

Surface Mount RF Transformer

50Ω 2 to 500 MHz

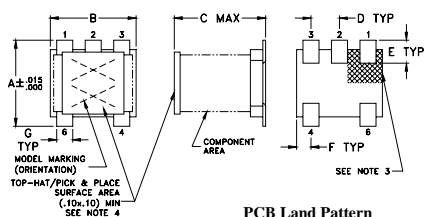
Maximum Ratings

| | |
|---|----------------|
| Operating Temperature | -20°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. | |

Pin Connections

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

Outline Drawing AT1521



PCB Land Pattern

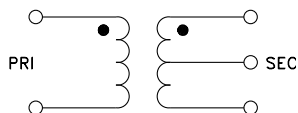
Suggested Layout,
Tolerance to be within ±.002

Notes:
1. Case Material: Plastic.
2. Termination Finish: Tin plate over Nickel plate.
3. Lead#1 identifier shall be located in the cross-hatched area shown, on bottom view. Identifier may be either a molded or marked feature.
4. Top-Hat total thickness: .013 inches max.

Outline Dimensions (inch)

| A | B | C | D | E | F |
|------|------|------|------|-------|------|
| .150 | .150 | .160 | .050 | .040 | .025 |
| 3.81 | 3.81 | 4.06 | 1.27 | 1.02 | 0.64 |
| G | H | J | K | wt | |
| .028 | .065 | .190 | .030 | grams | |
| 0.71 | 1.65 | 4.83 | 0.76 | 0.15 | |

Config. A



Features

- wideband, 2 to 500 MHz
- good return loss
- plastic base with leads
- aqueous washable

Applications

- push-pull amplifier
- impedance matching

TC8-1X+



CASE STYLE: AT1521
PRICE: \$2.19 ea. QTY (20)
\$1.19 ea. QTY (100)

+RoHS Compliant

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

| Reel Size | Devices/Reel |
|-----------|-----------------------|
| 7" | 20, 50, 100, 200, 500 |
| 13" | 1000, 2000 |

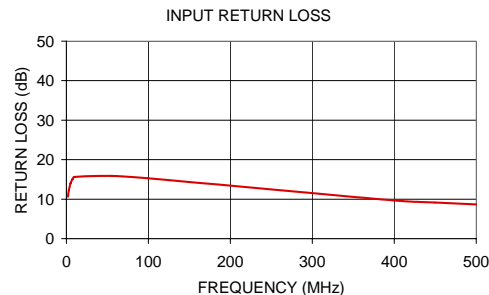
Transformer Electrical Specifications

| Ω RATIO (Secondary/Primary) | FREQUENCY (MHz) | INSERTION LOSS* | | |
|-----------------------------------|--------------------|-----------------|-------------|-------------|
| | | 3 dB MHz | 2 dB MHz | 1 dB MHz |
| 8 | 2-500 | 2-500 | 5-400 | 10-100 |

* Insertion Loss is referenced to mid-band loss, 0.8 dB typ.

Typical Performance Data

| FREQUENCY (MHz) | INSERTION LOSS (dB) | INPUT R. LOSS (dB) |
|--------------------|---------------------------|--------------------------|
| 2.00 | 1.20 | 10.65 |
| 3.00 | 1.03 | 12.20 |
| 5.00 | 0.90 | 14.01 |
| 7.50 | 0.84 | 15.09 |
| 10.00 | 0.82 | 15.64 |
| 55.00 | 0.86 | 15.88 |
| 100.00 | 0.90 | 15.29 |
| 400.00 | 1.15 | 9.68 |
| 450.00 | 1.34 | 9.15 |
| 500.00 | 1.51 | 8.67 |



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.
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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Page 1 of 1