



E-Series RF 2:1 Flux Coupled Transformer

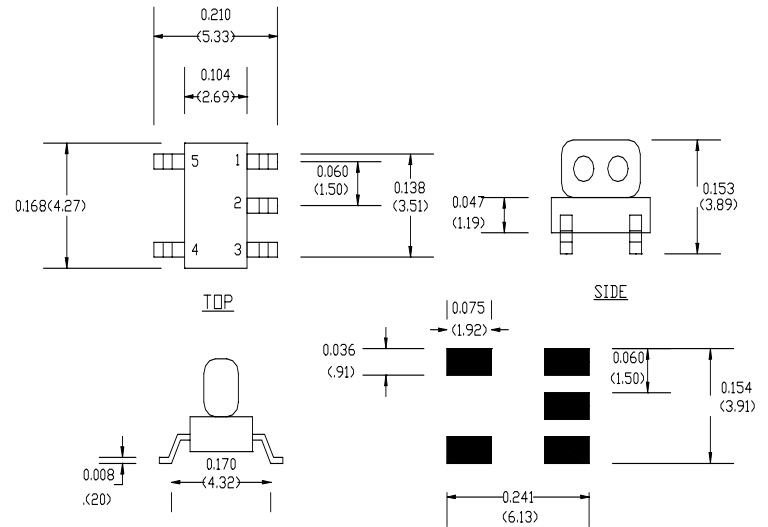
1.0 - 350 MHz

Features

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



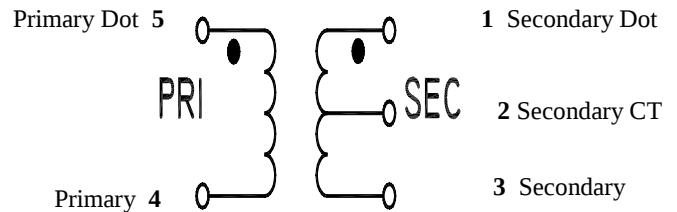
SM-138 Package



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
250 - 350 MHz	dB	—	3.0	—	2.6
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

V1.00

Please Note that the photograph above indicates typical package only, not actual unit.

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Absolute Maximum Ratings

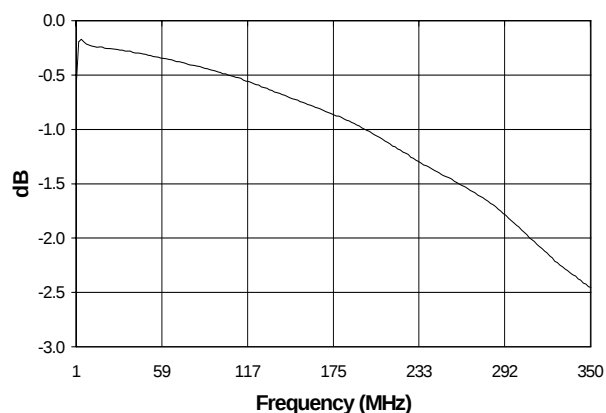
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

Functional Configuration

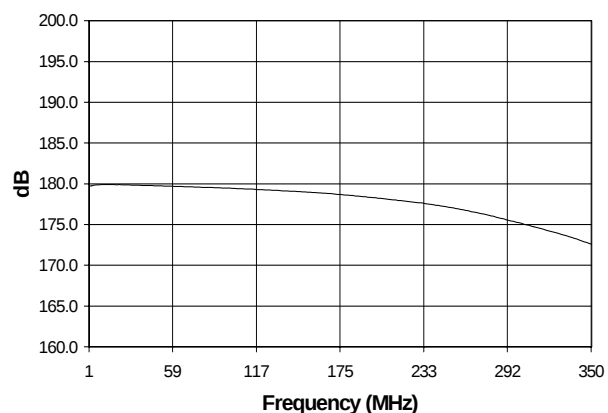
Function	Pin No.
Secondary	3
Secondary CT	2
Secondary Dot	1
Primary Dot	5
Primary	4

Typical Performance

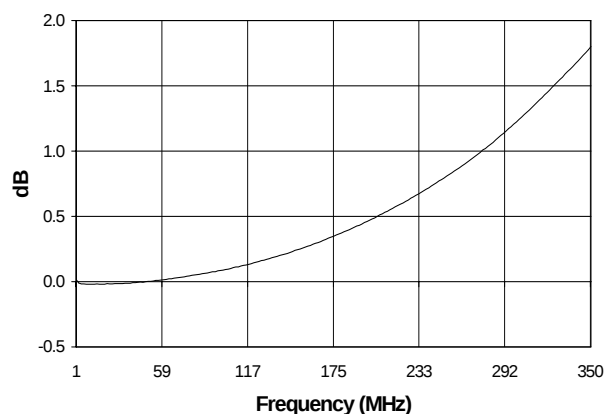
Insertion Loss



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.

V1.00