

## Features

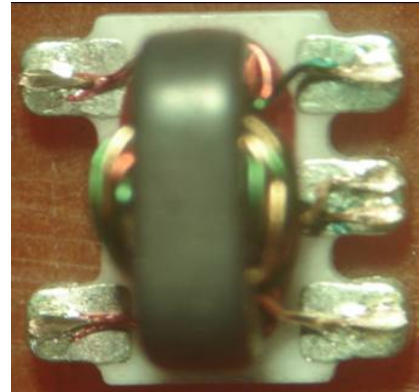
- 1:16 Impedance Ratio
- CT on Secondary
- Surface Mount
- Tape and reel packaging available
- 260°C Reflow Compatible

## Description

M/A-COM's ETC16-1T-2TR is a 1:16 RF 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 ETC16-1T-2TR is available in a SM-22 surface mount package. Parts are packaged in tape & reel.

## Product Image



## Ordering Information

Part Number	Package
ETC16-1T-2TR	Tape and Reel (2000 piece Reel)

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

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	5 - 40	MHz	—	—	—
Insertion Loss	—	5 - 40 22	dB dB	—	—	1.0 0.8
Amplitude Imbalance	—	5 - 40	dB	—	—	0.3
Phase Imbalance	—	5 - 40	Degrees	—	—	3

## Pin Configuration

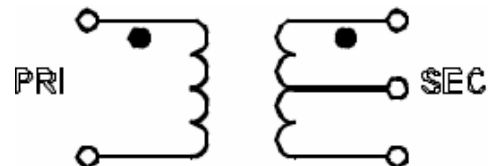
Pin No.	Function
1	Secondary
2	Secondary CT
3	Secondary Dot
4	Primary Dot
5	Primary

## Absolute Maximum Ratings

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA <sup>2</sup>
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.

## Schematic



# ETC16-1T-2TR



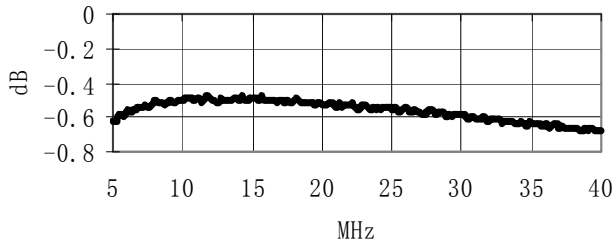
E-Series RF 1:16 Transformer  
5-40 MHz

M/A-COM Products  
Advanced - Rev. V2

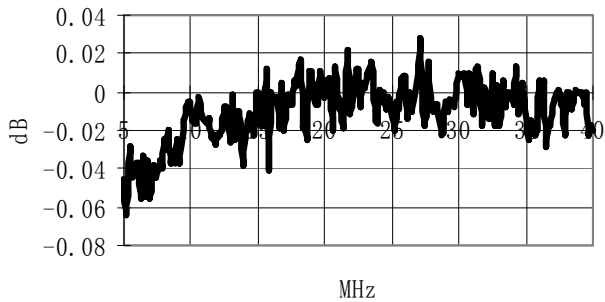
## Typical Performance Curves at +25°C

## SM - 22 Package

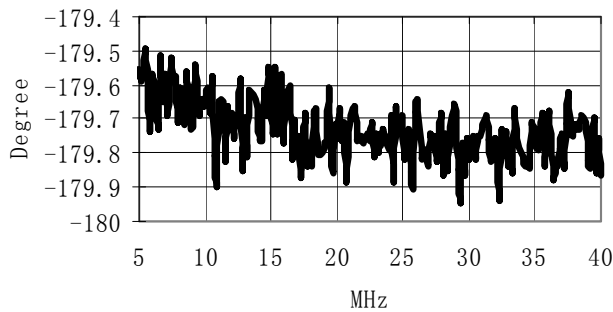
Insertion Loss



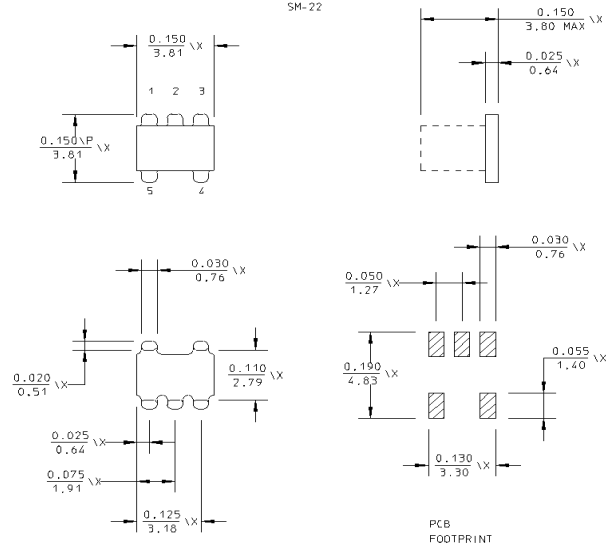
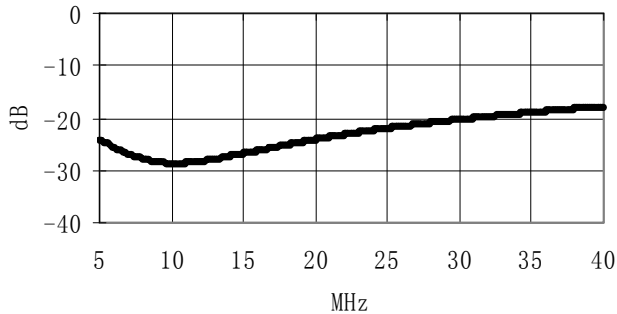
Amplitude Balance



Phase Balance



Input Return Loss



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

**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400  
 • **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588

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