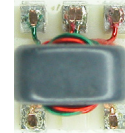


Surface Mount RF Transformer

50Ω

2 to 500 MHz

TC8-1+



CASE STYLE: AT224-1
PRICE: \$2.19 ea. QTY (20)
\$1.19 ea. QTY (100)

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 |

Features

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

Applications

- push-pull amplifier
- impedance matching

*Addition of Top hat™ feature

Benefits

- Allows faster pick-and-place
- Enables visual identification marking

+RoHS Compliant

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

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 |

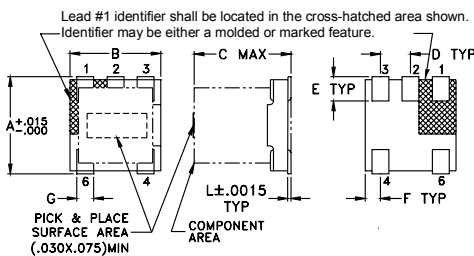
* Insertion Loss is referenced to mid-band loss, 0.8 dB typ.



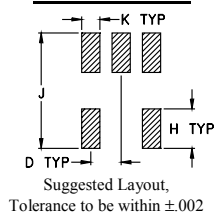
Available Tape and Reel
at no extra cost

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

Outline Drawing AT224-1



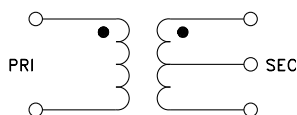
PCB Land Pattern



Outline Dimensions (inch)

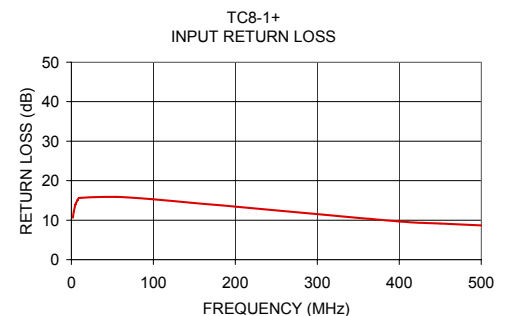
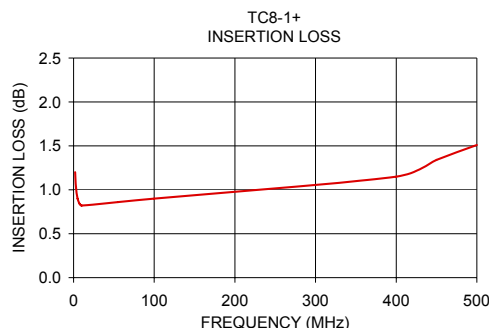
| A | B | C | D | E | F |
|------|------|------|------|------|-------|
| .150 | .150 | .160 | .050 | .040 | .025 |
| 3.81 | 3.81 | 4.06 | 1.27 | 1.02 | 0.64 |
| G | H | J | K | L | wt |
| .028 | .065 | .190 | .030 | .007 | grams |
| 0.71 | 1.65 | 4.83 | 0.76 | 0.18 | 0.15 |

Config. A



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

- 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.
- 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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