

1:1 Flux Coupled Transformer
5-50 MHz

MABA-007532-CF18A0
V1P

Features

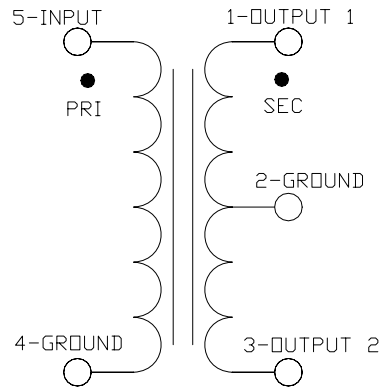
- Surface Mount
- 1:1 Impedance
- Centre tap on secondary
- 260°C Reflow Compatible
- RoHS* Compliant
- Available on Tape and Reel. Reel quantity 2000
- RoHS version of MABACT0022

Description

M/A-COM's MABA-007532-CF18A0 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume CATV/ Broadband applications.



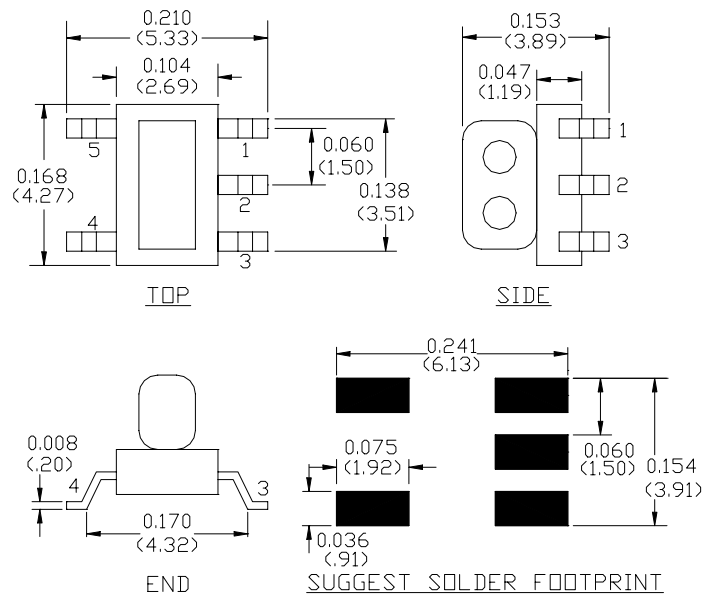
Schematic



Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Secondary centre tap
3	Secondary
4	Primary
5	Primary Dot

Case Style: SM-138



Ordering Information

Part Number	Package
MABA-007532-CF18A0TR	2000 piece reel
MABA-007532-CF18TB	Customer Test Board

Note: Reference Application Note **M513** for reel size information.

Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$ ¹

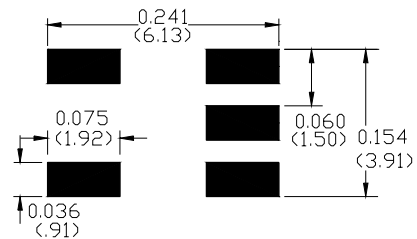
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Insertion Loss	-	5 - 50 MHz	dB	-	0.3	0.5
Amplitude Unbalance (Nominal 0dB)	-	5 - 50 MHz	dB	-	0.04	±0.10
Phase Unbalance (Nominal 180°)	-	5 - 50 MHz	°	-	0.3	±2.0
Input Return Loss	-	5 - 50 MHz	dB	20	25	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
Max Input Power	250mW
DC current	240mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

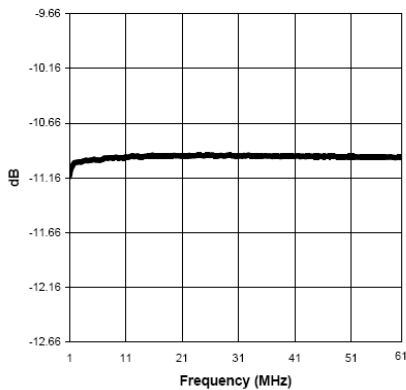
Recommended PCB Configuration



Typical Performance Curves

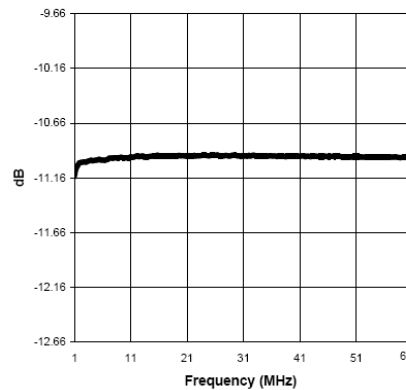
Insertion Loss 1: (Pin 5 to 1)

Insertion Loss (reference value -10.66dB)

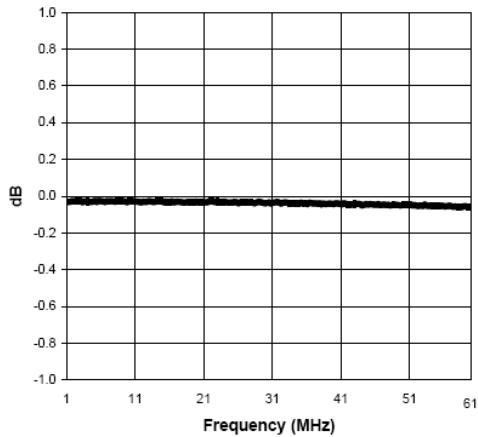


Insertion Loss 2: (Pin 5 to 3)

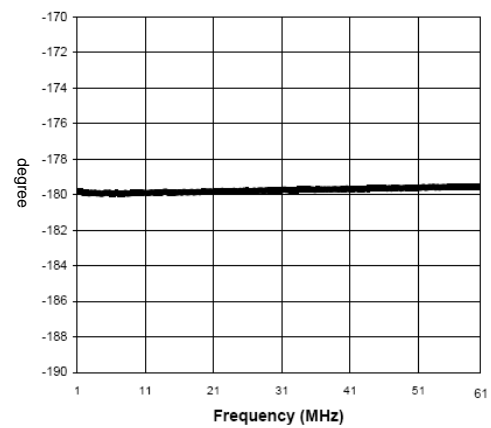
Insertion Loss (reference value -10.66dB)



Amplitude Unbalance



Phase Balance



Input Return Loss

