## 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 ETK4-2T is a 1:4 RF transmission line step-up transformer in a low cost, surface mount package. Ideally suited for high volume applications.

SM-22 Package


Schematic

Primary Dot 5


Electrical Specifications @ $25^{\circ} \mathrm{C}$

| Parameter |  | Units | Nominal | Typical | Minimum | Maximum |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency Range | $2-1000$ | MHz | - | - | - | - |
| Insertion Loss | $5-250 \mathrm{MHz}$ | dB | - | - | - | 1.0 |
|  | $3-500 \mathrm{MHz}$ | dB | - | - | 2.0 |  |
|  | $2.5-700 \mathrm{MHz}$ | dB | - | - | 3.0 |  |
|  | $2.0-1000 \mathrm{MHz}$ | dB | - | - | 4.0 |  |
| Amplitude Imbalance | $2-300 \mathrm{MHz}$ | dB | - | - | - | 0.3 |
|  | $300-1000 \mathrm{MHz}$ | dB | - | - | - | 2.0 |
| Phase Imbalance | $2-300 \mathrm{MHz}$ | Degrees | - | - | - | 5.0 |
|  | $300-1000 \mathrm{MHz}$ | Degrees | - | - | - | 20 |

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

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## Absolute Maximum Ratings

| Parameter | Absolute Maximum |
| :---: | :---: |
| RF Power | 250 mW |
| DC Current | 30 mA |
| Operating Temperature | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| Storage Temperature | $-55^{\circ} \mathrm{C}$ to $100^{\circ} \mathrm{C}$ |

## Functional Configuration

| Function | Pin No. |
| :---: | :---: |
| Primary Dot | 5 |
| Primary | 4 |
| Primary CT | - |
| Secondary Dot | 1 |
| Secondary | 3 |
| Secondary CT | 2 |
| Case Ground | - |
| Not Connected | - |

## Typical Performance @ $+25^{\circ} \mathrm{C}$



## Amplitude Imbalance



