

Rev. V4

1:1 Flux Coupled Transformer

5 - 200 MHz

Features

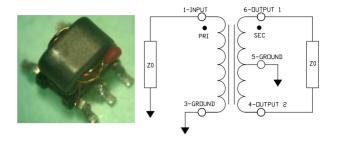
- Surface Mount Package
- 1:1 Impedance Ratio
- Centre Tap on Secondary
- Suitable for DOCSIS 3.0
- 260°C Reflow Compatible
- RoHS* Compliant, Lead Free
- · Available on Tape & Reel.
- Available in Weld & Soldered Versions**

Description

The MABA-007532-CF18A0 is a 1:1 RF flux coupled transformer in a surface mount package.

Ideally suited for broadband CATV applications.

Functional Schematic



Pin Configuration

Pin #	Function
1	Primary Dot
3	Primary
4	Secondary
5	Secondary Centre Tap
6	Secondary Dot

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

Parameter	Frequency	Units	Min.	Тур.	Max.
Insertion Loss	5 - 60 MHz 60 - 150 MHz 150 - 200 MHz	dB	_	0.3 0.4 0.7	0.5 0.8 1.1
Amplitude Unbalance	Nominal 0 dB, 5 - 60 MHz 60 - 200 MHz	dB	_	0.0 0.2	±0.1 ±0.6
Phase Unbalance	Nominal 180°, 5 - 60 MHz 60 - 200 MHz	o	_	0.1 0.3	±2.0 ±4.0
Input Return Loss	5 - 60 MHz 60 - 200 MHz	dB	20 10	31 17	_

Ordering Information

Part number	Description
MABA-007532-CF18A0	2000 piece reel
MABA-007532-CF18TB	Customer Test Board

** MACOM reserves the right to supply parts with weld or solder wire attach.

Recommended Maximum Ratings^{1,2}

Parameter	Value
Input Power	631 mW
DC Current	600 mA @ 5 V
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

Exceeding any one or combination of these limits may cause permanent damage to this device.

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MACOM does not recommend sustained operation near these survivability limits.



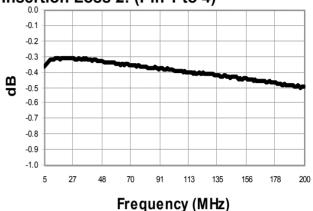
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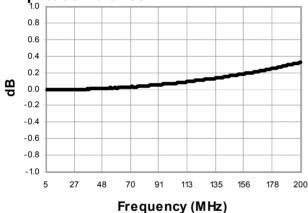
Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$



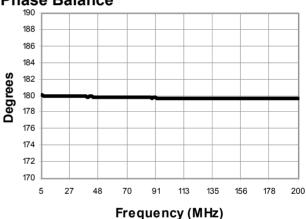
Insertion Loss 2: (Pin 1 to 4)



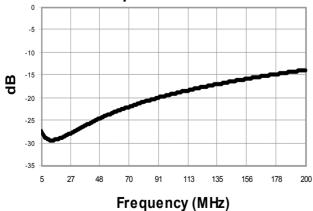
Amplitude Balance



Phase Balance



Return Loss: Input

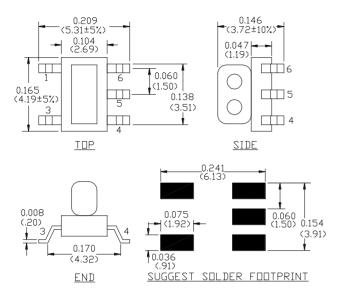




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Outline Drawing (SM-138)



Dimensions in inches [mm] Tolerance: .xx \pm .02, .xxx \pm .010, unless otherwise stated

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	6.10		
Во	mm	4.60		
Ko	mm	4.00		
Orientation	-	F26		
Reference Application Note ANI-019 for orientation				



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4