

# ETC1-1T-2TR



**E-Series RF 1:1 Transformer**  
0.1 – 200 MHz

**Rev. V1**

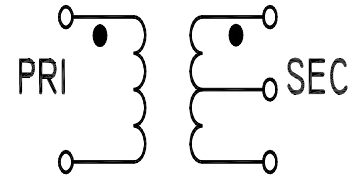
## Features

- 1:1 Impedance Ratio
- Surface Mount
- Tape and reel packaging available

## Description

M/A-COM's ETC1-1T-2 is a 1:1 RF transformer in a low cost, surface mount package. Typical applications include single to balanced mode conversion and impedance matching. Parts are packaged in tape & reel.

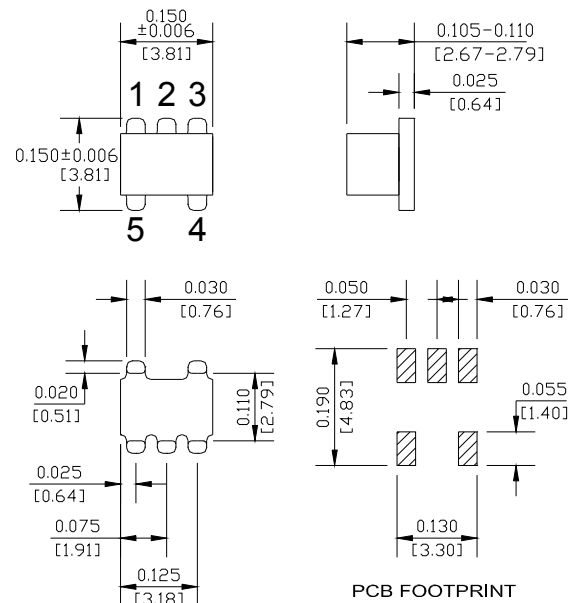
## Schematic



## Product Image



## SM-22 package



## Pin Configuration

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

\* Dimensions are inches (millimeters)  $\pm 0.015$  (0.38) unless otherwise specified.

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Electrical Specifications:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\Omega$

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	0.1 - 200	MHz	—	—	—
Insertion Loss	—	0.1 - 200	dB	—	0.3	1.5
Amplitude Imbalance	—	0.1 - 200	dB	—	—	0.5
Phase Imbalance	—	0.1 - 200	Degrees	—	—	5°

## Absolute Maximum Ratings <sup>1</sup>

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.

2

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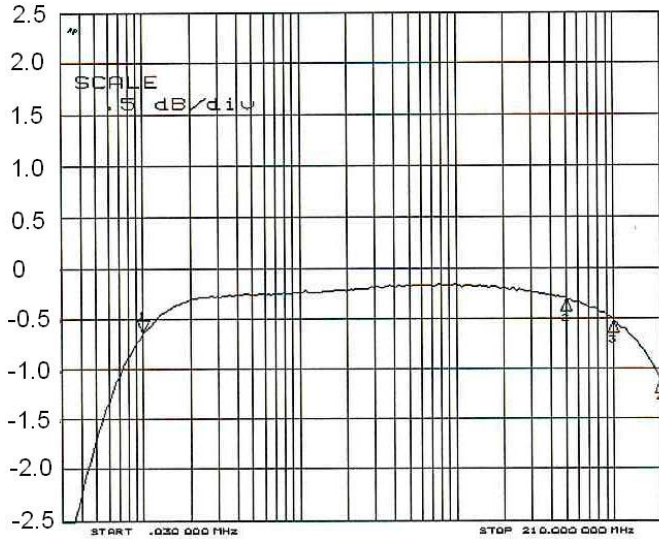
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Visit [www.macontech.com](http://www.macontech.com) for additional data sheets and product information.

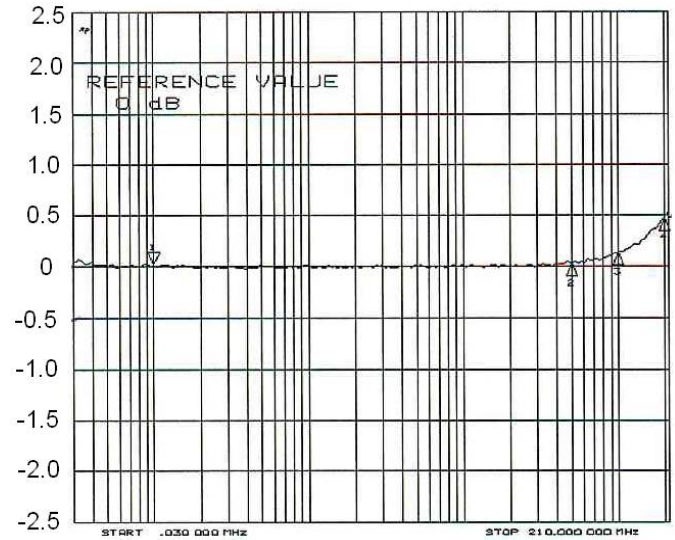
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## Typical Performance Curves

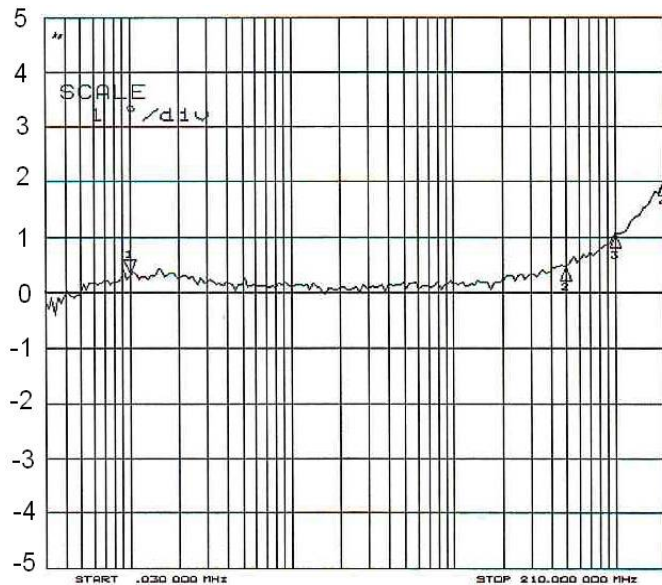
### Insertion Loss



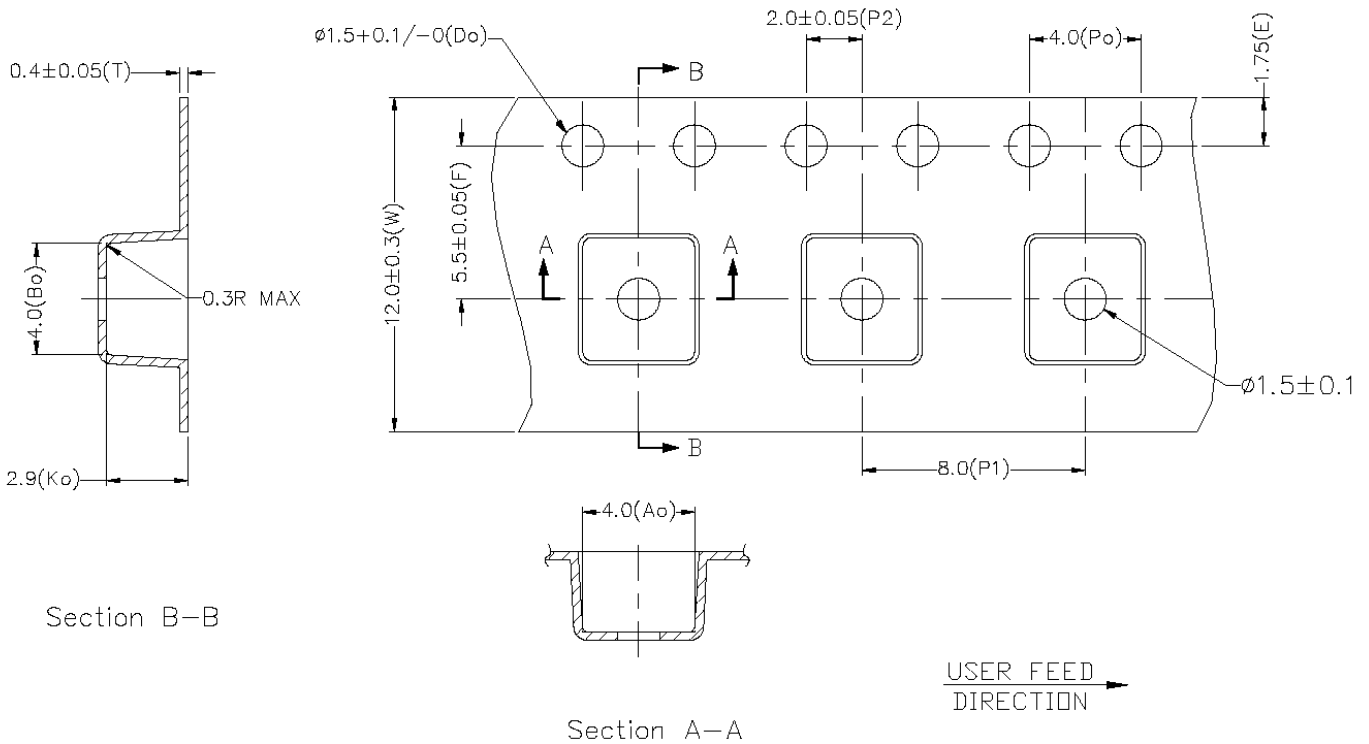
### Amplitude Unbalance



### Phase Unbalance



## Tape & Reel Information



Item	Dimension
Ao	4.00mm +/-0.1mm
Bo	4.00mm +/-0.1mm
Ko	2.9mm +/-0.1mm
W	12.00mm +/-0.3mm
P1	8.00mm +/-0.1mm

## Ordering Information

Part Number	Package
ETC1-1T-2TR	2000 piece reel

1. Reference Application Note M513 for reel size information.
2. All sample boards include 5 loose parts.