

**CATV RF 1:1 Transmission Line Transformer
4.5 - 3000 MHz**

**ETC1-1-13
V4**

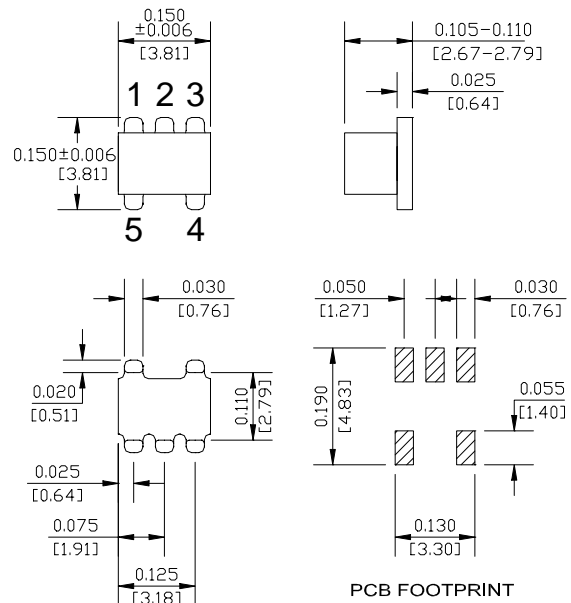
Features

- 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 application. 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	Test Conditions	Units	Min	Typ	Max
RF Frequency	-	4.5 - 3000	MHz	-	-	-
Insertion Loss	-	4.5 - 1000	dB	-	0.32	1.0
		1000 - 2000	dB	-	-	2.0
		2000 - 3000	dB	-	-	3.5
Amplitude Unbalance	-	4.5 - 1000	dB	-	-	1.0
Phase Unbalance	-	4.5 - 1000	Degrees	-	-	20

Absolute Maximum Ratings^{1,2}

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

Ordering Information

Part Number	Package
ETC1-1-13TR	2000 piece reel

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Note: Reference Application Note M513 for reel size 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.

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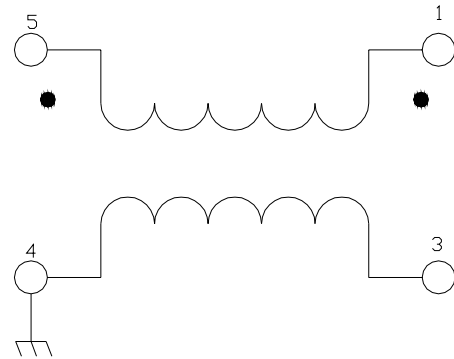
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Pin Configuration

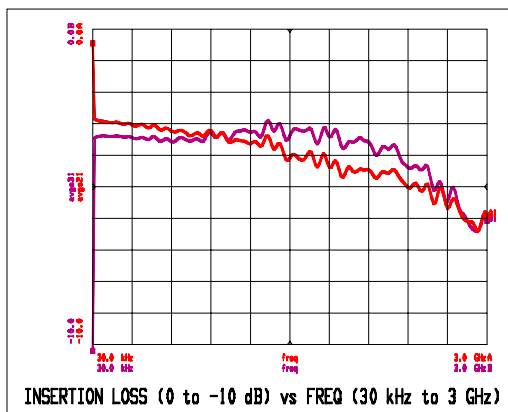
Pin No.	Function
1	Secondary Dot
2	Not Connected
3	Secondary
4	Primary
5	Primary Dot

Schematic

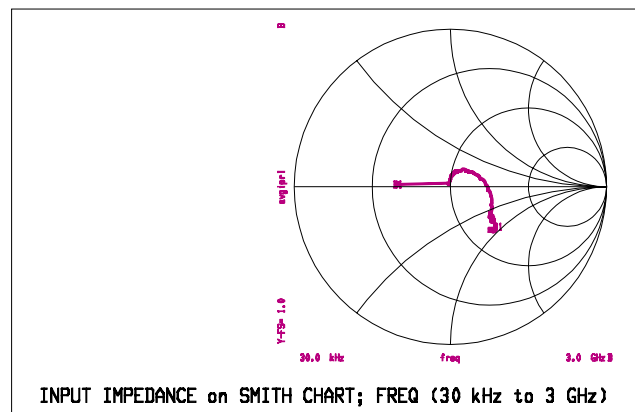


Typical Performance Curves

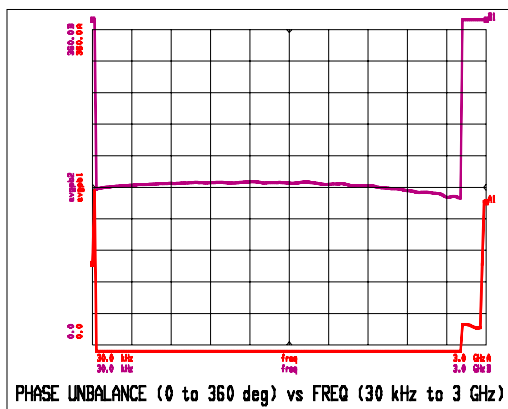
Insertion Loss



Input Impedance



Phase Unbalance



Amplitude Unbalance

