

## E-Series RF 1:1 Flux Coupled Transformer 3 – 200 MHz



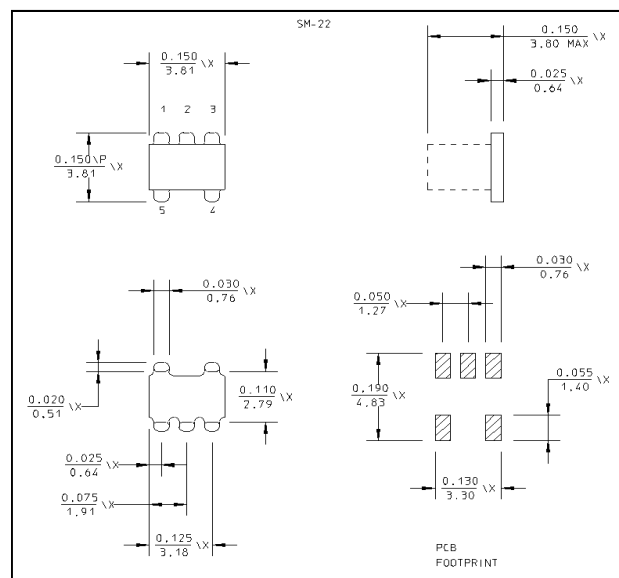
### Features

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

### Description

M/A-COM's ETC1-1T is a 1:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume applications. Parts are packaged in tape & reel.

### SM - 22 Package



### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 50\Omega$ <sup>1</sup>

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	3 - 200	MHz	—	—	—
Insertion Loss	—	3 - 200	dB	—	—	1.5
Amplitude Imbalance	—	3 - 50	dB	—	—	0.1
		3 - 200	dB	—	—	0.5
Phase Imbalance	—	3 - 50	Degrees	—	—	1.0
		3 - 200	Degrees	—	—	5.0
Input Return Loss	—	3 - 200	dB	—	—	10.0
		5 - 120	dB	—	—	15.0

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

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. Operation of this device above any one of these parameters may cause permanent damage.
2. The maximum DC current applies to the secondary center tap in applications where the secondary is balanced.

### Ordering Information

Part Number	Package
ETC1-1TTR	Tape and Reel (2000 piece Reel)

**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.

**PRELIMINARY:** Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

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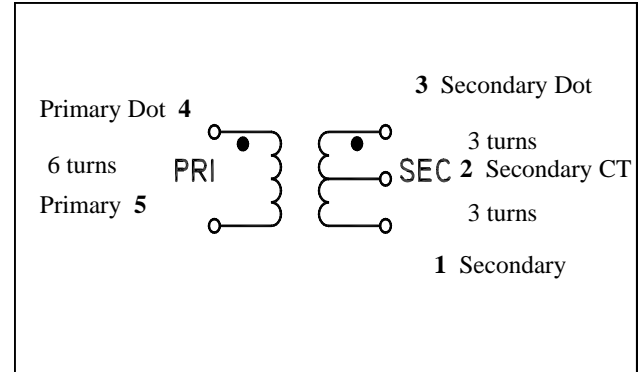
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### Pin Configuration

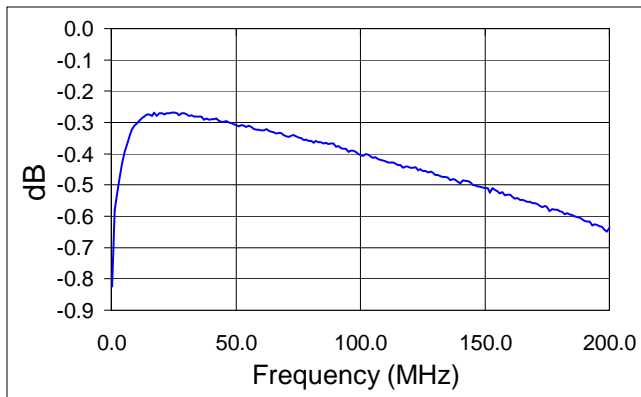
Pin No.	Function
1	Secondary
2	Secondary CT
3	Secondary Dot
4	Primary Dot
5	Primary

### Schematic

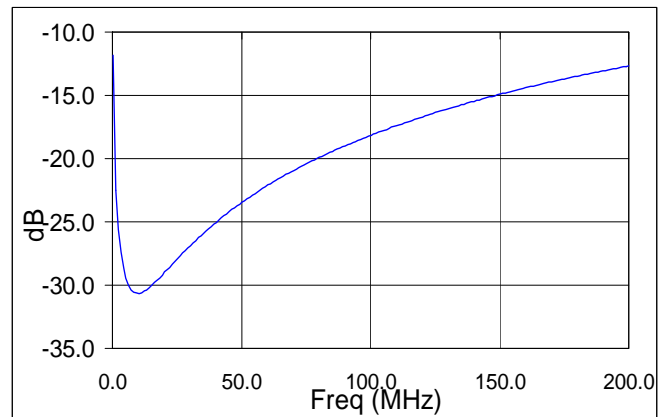


### Typical Performance Curves

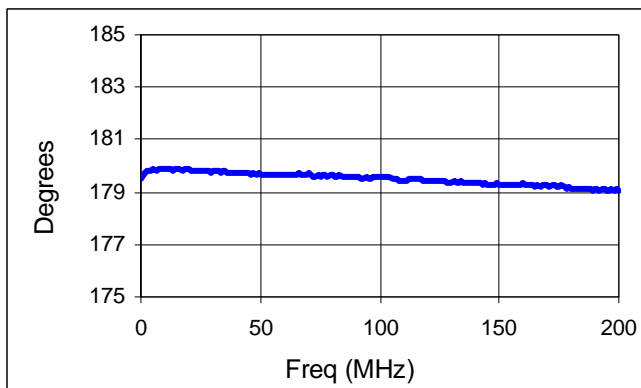
#### Insertion Loss



#### Input Return Loss



#### Phase Imbalance



#### Amplitude Imbalance

