

# ET16-6T-SM1

E-Series RF 16:1 Transformer  
0.06 – 60 MHz

V1

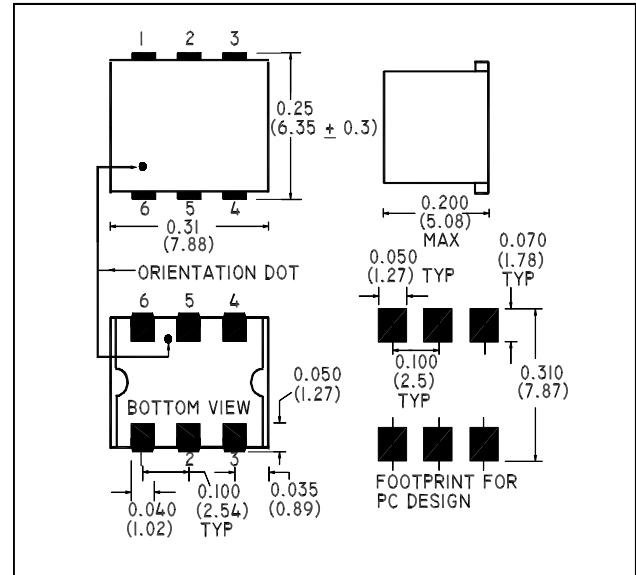
## Features

- 16:1 Impedance Ratio
- CT on Secondary
- Surface Mount
- Tape and reel packaging available

## Description

M/A-COM's ET16-6T-SM1 is a 16:1 RF 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. Parts are packaged in tape & reel.

## SM - 1 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        | —               | 0.06 - 60 | MHz     | —   | —   | —   |
| Insertion Loss      | $F_L - f_U$     | 0.06 - 60 | dB      | —   | —   | 3.0 |
|                     |                 | 0.08 - 40 | dB      | —   | —   | 2.0 |
|                     |                 | 0.15 - 15 | dB      | —   | —   | 1.0 |
| Amplitude Unbalance | $F_L - f_U$     | 0.06 - 30 | dB      | —   | —   | 0.3 |
|                     |                 | 0.06 - 60 | dB      | —   | —   | 0.6 |
| Phase Unbalance     | $F_L - f_U$     | 0.06 - 20 | Degrees | —   | —   | 1°  |
|                     |                 | 0.06 - 60 | Degrees | —   | —   | 4°  |

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

| Parameter             | Absolute Maximum |
|-----------------------|------------------|
| RF 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                        |
|---------------|--------------------------------|
| ET16-6T-SM1TR | Tape and Reel (900 piece Reel) |

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**ADVANCED:** Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

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## Pin Configuration

| Pin No. | Function      |
|---------|---------------|
| 1       | Secondary     |
| 2       | Secondary CT  |
| 3       | Secondary Dot |
| 4       | Primary Dot   |
| 5       | Not Connected |
| 6       | Primary       |

## Schematic

