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

Features

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

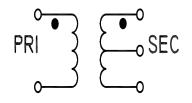
Description

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.



Rev. V1

Schematic



Product Image

SM-22 package

0.150 :0.006

[3.81]



[2.67-2.79] 0.025 123 [0.64] 0.150±0.006 [3.81] 5 4 0.030 0.050 0.030 [0.76] [1.27] [0.76] 0 Ø V 0.110 [2.79] 0.020 0.055 [4.83] 190 [1.40] [0.51] 5 0.025 [0.64] 0.075 0.130 [1.91] [3.30] 0.125 PCB FOOTPRINT [3.18]

0.105-0.110

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

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Pin Configuration

Pin No.

1	Secondary	
DataSheet4U 2 0m	Secondary CT	
3	Secondary Dot	
4	Primary Dot	
5	Primary	

Function

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	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 Ratings¹

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

www

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

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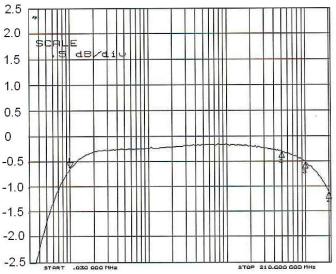


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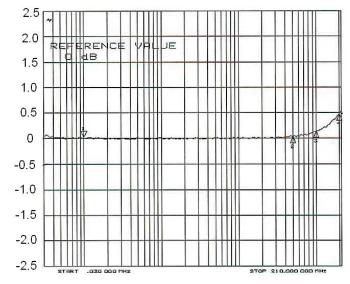
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Typical Performance Curves

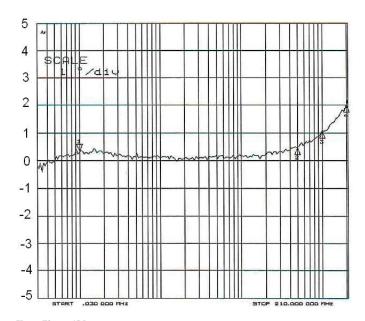
Insertion Loss



Amplitude Unbalance



Phase Unbalance



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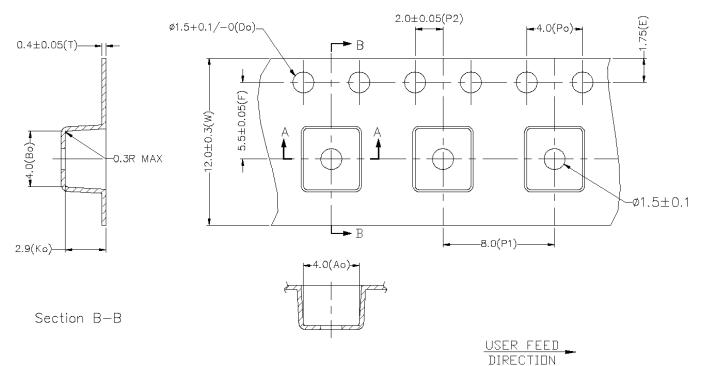
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Tape & Reel Information



Section A-A

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

Ordering Information

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	Part Number	Package
vww.	DataS ETC11-11T-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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