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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# ETC1-1T-2TR



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

Rev. V2

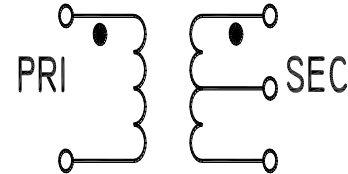
## Features

- 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.

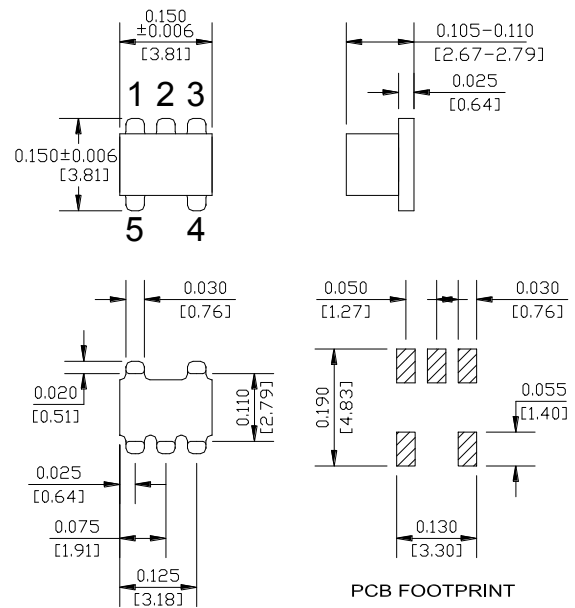
## Schematic



## Product Image



## SM-22 package



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

## Pin Configuration

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

**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°

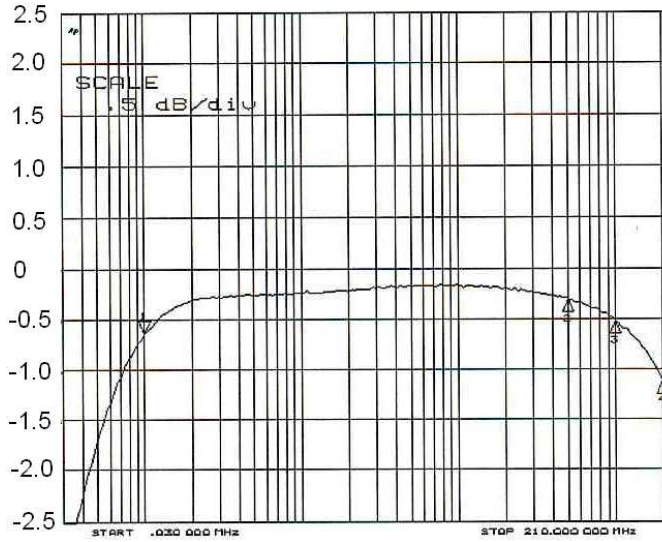
## Absolute Maximum Ratings <sup>1</sup>

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

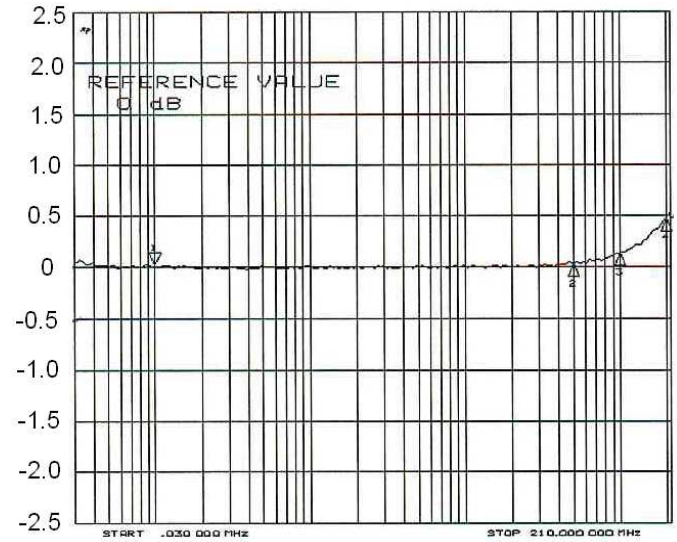
1. Operation of this device above any one of these parameters may cause permanent damage.

## Typical Performance Curves

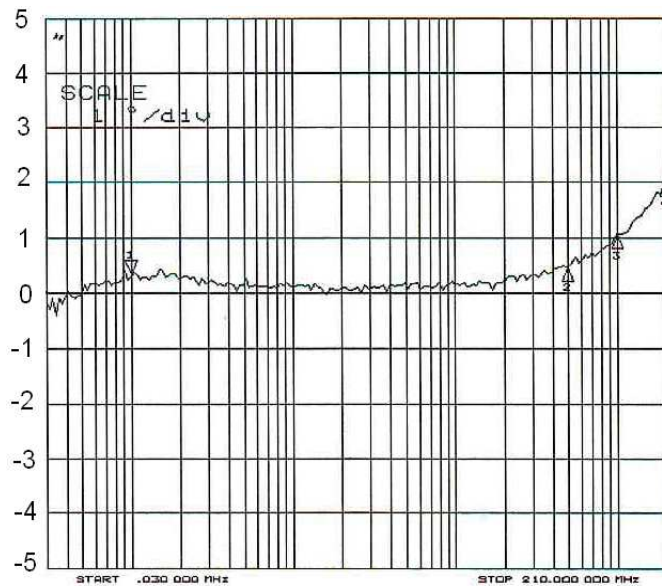
### Insertion Loss



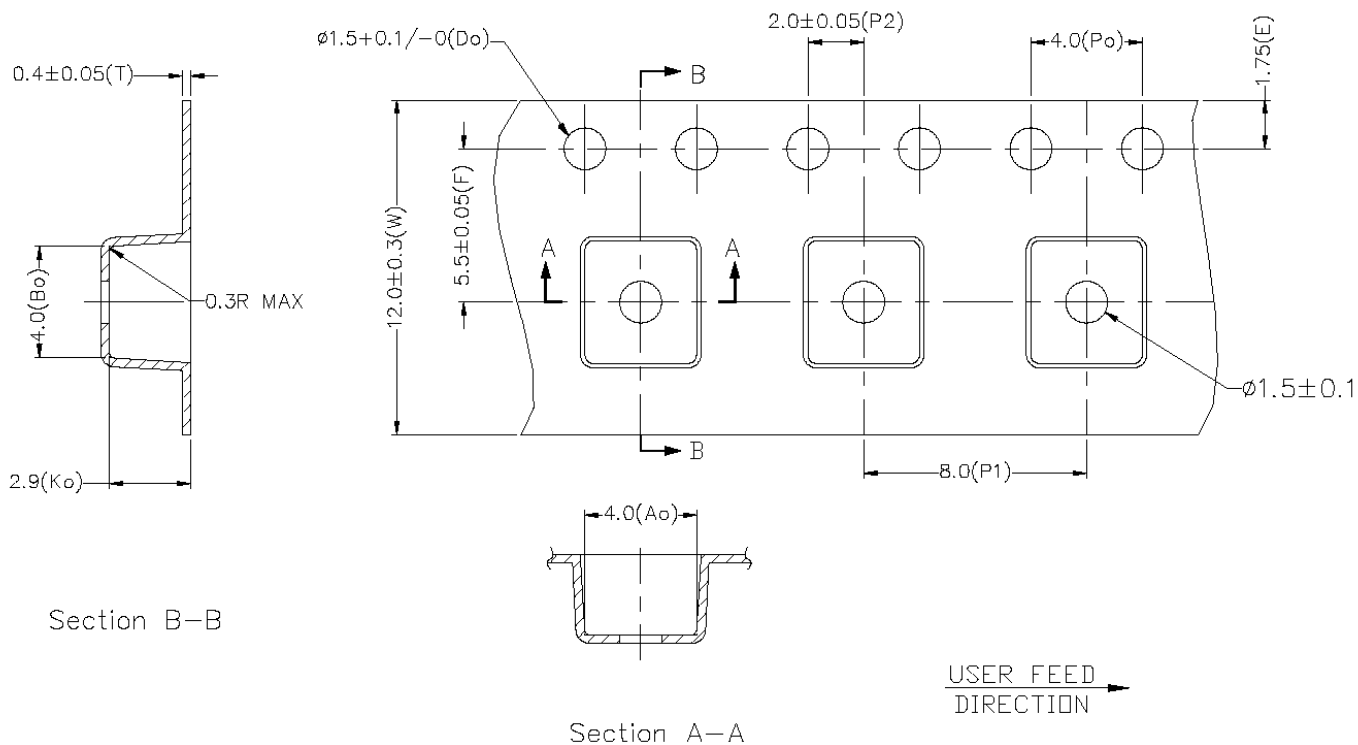
### Amplitude Unbalance



### 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.

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