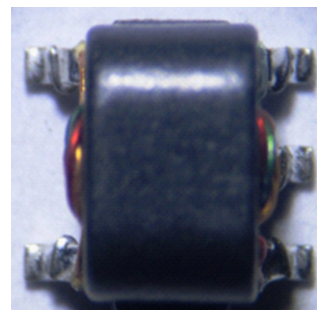


## Features

- 2:1 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

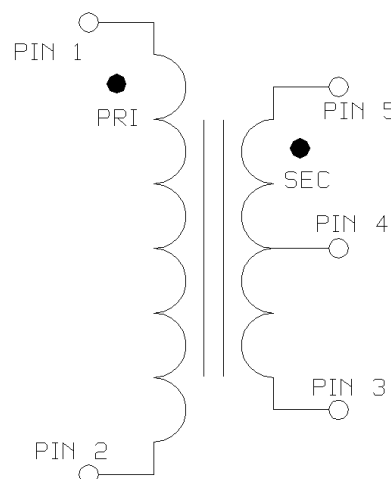


## Description

MACOM's MABA-011063 is a 2:1 flux coupled transformer.

This transformer is ideally suited for DOCSIS 3.0x upstream applications due to its high power and temperature performance.

## Functional Schematic



## Ordering Information

Part Number	Package
MABA-011063	Tape & Reel
MABA-011063-TB	Customer Test Board

## Pin Configuration

Pin No.	Function
1	Primary Dot (input)
2	Primary (ground)
3	Secondary (output2)
4	Center tap (ground)
5	Secondary Dot (output1)

**Balun transformer, 2:1 step down flux coupled  
5 – 300 MHz**

Rev. V1

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

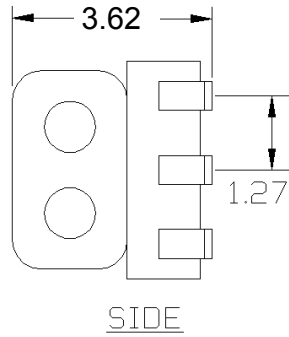
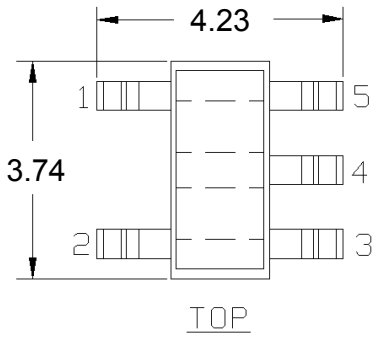
Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range		MHz	5		300
Impedance		$\Omega$		75	
Impedance Ratio				2:1	
Insertion Loss 1 (Pin1 - Pin5)	5 - 50 MHz	dB	-	0.3	0.5
	50 - 150 MHz	dB	-	0.5	1.0
	150 - 300 MHz	dB	-	1.3	2.6
Insertion Loss 2 (Pin1 - Pin3)	5 - 50 MHz	dB	-	0.2	0.5
	50 - 150 MHz	dB	-	0.5	1.0
	150 - 300 MHz	dB	-	1.1	2.3
Amplitude Balance	5 - 50 MHz	dB	-	0.01	$\pm 0.2$
	50 - 150 MHz	dB	-	0.01	$\pm 0.4$
	150 - 300 MHz	dB	-	0.2	$\pm 1.1$
Phase Balance (ref value $180^\circ$ )	5 - 50 MHz	$^\circ$	-	0.2	$\pm 2.0$
	50 - 150 MHz	$^\circ$	-	1.3	$\pm 5.0$
	150 - 300 MHz	$^\circ$	-	1.8	$\pm 7.0$
Input Return Loss (Pin1)	5 - 50 MHz	dB	18	24	-
	50 - 150 MHz	dB	10	15	-
	150 - 300 MHz	dB	5	9	-

## Recommended Maximum Ratings

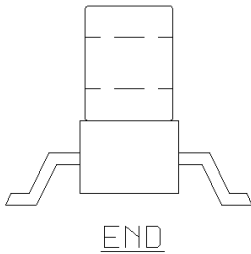
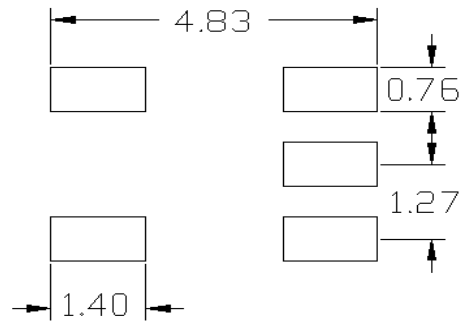
Parameter	Units	Min	Max
Input Power	mW		1000
DC Current	mA		1000
Operating Temperature Range	$^\circ\text{C}$	-40	+125

Full temperature plots available on request

### Outline Drawing

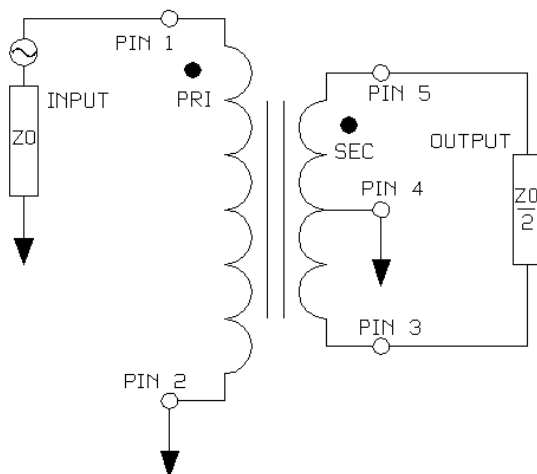


### PCB Layout



1. Dimensions in mm.
2. Tolerance:  $\pm 0.2\text{mm}$  unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Lead plating (CuSn6) Lead finish SAC-305.

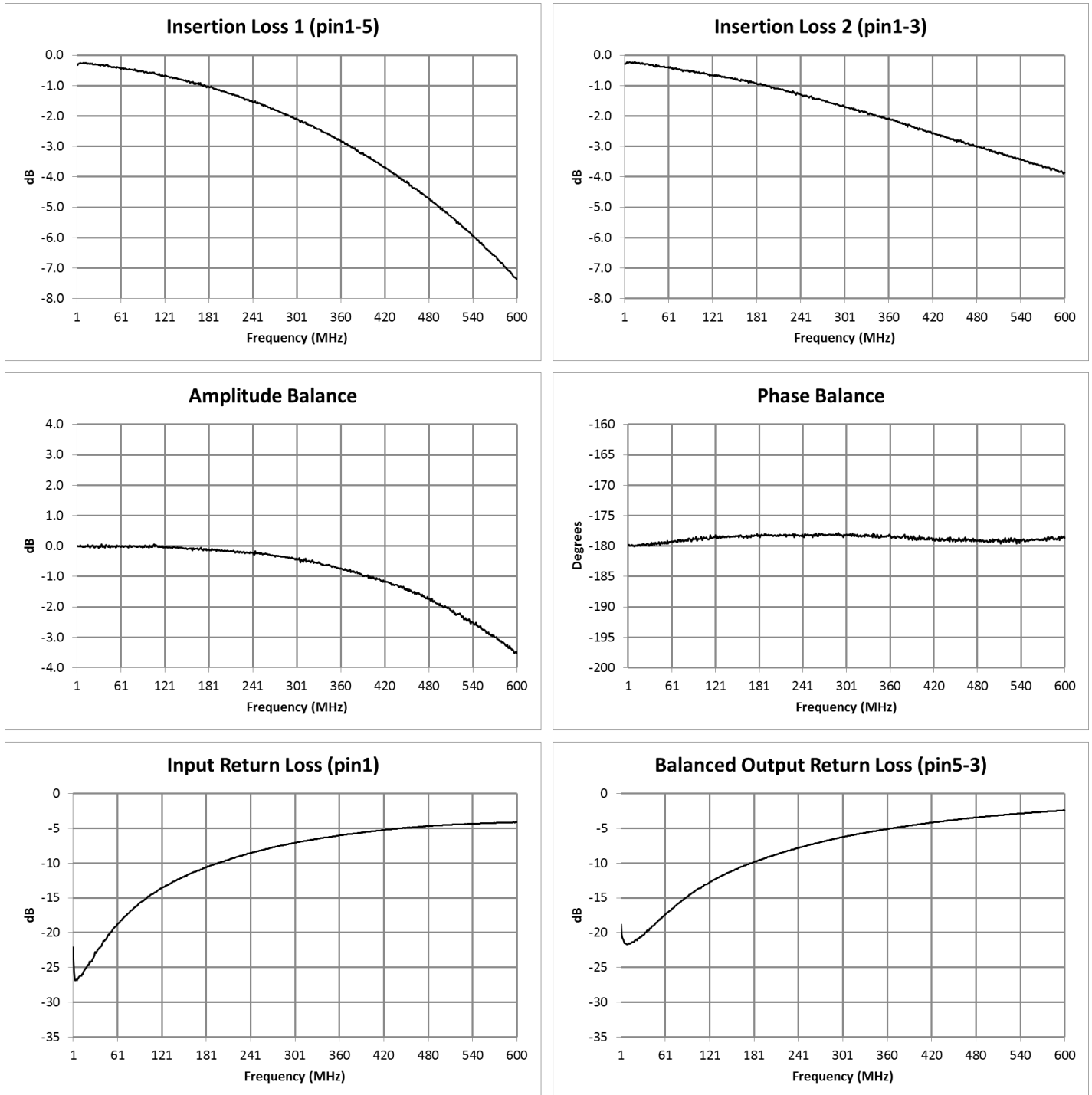
### Application Schematic



### 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 orienta-		

## Typical Performance Curves



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

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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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