



# E-Series RF 1:1 Transmission Line Transformer 4.5 – 3000 MHz

ETC1-1-13 V4

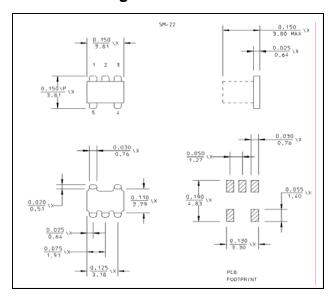
#### **Features**

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

## **Description**

M/A-COM's ETC1-1-13 is a 1:1 RF transmission line transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Parts are packaged in tape & reel.

## SM - 22 Package



# Electrical Specifications: $T_A = 25$ °C, $Z_0 = 50\Omega^1$

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
RF Frequency	_	4.5 - 3000	MHz	_	_	_
Insertion Loss	F <sub>L</sub> —f <sub>U</sub>	4.5 - 1000 1000 - 2000 2000 - 3000	dB dB dB	_ _ _	0.32 — —	1.0 2.0 3.5
Amplitude Unbalance	_	4.5 - 1000	dB	_	_	1.0
Phase Unbalance	_	4.5 - 1000	Degrees	_	_	20

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

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

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

# **Ordering Information**

Part Number	Package	
ETC1-1-13TR	Tape and Reel (2000 piece Reel)	

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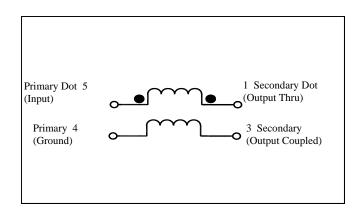
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### Pin Configuration

Pin No.	Function
1	Output (thru)
2	Not Connected
3	Output (coupled)
4	Ground
5	Input

#### **Schematic**

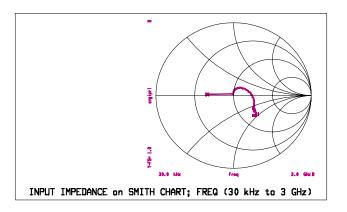


### **Typical Performance Curves**

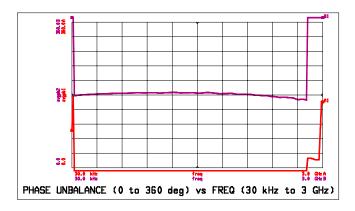
#### Insertion Loss



#### Input Impedance



#### Phase Unbalance



## Amplitude Unbalance



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