

# E-Series RF 1:4 Transmission Line Step-up Transformer 500 - 2500 MHz

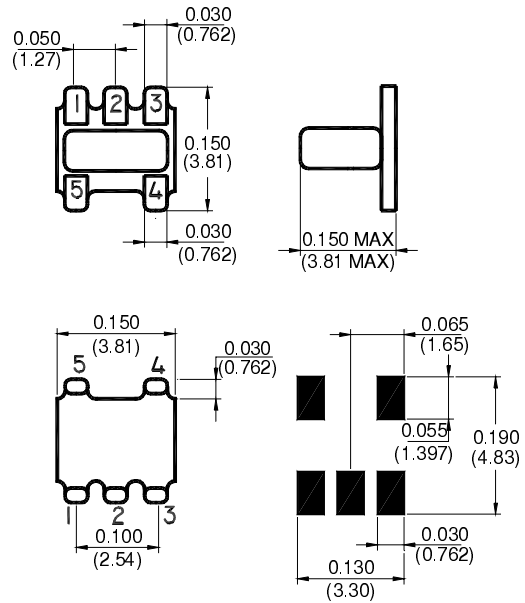


## Features

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



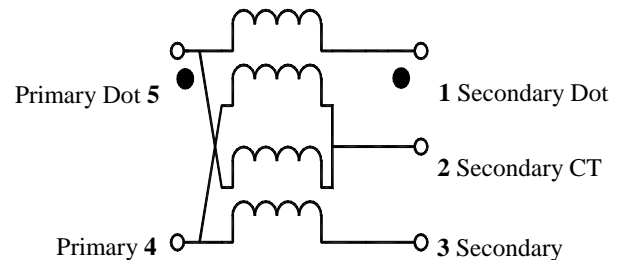
## SM-22 Package



## Description

M/A-COM's ETC1.6-4-2-3 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.

## Schematic



## Electrical Specifications @25°C

Parameter	Units	Nominal	Maximum	Mean (x)	Sigma ( $\sigma$ )
Frequency Range 500 - 2500	MHz	—	—	—	—
Insertion Loss ( $f_L - f_U$ )					
500 - 750 MHz	dB	—	3.0	—	—
750 - 1200 MHz	dB	—	1.0	0.22	0.159
1200 - 2500 MHz	dB	—	3.0	—	—

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

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

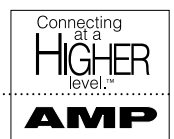
V2.00 S 0206 G



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**Absolute Maximum Ratings**

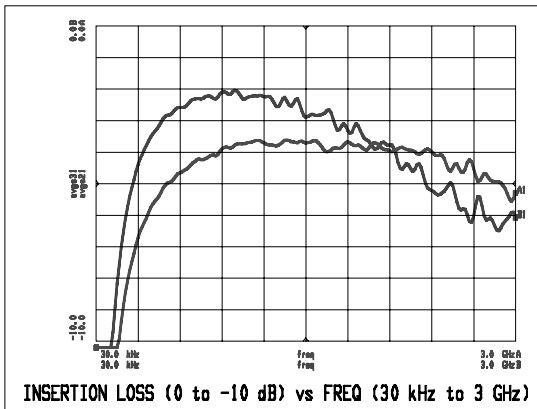
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-30°C to +85°C
Storage Temperature	-30°C to +85°C

**Functional Configuration**

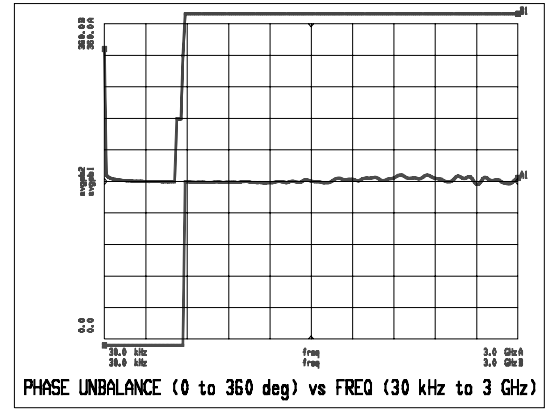
Function	Pin No.
Secondary	3
Secondary CT	2
Secondary Dot	1
Primary Dot	5
Primary	4

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

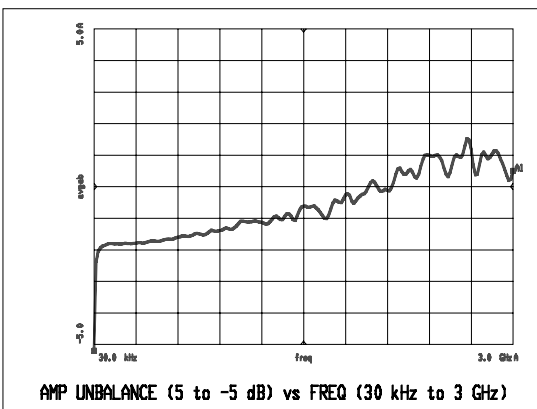
**Insertion Loss**



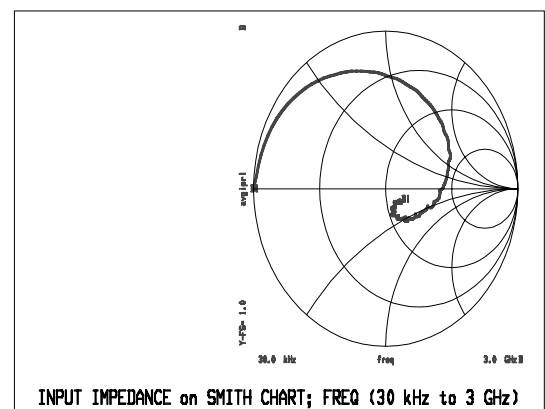
**Phase Unbalance**



**Amplitude Unbalance**



**Input Impedance**



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

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