

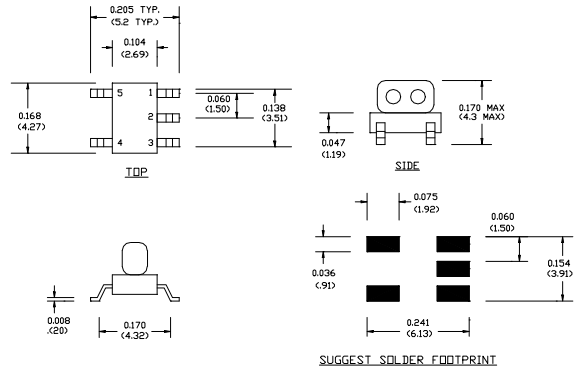
# 1:1 RF Flux Coupled Transformer

## 5 – 50 MHz

MABACT0022



SM-138 Package



### Features

- Surface Mount
- 1:1 Impedance
- Available on Tape & Reel

### Description

M/A-COM's MABACT0022 is a 1:1 RF flux coupled transformer in a low cost, surface mount package. The windings of the MABACT0022 are welded to the package substrate for improved reliability and reduced lead content. This Transformer is ideally suited for CATV and Satellite STB/Subscriber applications.

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

### Electrical Specifications @ 25°C, Z<sub>0</sub> = 75 Ohms

Frequency Range 5 - 50 MHz	Test Conditions	Nominal	Units	Min.	Typ.	Max.
Insertion Loss (Above 3dB)	5 - 50 MHz	—	dB	—	0.3	0.5
Amplitude Unbalance	5 - 50 MHz	—	dB	—	0.04	0.10
Phase Unbalance	5 - 50 MHz	—	°	—	0.3°	2.0°
Input Return Loss	5 - 50 MHz	—	dB	20	25	—

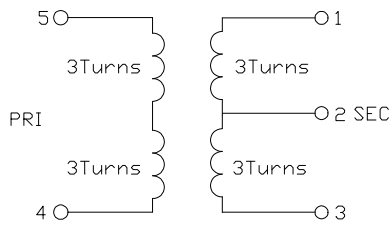
Note: Specifications subject to change without notice.

**Absolute Maximum Ratings**

Parameter	Absolute Maximum
RF Power	1 Watt
Internal Load Dissipation	0.125 Watt
Storage Temperature	-40° C to +85°C
Operating Temperature	-40° C to +80°C

**Operating Characteristics**

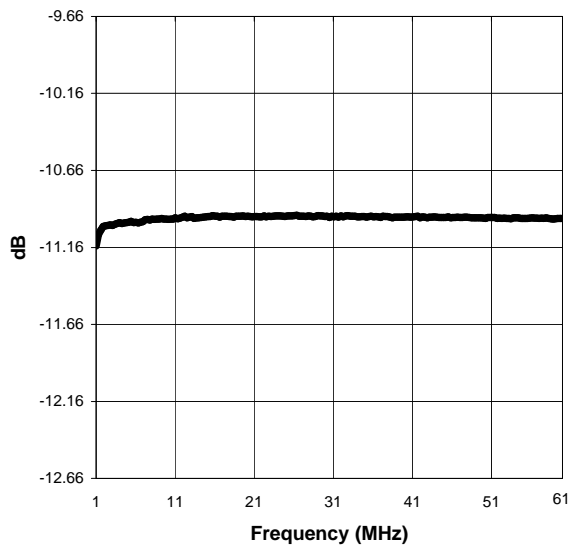
Function	Pin No.
Primary Dot (Input)	4
Primary (Ground)	5
Secondary Dot (output port2)	3
Secondary (output port1)	1
Center Tap (Ground)	2



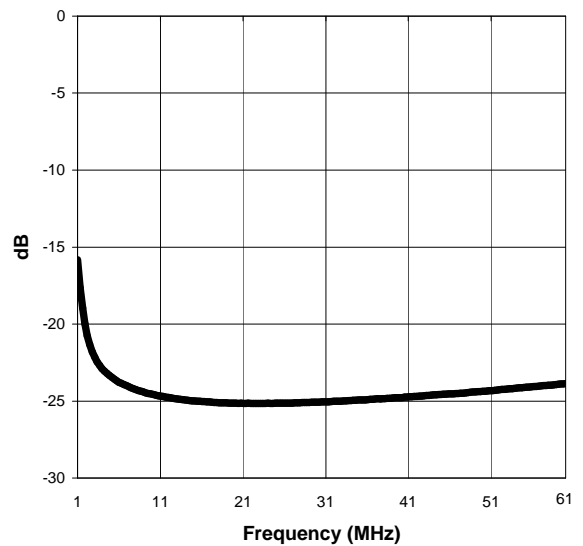
**Schematic**

**Typical Performance @ +25° C**

**Insertion Loss (reference value -10.66dB)**



**Input Return Loss**



RevA

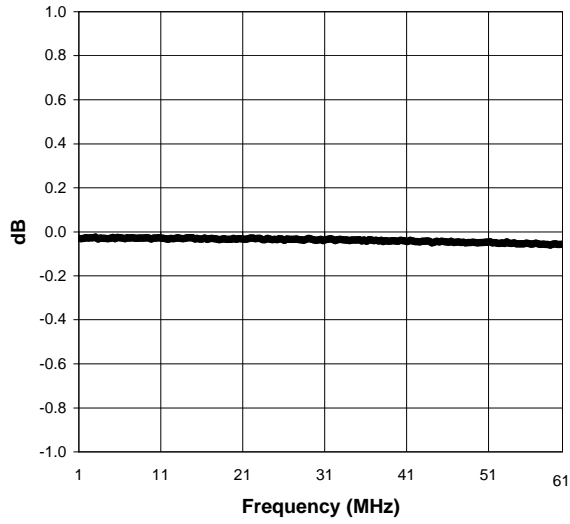
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 Asia/Pacific: Tel.+81-44-844-8296, Fax +81-44-844-8298  
 Europe: Tel. +44 (1344) 869 595, Fax+44 (1344) 300 020

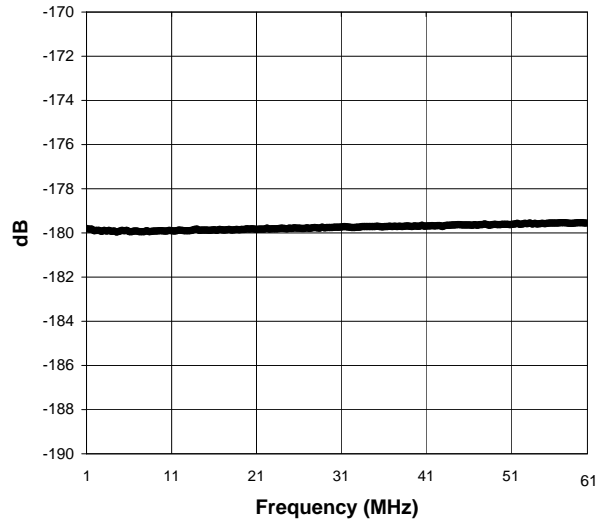
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**Amplitude Unbalance**



**Phase Unbalance**



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