

## E-Series RF 1:1 Transformer 1710 – 1910 MHz

V1

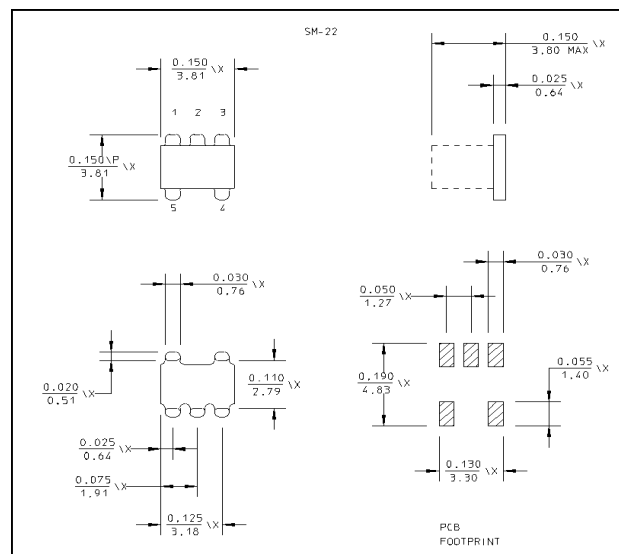
### Features

- 1:1 Impedance Ratio
- Surface Mount
- Tape and reel packaging available

### Description

M/A-COM's ETC1-1-10 is a 1:1 RF transmission line transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Parts are packaged in tape & reel.

### SM - 22 Package



### Electrical Specifications: $T_A = 25^\circ\text{C}$ , $Z_0 = 50\Omega$ <sup>1</sup>

| Parameter           | Test Conditions | Frequency   | Units   | Min | Typ | Max |
|---------------------|-----------------|-------------|---------|-----|-----|-----|
| RF Frequency        | —               | 1710 - 1910 | MHz     | —   | —   | —   |
| Insertion Loss      | $F_L - f_U$     | 1710 - 1910 | dB      | —   | —   | 2.0 |
| Amplitude Unbalance | —               | 1710 - 1910 | dB      | —   | —   | 2.0 |
| Phase Unbalance     | —               | 1710 - 1910 | Degrees | —   | —   | 10° |

### Absolute Maximum Ratings<sup>1</sup>

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

1. Operation of this device above any one of these parameters may cause permanent damage.

### Ordering Information

| Part Number | Package                         |
|-------------|---------------------------------|
| ETC1-1-10TR | Tape and Reel (2000 piece Reel) |

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 • **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588

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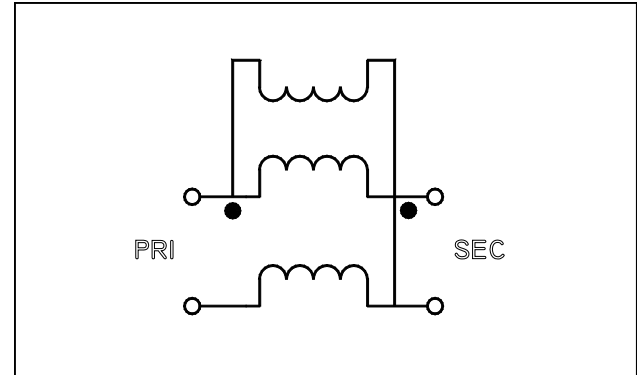
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### Pin Configuration

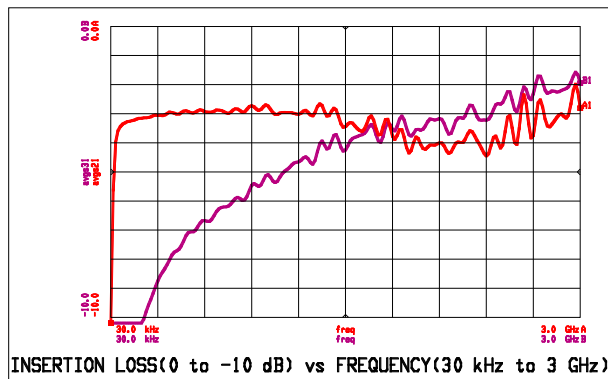
| Pin No. | Function      |
|---------|---------------|
| 1       | Secondary Dot |
| 2       | Not Connected |
| 3       | Secondary     |
| 4       | Primary       |
| 5       | Primary Dot   |

### Schematic

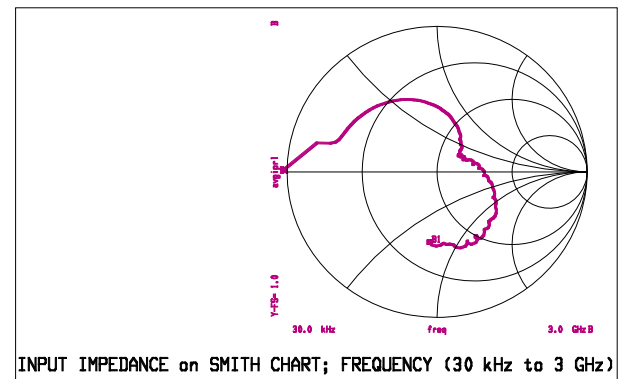


### Typical Performance Curves

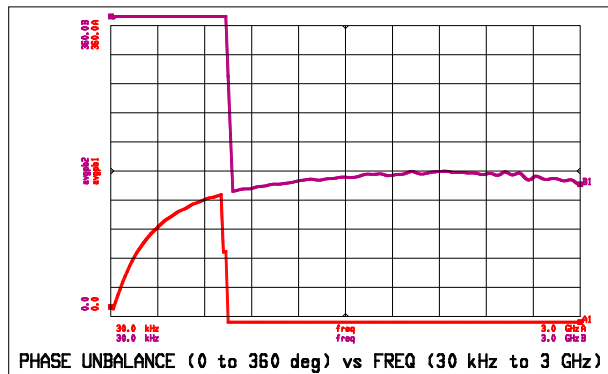
#### Insertion Loss



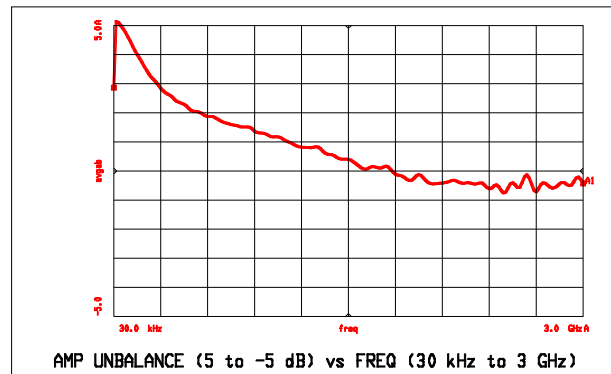
#### Input Impedance



#### Phase Unbalance



#### Amplitude Unbalance



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