



SURFACE MOUNT

## RF Transformer

TC4-14G2+

Mini-Circuits

50Ω 200 to 1400 MHz

## FEATURES

- Suitable for Tin/Lead and RoHS Solder Systems
- Good Return Loss
- Wideband, 200 to 1400 MHz
- Aqueous Washable



Generic photo used for illustration purposes only

CASE STYLE: AT224-3

**+RoHS Compliant**

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

## APPLICATIONS

- Push-Pull Amplifiers
- Impedance Matching

## ELECTRICAL SPECIFICATIONS AT +25°C

| Parameter                           | Frequency (MHz) | Min. | Typ. | Max. | Unit |
|-------------------------------------|-----------------|------|------|------|------|
| Impedance Ratio (Secondary/Primary) |                 |      | 4    |      | Ohm  |
| Frequency Range                     |                 | 200  |      | 1400 | MHz  |
| Insertion Loss <sup>1</sup>         | 200-1400        |      |      | 3.0  | dB   |
|                                     | 300-1300        |      |      | 2.0  |      |
|                                     | 800-1100        |      |      | 1.0  |      |

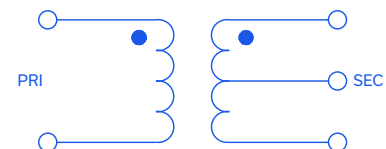
1. Insertion Loss is referenced to mid-band loss, 0.7 dB typ.

## ABSOLUTE MAXIMUM RATINGS

| Parameter             | Ratings         |
|-----------------------|-----------------|
| Operating Temperature | -20°C to +85°C  |
| Storage Temperature   | -55°C to +100°C |
| RF Power              | 0.25 W          |
| DC Current            | 30 mA           |

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

## CONFIG. A



Mini-Circuits

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. C  
ECO-027808  
TC4-14G2+  
MCL NY  
251204

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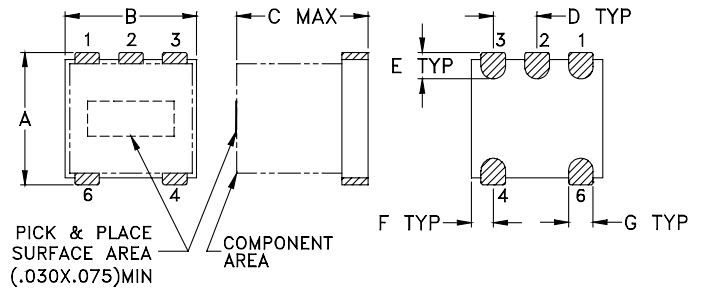
## PIN CONNECTIONS

|               |   |
|---------------|---|
| PRIMARY DOT   | 6 |
| PRIMARY       | 4 |
| SECONDARY DOT | 3 |
| SECONDARY     | 1 |
| SECONDARY CT  | 2 |

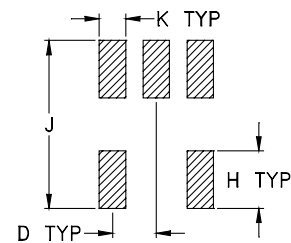
PRODUCT MARKING: NA

DEMO BOARD MCL P/N: TB-TC4-14G2+

## OUTLINE DRAWING



## PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm 0.002$  in

## OUTLINE DIMENSIONS (Inch/mm)

| A    | B    | C    | D    | E     | F    |
|------|------|------|------|-------|------|
| .150 | .150 | .150 | .050 | .030  | .025 |
| 3.81 | 3.81 | 3.81 | 1.27 | 0.76  | 0.64 |
| G    | H    | J    | K    | wt    |      |
| .028 | .065 | .190 | .030 | grams |      |
| 0.71 | 1.65 | 4.83 | 0.76 | 0.10  |      |

TAPE & REEL INFORMATION: F17





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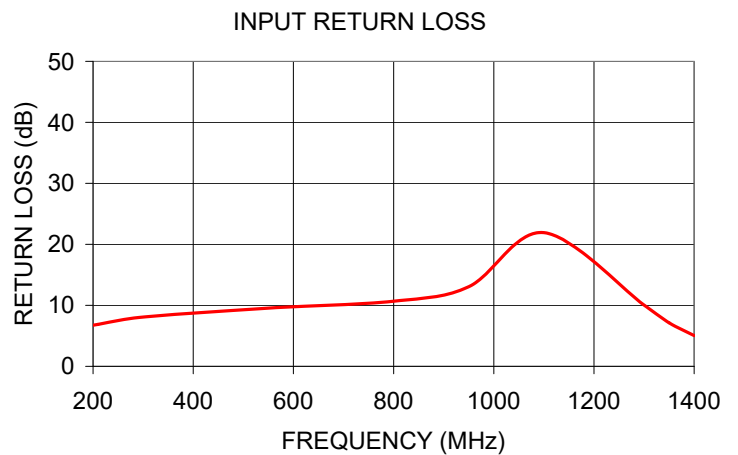
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## TYPICAL PERFORMANCE DATA

| FREQUENCY (MHz) | INSERTION LOSS (dB) | INPUT R. LOSS (dB) |
|-----------------|---------------------|--------------------|
| 200             | 1.33                | 6.74               |
| 210             | 1.26                | 6.88               |
| 300             | 1.22                | 8.07               |
| 550             | 0.92                | 9.54               |
| 800             | 0.88                | 10.68              |
| 950             | 0.82                | 13.05              |
| 1100            | 0.70                | 21.93              |
| 1300            | 1.53                | 10.04              |
| 1350            | 1.77                | 7.15               |
| 1400            | 2.77                | 5.05               |



### NOTES

- 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.
- 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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