

# Surface Mount RF Transformer

50Ω

0.5 to 300 MHz

## Maximum Ratings

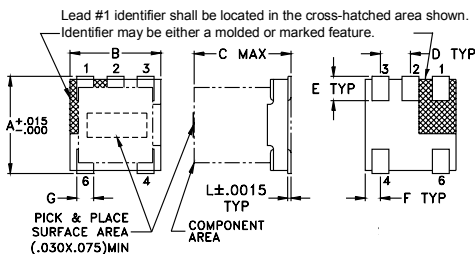
Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

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

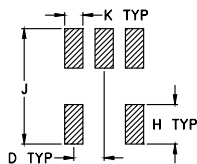
## Pin Connections

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

## Outline Drawing AT224-1



## PCB Land Pattern

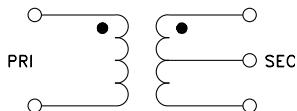


Suggested Layout,  
Tolerance to be within ±.002

## Outline Dimensions (inch/mm)

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



## Features

- wide band 0.5-300 MHz, usable over 0.2-450 MHz
- good return loss
- impedance matching
- plastic base with leads
- aqueous washable

## Applications

- catv

TC4-1T+



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

## \*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

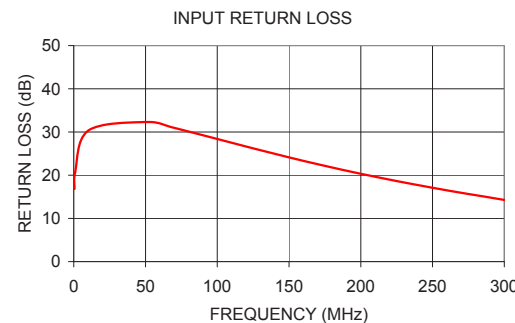
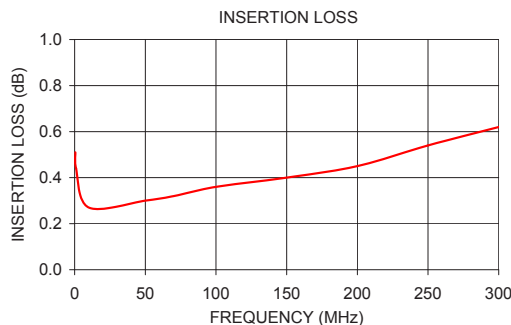
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
4	0.5-300	—	0.5-300	1.5-100

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

Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

## 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

- 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](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 35166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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