

# Surface Mount RF Transformer

## TC9-1G2+

50Ω

2 to 200 MHz



Generic photo used for illustration purposes only  
CASE STYLE: AT224-3

**+RoHS Compliant**

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

**Available Tape and Reel at no extra cost**

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	0.25W
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

### Features

- suitable for tin/lead and RoHS solder systems
- good return loss
- excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 1 deg. typ. in 1 dB band width
- aqueous washable

### Applications

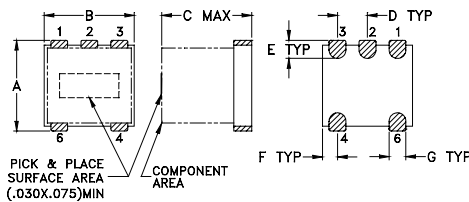
- impedance matching

### Transformer Electrical Specifications

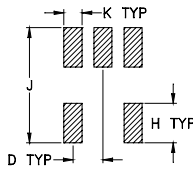
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
9	2-200	2-200	3-100	5-40

\* Insertion Loss is referenced to mid-band loss, 0.7 dB typ.

### Outline Drawing AT224-3



### PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±.002

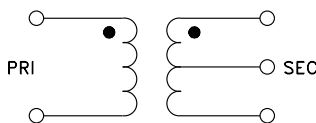
### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.150	.150	.150	.050	.030	.025	
3.81	3.81	3.81	1.27	0.76	0.64	
G	H	J	K			wt
.028	.065	.190	.030			grams
0.71	1.65	4.83	0.76			0.10

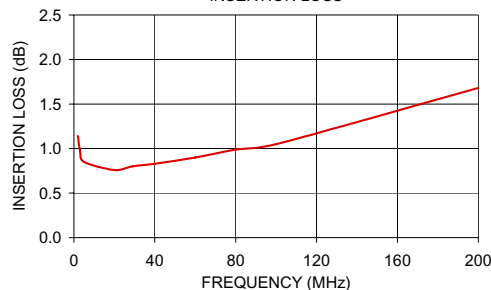
### Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
2.00	1.14	9.85
3.00	0.98	11.35
5.00	0.85	13.33
20.00	0.76	15.80
29.00	0.80	15.77
40.00	0.83	14.99
60.00	0.90	13.22
80.00	0.99	11.5
100.00	1.05	10.34
200.00	1.68	6.08

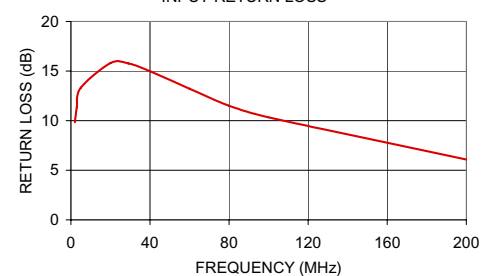
### Config. A



TC9-1G2+  
INSERTION LOSS



TC9-1G2+  
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.
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