

E-SERIES RF 1:4 Flux Coupled Step-up Transformer 2.0 - 800 MHz

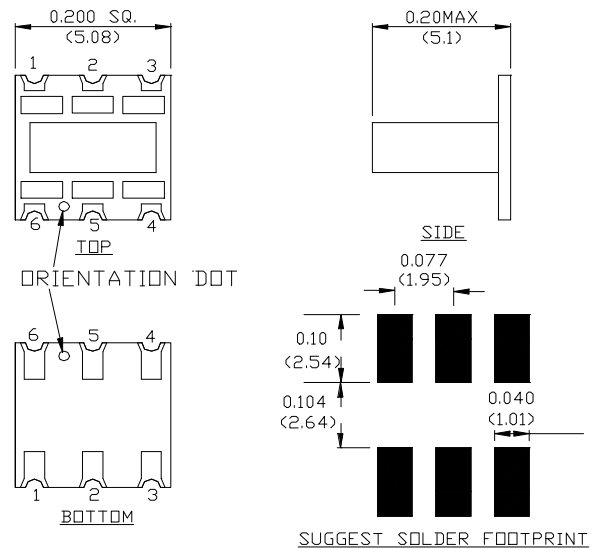
MABAES0015



Features

- Surface Mount
- 1:4 Impedance Ratio
- CT on Secondary
- Available on Tape & Reel

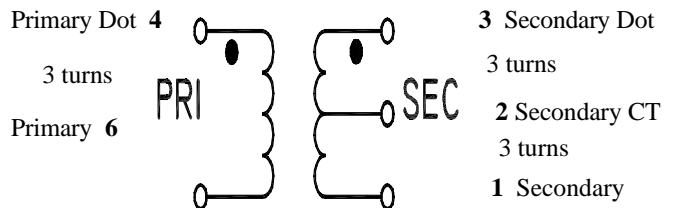
SM-52Package



Description

M/A-COM's MABAES0015 is a 1:4 RF flux coupled step-up 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	Typical	Minimum	Maximum
Frequency Range 2.0 - 800	MHz	—	—	—
Insertion Loss				
10 - 100 MHz	dB	—	—	1.5
100 - 500 MHz	dB	—	—	2.0
2 - 700MHz	dB	—	—	3.5
700 - 800 MHz	dB	—	—	4.0
Amplitude Unbalance				
2.0 - 800 MHz	dB	—		1.0
Phase Unbalance				
2- 10 MHz	Degrees	—	—	10
10 - 400 MHz	Degrees	—	—	5
400-600MHz	Degrees	—	—	10
600 -800MHz	Degrees	—	—	30

Note: Mean and Sigma calculated from average loss at @ 105 MHz.
Please Note that the photograph above indicates typical package only, not actual unit.

S 1590 A



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Specifications subject to change without notice.

Absolute Maximum Ratings

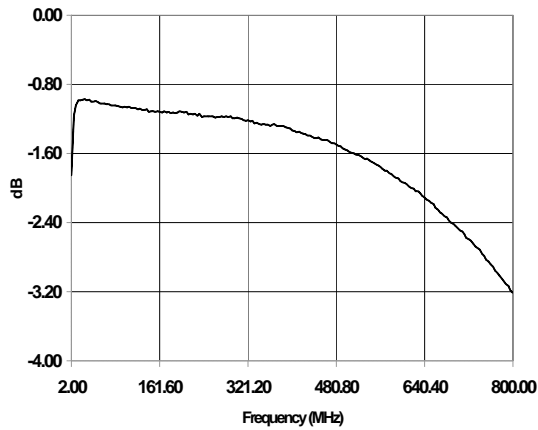
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to +85°C
Storage Temperature	-20°C to +85°C

Functional Configuration

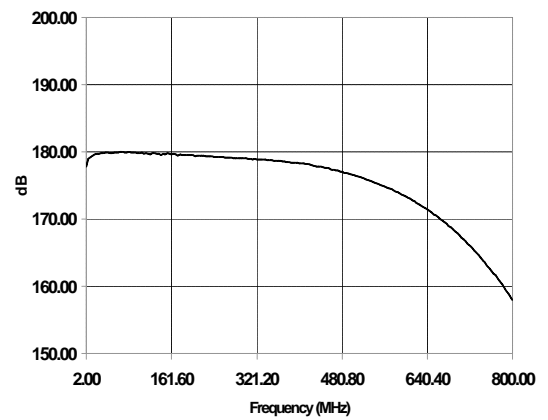
Function	Pin No.
Secondary	1
Secondary CT	2
Secondary Dot	3
Primary Dot	4
Primary	6

Typical Performance Over Extended Bandwidth (30kHz - 1.0GHz)

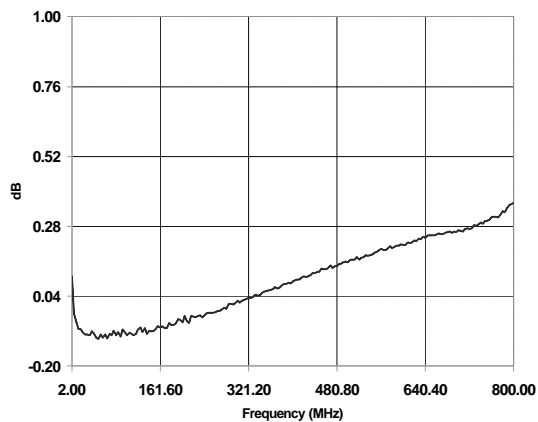
Insertion Loss



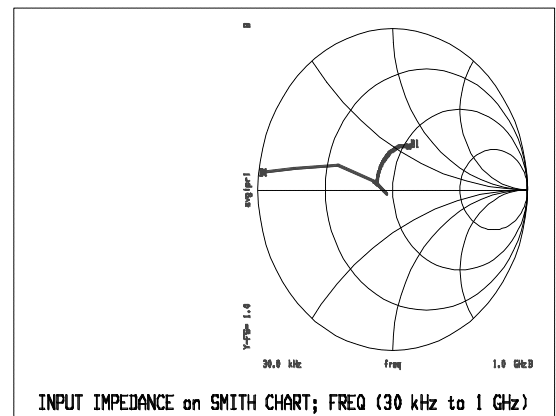
Phase Unbalance



Amplitude Unbalance



Input Impedance



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.