

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

**MABAES0061
V1**

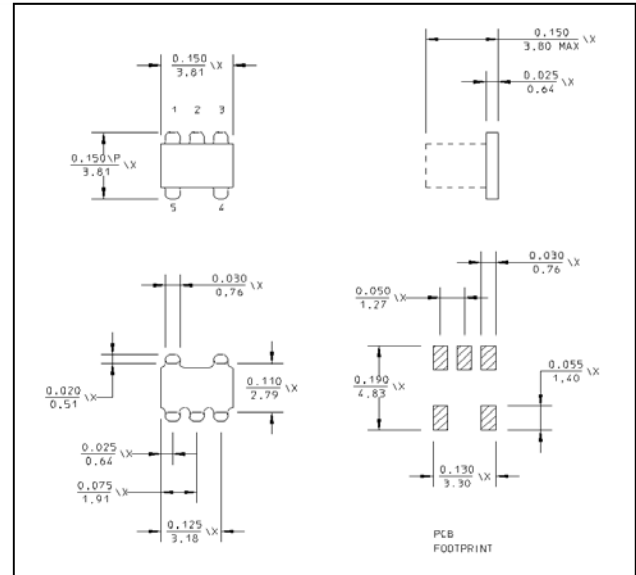
Features

- Surface Mount
- 1:4 Impedance Ratio
- CT on Secondary
- RoHS Compliant
- Tape and reel packaging available

Description

M/A-COM's MABAES0061 is a RoHS compliant device that is equivalent to the ETC4-1-2 transformer. This device 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. The MABAES0061 transformer is offered in an SM-22 surface mount package and is designed to be utilized in both standard reflow and high temperature soldering reflow profiles.

Outline Drawing — SM-22



Electrical Specifications: T_A = 25°C

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
Frequency Range	—	2 — 800	MHz	—	—	—
Insertion Loss (f _L - f _U)	—	10 - 100 MHz	dB	—	—	1.0
	—	5 - 600 MHz	dB	—	1.21	2.0
	—	2 - 800 MHz	dB	—	—	3.0
Amplitude Unbalance	—	10 - 100 MHz	dB	—	—	0.25
	—	2 - 800 MHz	dB	—	—	1.0
Phase Unbalance	—	10 - 500 MHz	Degrees	—	—	2.0
	—	2 - 800 MHz	Degrees	—	—	10.0

Ordering Information

Part Number	Package
MABAES0061	Tape and Reel (2K Reel)

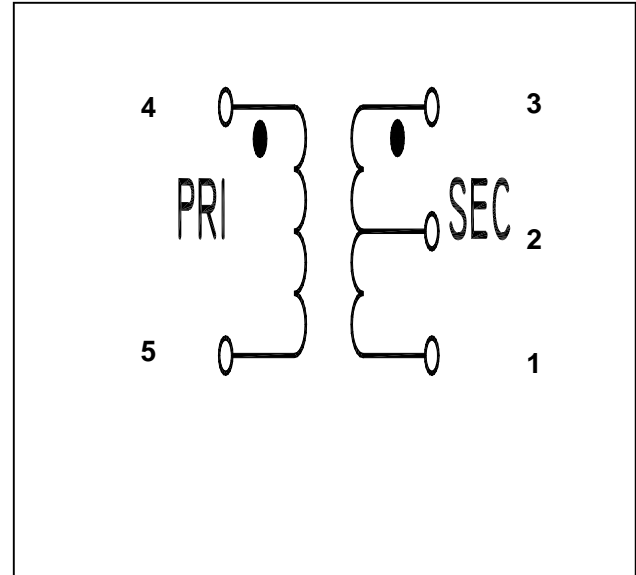
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Pin Configuration

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

Schematic



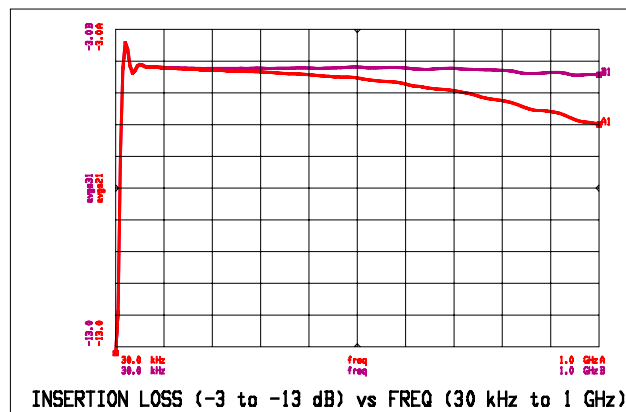
Absolute Maximum Ratings ¹

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

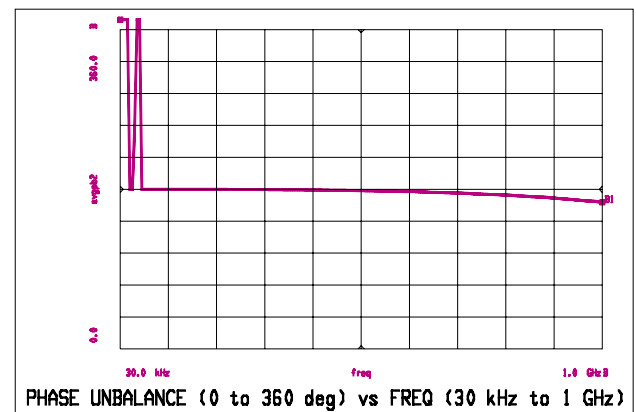
1. Operation of this device above any one of these parameters may cause permanent damage.

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

Insertion Loss



Phase Unbalance

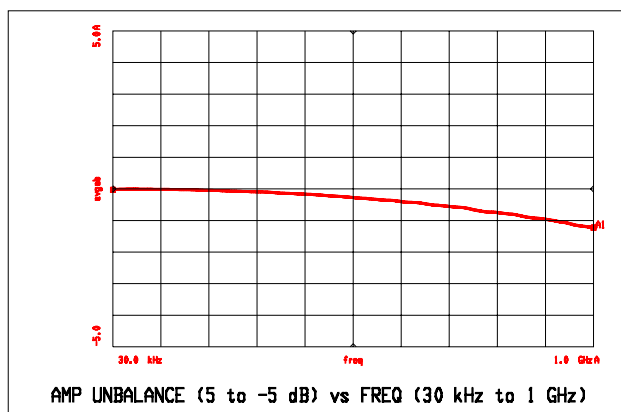


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Typical Performance Curves Over Extended Bandwidth (30kHz - 1.0GHz)

Amplitude Unbalance



Input Impedance

