

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

ETC1-1T
V10

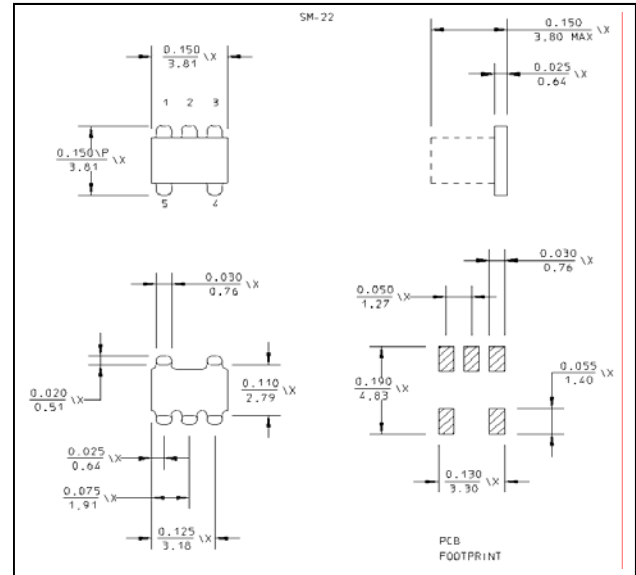
Features

- 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: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

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 Ratings¹

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	240 mA ²
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)

1

M/A-COM Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice. M/A-COM makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does M/A-COM assume any liability whatsoever arising out of the use or application of any product(s) or information.

- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

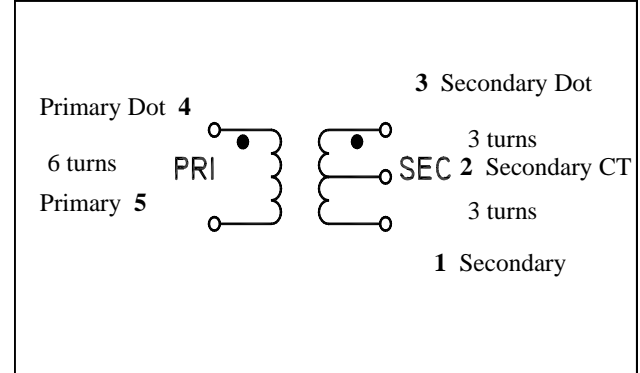
E-Series RF 1:1 Flux Coupled Transformer
3 – 200 MHz

ETC1-1T
V10

Pin Configuration

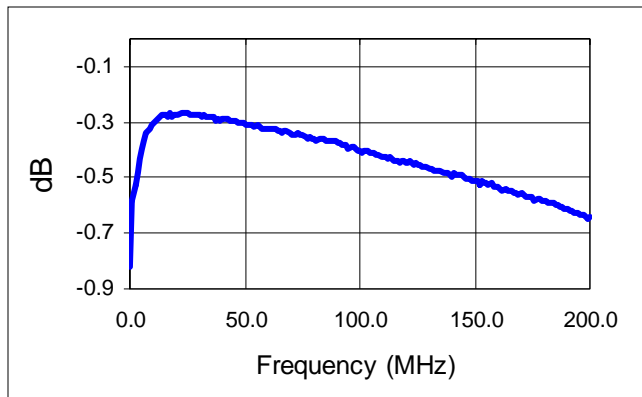
Pin No.	Function
1	Secondary
2	Secondary CT
3	Secondary Dot
4	Primary Dot
5	Primary

Schematic

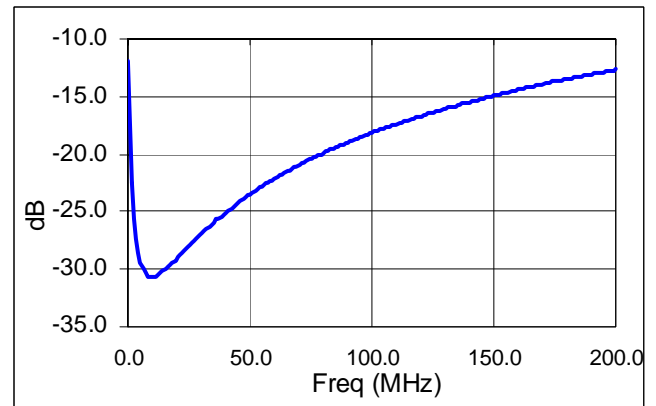


Typical Performance Curves

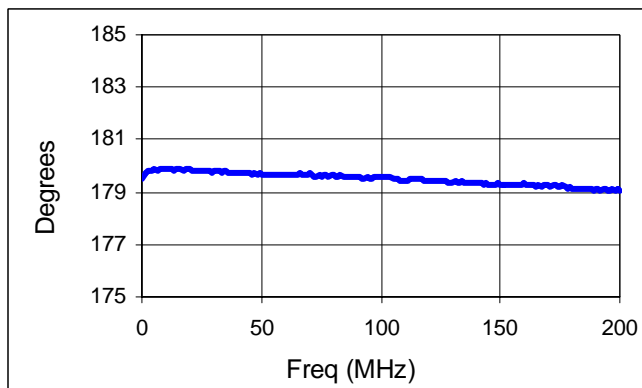
Insertion Loss



Input Return Loss



Phase Imbalance



Amplitude Imbalance

