

# Surface Mount RF Transformer

50Ω

2 to 1100 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	3
SECONDARY DOT	1
SECONDARY	3

## Features

- wideband 2-1100 MHz
- good return loss
- terminations, solder plated with nickel barrier for solderability and excellent leach resistance
- step-down autotransformer
- plastic base with leads
- aqueous washable

## Applications

- cellular

TC4-11+



Generic photo used for illustration purposes only

CASE STYLE: AT224-1

### \*Addition of Top Hat™ feature

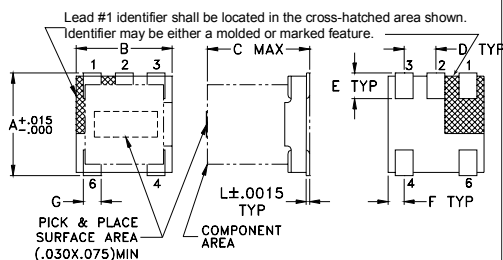
- Benefits**
- Allows faster pick-and-place
  - Enables visual identification marking

### +RoHS Compliant

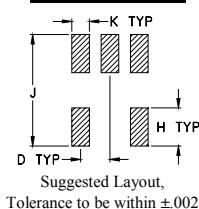
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

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

## 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

## Transformer Electrical Specifications

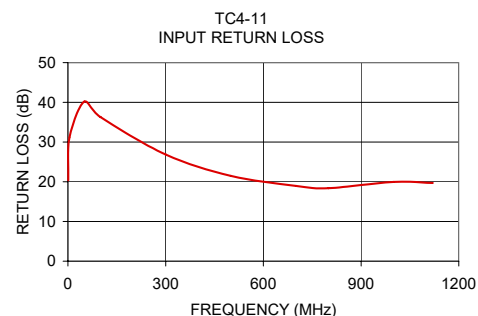
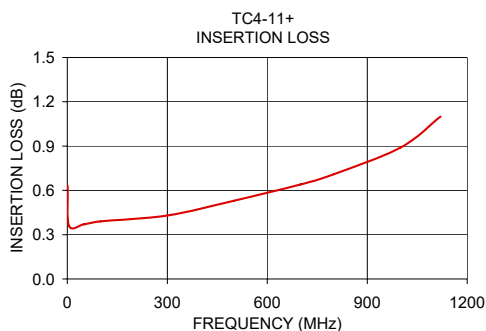
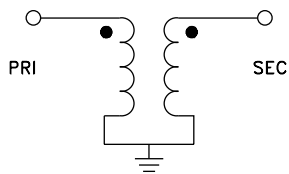
Ω RATIO (Primary/Secondary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
50/12.5	2-1100	—	2-1100	5-700

\* Insertion Loss is referenced to mid-band loss, 0.4 dB typ.  
Stepdown, 50 ohm primary, 5.2 pF across secondary

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
1.00	0.63	20.35
5.00	0.36	31.19
50.00	0.37	40.18
100.00	0.39	36.30
300.00	0.43	26.86
500.00	0.53	21.49
700.00	0.64	18.96
800.00	0.71	18.37
1000.00	0.89	19.97
1120.00	1.10	19.69

## Config. D



## 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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