



# THE DATASHEET OF TC4-1TX+





# RF Transformer

## TC4-1TX+

50Ω 0.5 to 300 MHz

### THE BIG DEAL

- Wideband 0.5-300 MHz, usable over 0.2-450 MHz
- Good return loss
- Impedance matching
- Plastic base with leads
- Aqueous washable



*Generic photo used for illustration purposes only*

CASE STYLE: AT1521

### +RoHS Compliant

The +Suffix identifies RoHS Compliance.  
See our website for methodologies and qualifications

### APPLICATIONS

- CATV

### ELECTRICAL SPECIFICATIONS AT 25°C

| Parameter                             | Frequency (MHz) | Min. | Typ. | Max. | Unit |
|---------------------------------------|-----------------|------|------|------|------|
| Impedance Ratio (secondary / primary) |                 |      | 4    |      | Ohm  |
| Frequency Range                       |                 | 0.5  |      | 300  | MHz  |
| Insertion Loss*                       | —               |      | 3.0  |      | dB   |
|                                       | 0.5-300         |      | 2.0  |      |      |
|                                       | 1.5-100         |      | 1.0  |      |      |

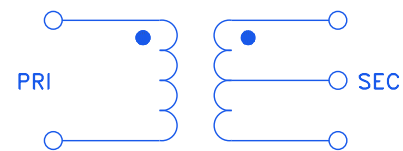
\* Insertion Loss is referenced to mid-band loss, 0.3 dB typ.

### MAXIMUM RATINGS

| Parameter             | Ratings        |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| RF Power              | 0.25W          |
| DC Current            | 30mA           |

Permanent damage may occur if any of these limits are exceeded.

### CONFIG. A



REV. C  
ECO-021454  
TC4-1TX+  
ED-6398/2  
IG/TD/CP/AM  
240411

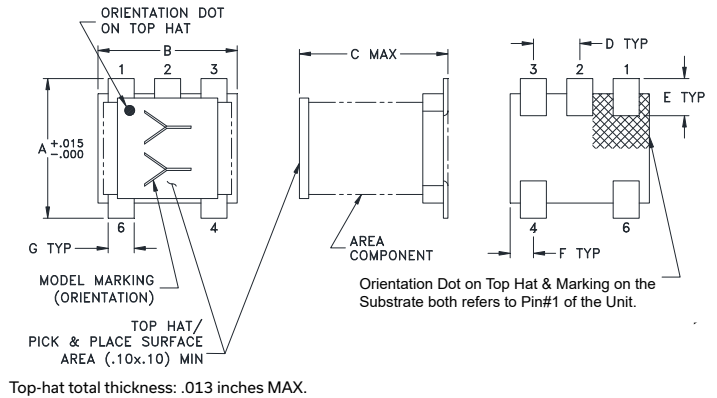


### PIN CONNECTIONS

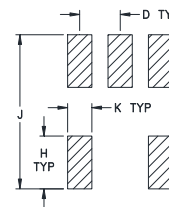
|               |   |
|---------------|---|
| PRIMARY DOT   | 6 |
| PRIMARY       | 4 |
| SECONDARY DOT | 1 |
| SECONDARY     | 3 |
| SECONDARY CT  | 2 |
| NOT USED      | 5 |

**PRODUCT MARKING: FL**

### OUTLINE DRAWING



### PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm .002$

### OUTLINE DIMENSIONS (Inch mm)

| A    | B    | C    | D    | E    | F    | G    | H    | J    | K    |
|------|------|------|------|------|------|------|------|------|------|
| .150 | .150 | .160 | .050 | .040 | .025 | .028 | .065 | .190 | .030 |
| 3.81 | 3.81 | 4.06 | 1.27 | 1.02 | 0.64 | 0.71 | 1.65 | 4.83 | 0.76 |

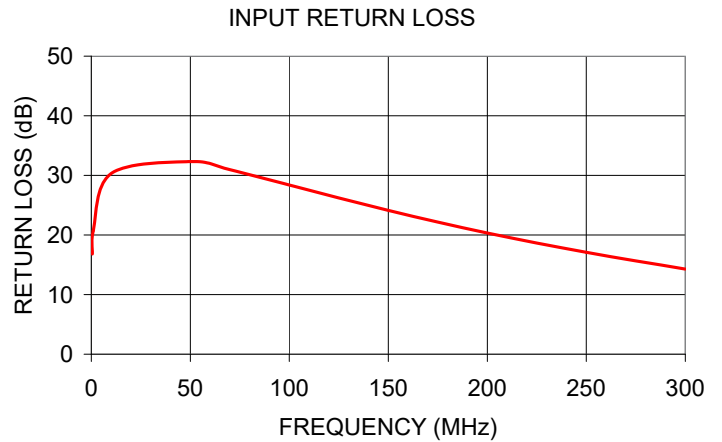
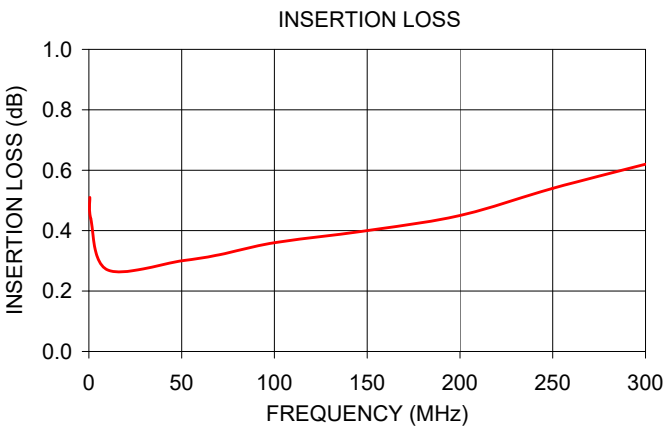
Weight: 0.15 grams

### TAPE & REEL INFORMATION: F17



### TYPICAL PERFORMANCE DATA

| FREQUENCY (MHz) | INSERTION LOSS (dB) | INPUT R. LOSS (dB) |
|-----------------|---------------------|--------------------|
| 0.50            | 0.51                | 16.81              |
| 1.00            | 0.44                | 20.73              |
| 10.00           | 0.27                | 30.31              |
| 50.00           | 0.30                | 32.32              |
| 70.00           | 0.32                | 30.95              |
| 100.00          | 0.36                | 28.39              |
| 150.00          | 0.40                | 24.12              |
| 200.00          | 0.45                | 20.32              |
| 250.00          | 0.54                | 17.09              |
| 300.00          | 0.62                | 14.29              |



#### NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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