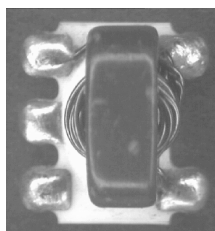


E-Series RF 1:4 Transmission Line Step-up Transformer

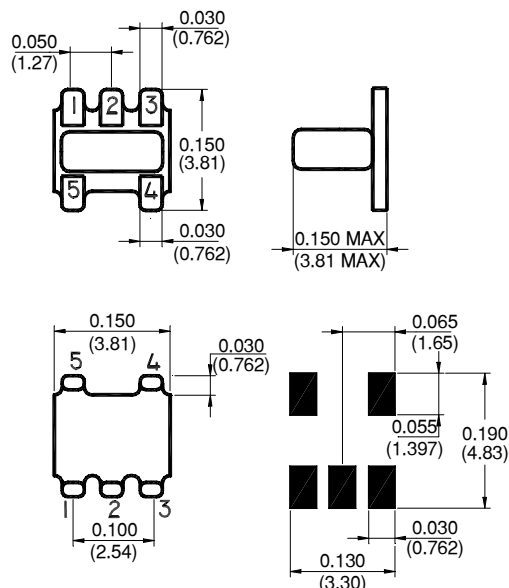


Features

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



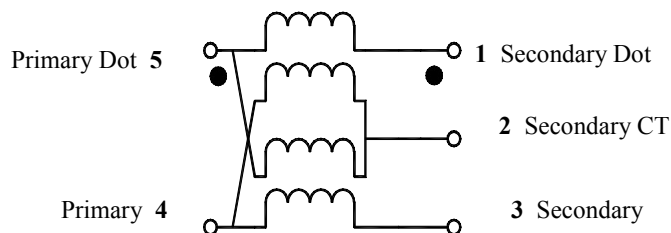
SM-22 Package



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.

Schematic



Electrical Specifications @25°C

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

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

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Absolute Maximum Ratings

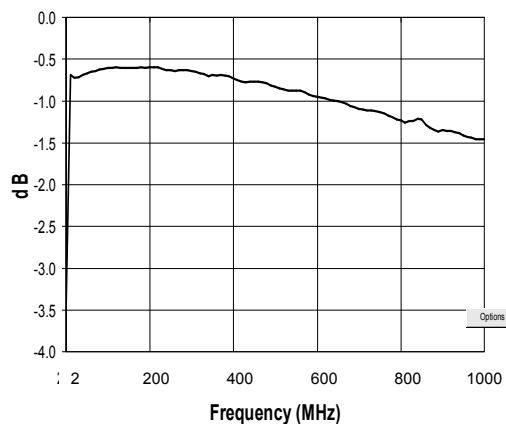
| Parameter | Absolute Maximum |
|-----------------------|------------------|
| RF Power | 250 mW |
| DC Current | 30 mA |
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to 100°C |

Functional Configuration

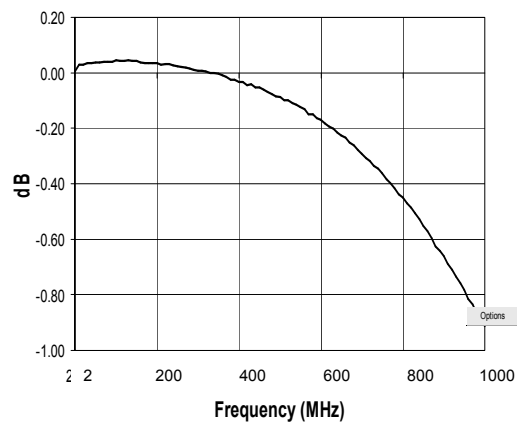
| Function | Pin No. |
|---------------|---------|
| Primary Dot | 5 |
| Primary | 4 |
| Primary CT | — |
| Secondary Dot | 1 |
| Secondary | 3 |
| Secondary CT | 2 |
| Case Ground | — |
| Not Connected | — |

Typical Performance @ +25°C

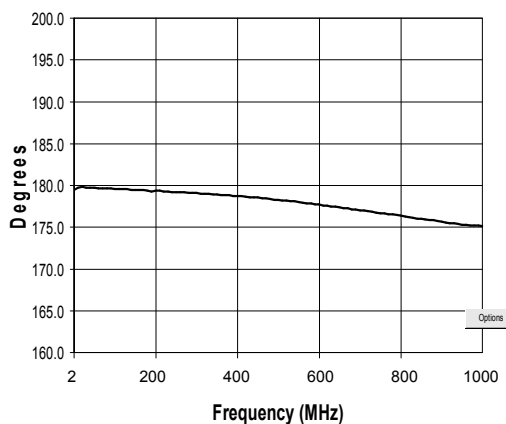
Insertion Loss



Amplitude Imbalance



Phase Imbalance



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