

# E-Series RF 2:1 Flux Coupled Transformer

## 1.0 - 350 MHz

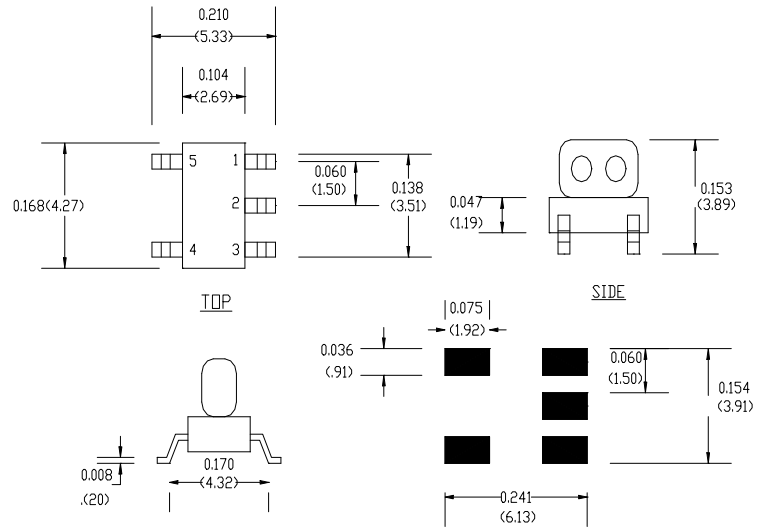


### Features

- Surface Mount
- 2:1 Impedance Ratio
- CT on Secondary
- Available on Tape & Reel



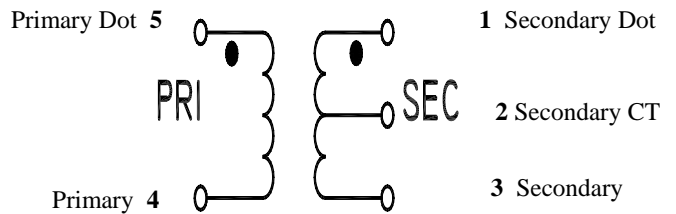
### SM-138 Package



### Description

M/A-COM's MABAES0040 is a 2:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching.

### Schematic



### Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Minimum	Typical
Frequency Range 1.0 - 350	MHz	—	—	—	—
Insertion Loss					
1 - 150 MHz	dB	—	1.0	—	0.7
150 - 250 MHz	dB	—	2.0	—	1.6
Amplitude Unbalance					
1 - 150 MHz	dB	—	0.5	—	0.3
150 - 250 MHz	dB	—	1.0	—	0.7
250 - 350 MHz	dB	—	2.0	—	1.5
Phase Unbalance					
1 - 250 MHz	Degrees	—	5	—	2.5
250 - 350 MHz	Degrees	—	12	—	8

**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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Visit [www.macomtech.com](http://www.macomtech.com) for additional data sheets and product information.

**Absolute Maximum Ratings**

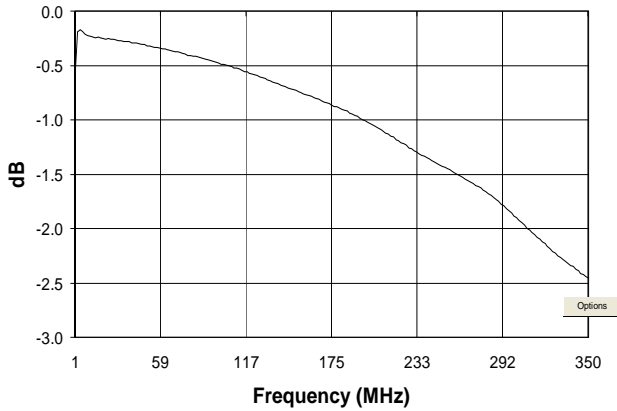
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

**Functional Configuration**

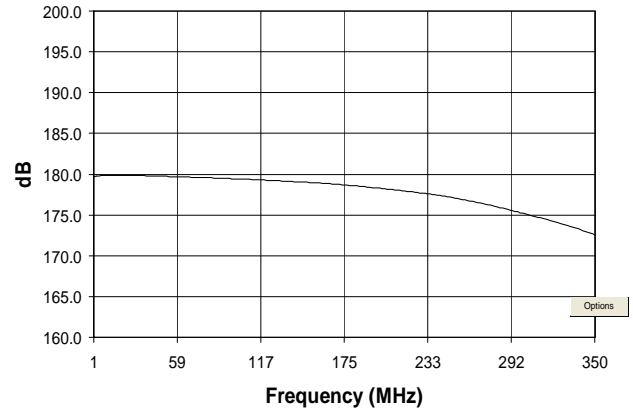
Function	Pin No.
Secondary	3
Secondary CT	2
Secondary Dot	1
Primary Dot	5
Primary	4

**Typical Performance**

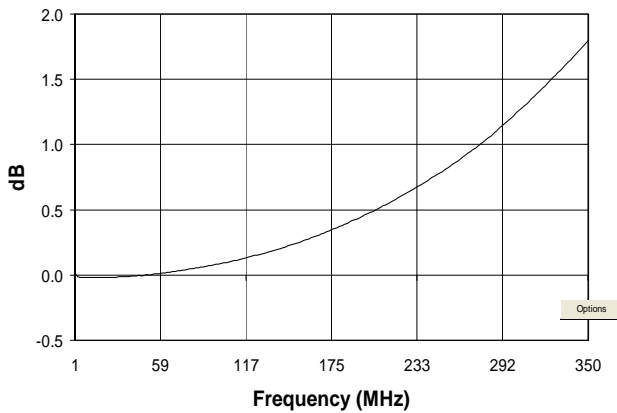
**Insertion Loss**



**Phase Unbalance**



**Amplitude Unbalance**



Note: All measurements performed on Hewlett Packard 8753D Network Analyzer (201 sample points, linear scale) in a 50 ohm coplanar waveguide environment. Tables created using MDS software.