

# Surface Mount RF Transformer

50Ω 1.5 to 600 MHz

TC4-6T+  
Upgraded Version\*



Generic photo used for illustration purposes only

CASE STYLE: AT224-1

\*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

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

## Maximum 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.

## Pin Connections

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

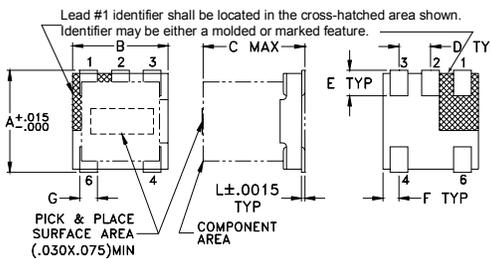
## Features

- wideband, 1.5-600 MHz
- good return loss
- plastic base with leads
- aqueous washable

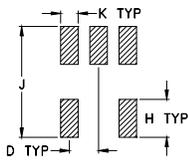
## Applications

- CATV
- VHF/UHF receivers/transmitters

## Outline Drawing AT224-1



## PCB Land Pattern



## 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

## Transformer Electrical Specifications

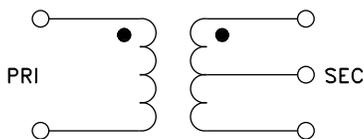
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
4	1.5-600	1.5-600	2-400	3-350

\* Insertion Loss is referenced to mid-band loss, 0.6 dB typ.

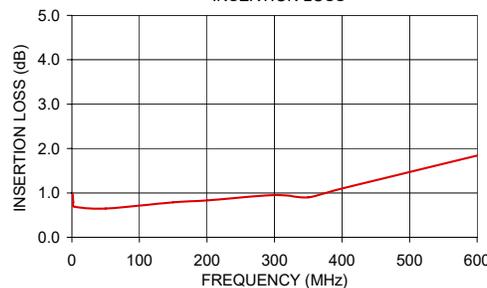
## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
1.00	0.99	18.04
2.00	0.79	21.15
3.00	0.69	23.26
50.00	0.65	34.11
150.00	0.79	29.54
200.00	0.83	26.00
300.00	0.95	20.67
350.00	0.90	17.75
400.00	1.10	16.06
600.00	1.84	9.91

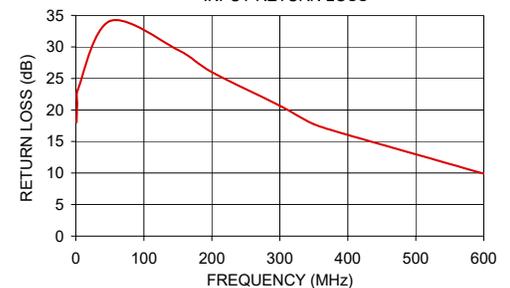
## Config. A



TC4-6T+  
INSERTION LOSS



TC4-6T+  
INPUT RETURN LOSS



## 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-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

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