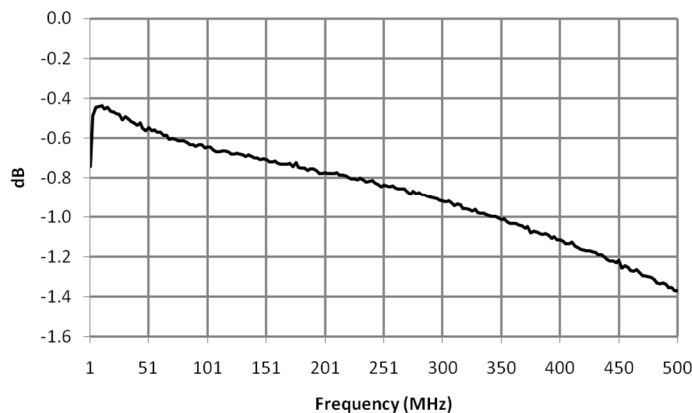
MACOM's MABA-011039 is a 1:4 Flux coupled Transmission. This Transformer is ideally suited for CATV and Broadband applications.

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	1		300
Impedance		Ω		75	
Impedance Ratio				1:4	
Insertion Loss 1 (Pin1 - Pin5)	1 - 300 MHz	dB	-	0.7	1.1
Insertion Loss 2 (Pin1 - Pin3)	1 - 300 MHz	dB	-	0.6	1.1
Amplitude Balance	1 - 300 MHz	dB	-	0.05	± 0.5
Phase Balance	1 - 300 MHz	$^{\circ}$	-	0.2	± 3.0
Input Return Loss (Pin1)	1 - 300 MHz	dB	14	21	-

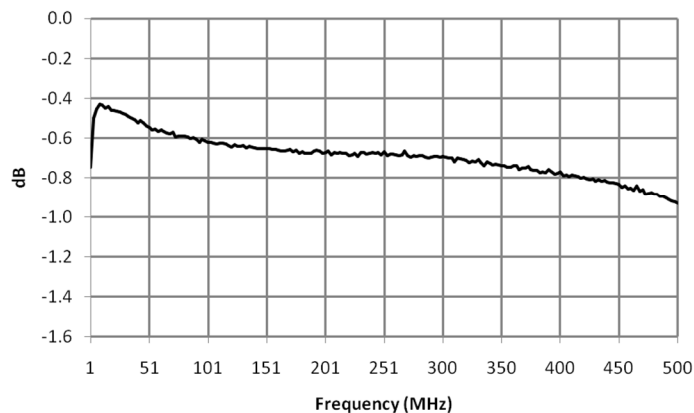
1:4 Flux Coupled Balun Transformer 1 - 300 MHz

V1

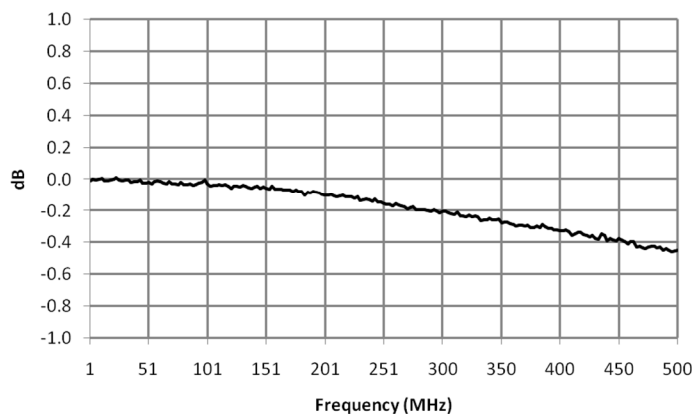
MABA-011039 insertion_loss_1_p1_5



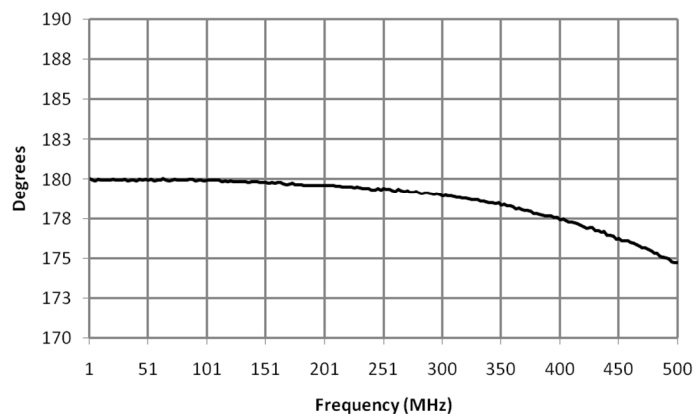
MABA-011039 insertion_loss_2_p1_3



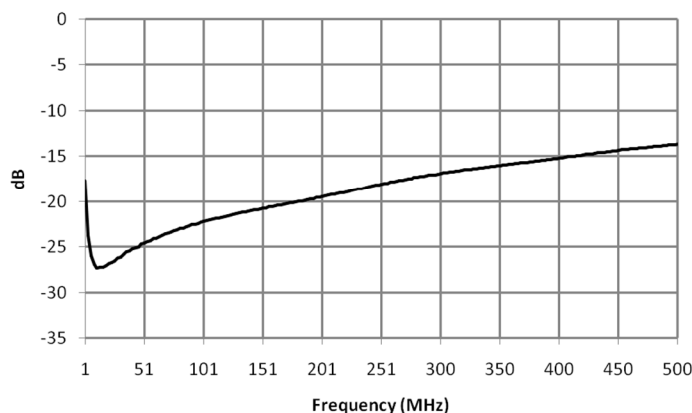
MABA-011039 amplitude_balance



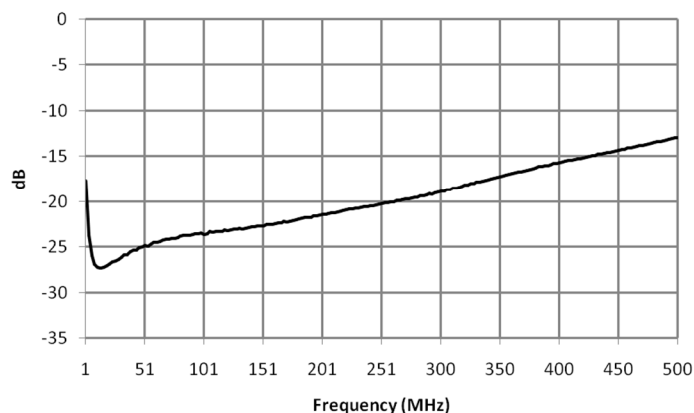
MABA-011039 phase_balance



MABA-011039 input_return_loss_p1



MABA-011039 Sdd22

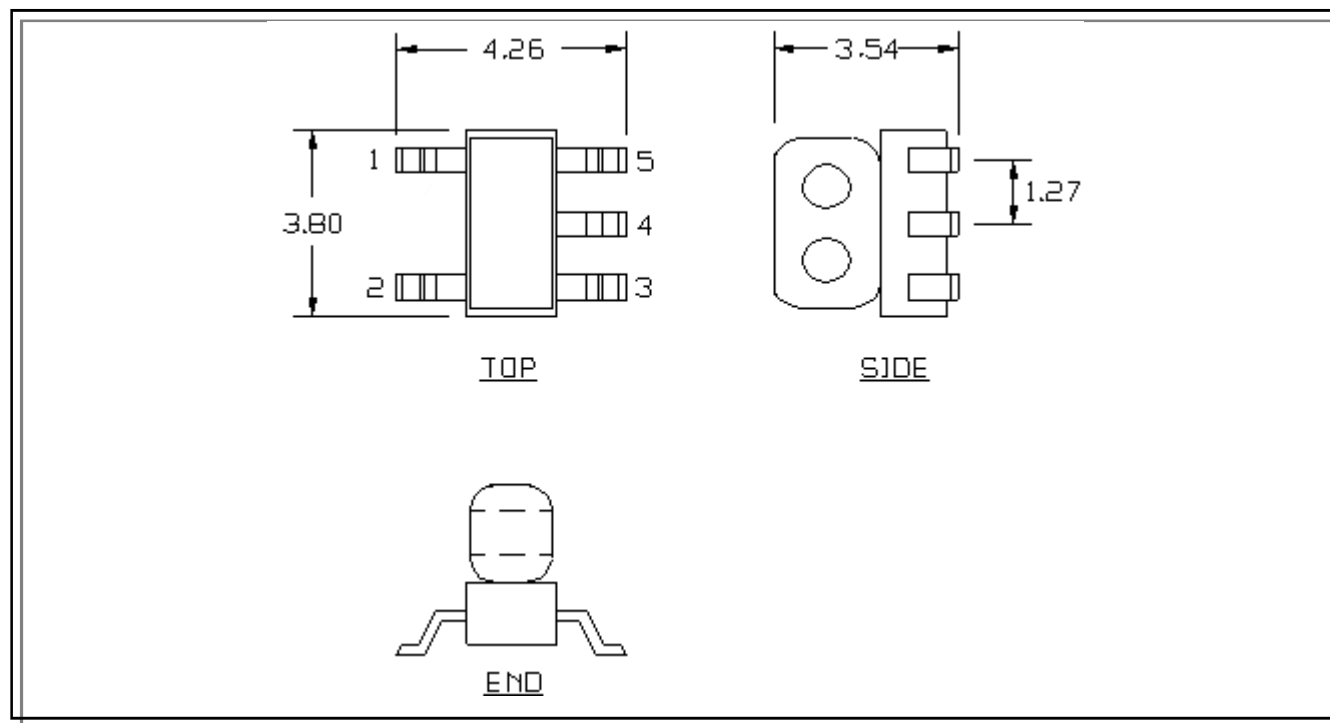


Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

1:4 Flux Coupled Balun Transformer 1 - 300 MHz

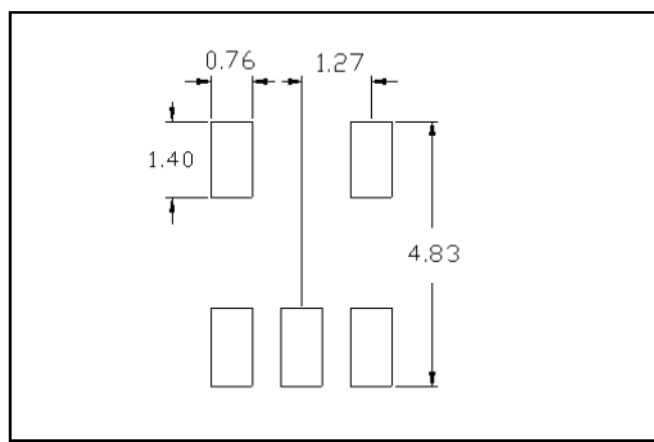
V1

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. Lead plating (CuSn6) Lead finish SAC-305.

Recommended Footprint



1:4 Flux Coupled Balun Transformer 1 - 300 MHz

V1

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	4.40
Bo	mm	4.00
Ko	mm	3.90
Orientation	-	F26
Reference Application Note ANI-019 for orientation		

Ordering Information

Part Number	Description
MABA-011039	Tape & Reel
MABA-011039-TB	Customer Test Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		30
Operating Temperature Range	°C	-40	+125

Full temperature plots available on request

Pin Configuration

Pin No.	Function
1	Primary Dot
2	Primary
3	Secondary
4	Center Tap (Ground)
5	Secondary Dot

Application circuit

