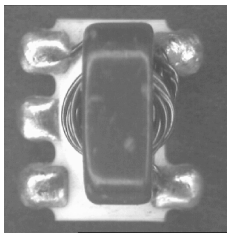
E-Series RF 1:4 Transmission Line Step-up Transformer

Features

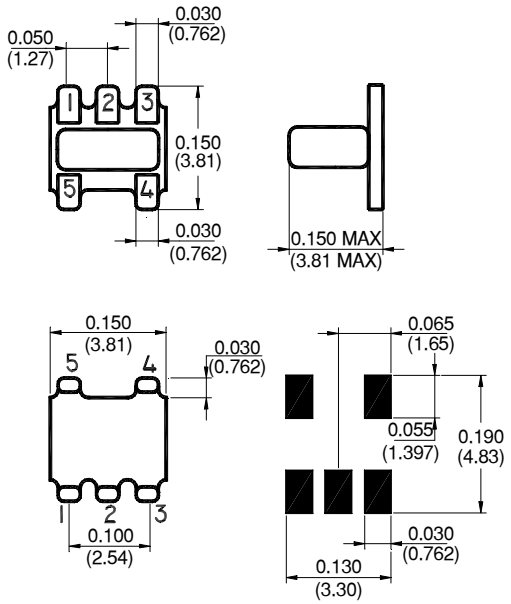
- Surface Mount
- 1:4 Impedance Ratio
- CT on Secondary
- Available on Tape & Reel



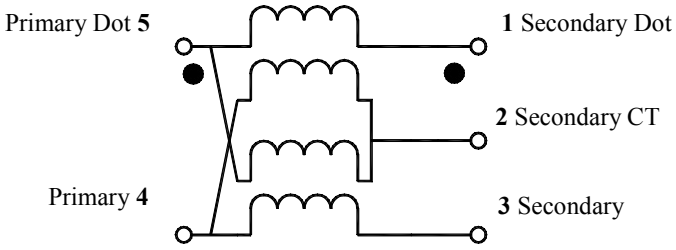
Description

M/A-COM's ETC4-1T-7 is a 1:4 RF transmission line step-up 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.

SM-22 Package



Schematic



Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Mean (x)	Sigma (σ)
Frequency Range 6.0 - 1000	MHz	—	—	—	—
Insertion Loss (f_L - f_U)					
6.0 - 600 MHz	dB	—	2.0	1.06	0.027
600 - 1000 MHz	dB	—	3.0	—	—
Amplitude Unbalance					
6.0 - 1000 MHz	dB	—	1.0	—	—
Phase Unbalance					
6.0 - 1000 MHz	Degrees	—	10	—	—

Note: Mean and Sigma calculated from average loss at @ (f_U - f_L)/2 + f_L

Please Note that the photograph above indicates typical package only, not actual unit.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

Absolute Maximum Ratings

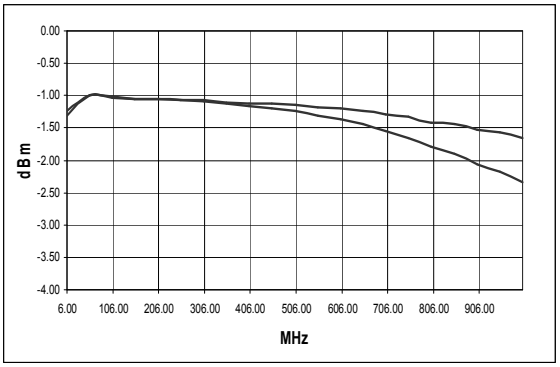
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-20°C to +85°C
Storage Temperature	-20°C to +85°C

Functional Configuration

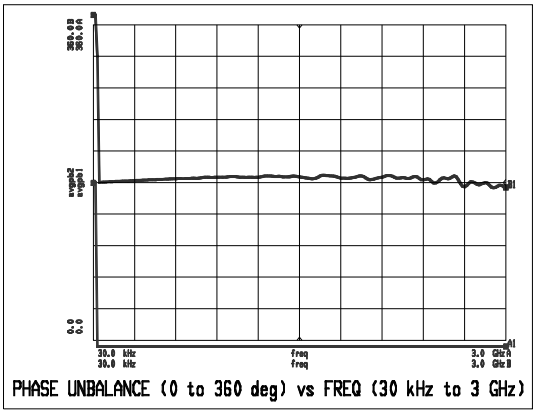
Function	Pin No.
Secondary Dot	1
Secondary CT	2
Secondary	3
Primary	4
Primary Dot	5

Typical Performance Over Extended Bandwidth (30kHz - 3.0GHz)

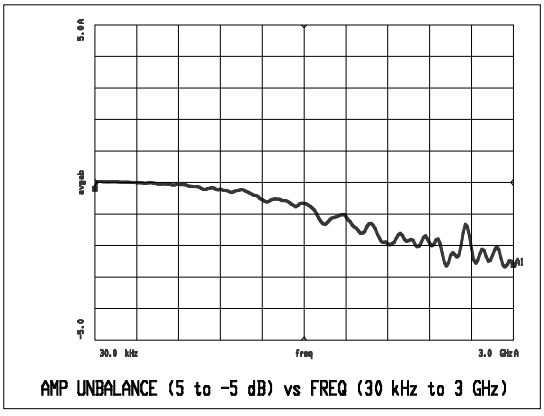
Insertion Loss



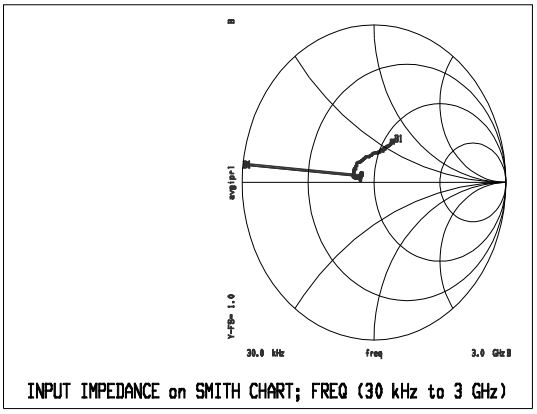
Phase Unbalance



Amplitude Unbalance



Input Impedance



Note: All measurements performed on Hewlett Packard 8753D Network Analyser (201 sample points, linear scale) in a 50 ohm coplanar waveguide environment. Tables created using MDS software.

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