

Surface Mount RF Transformer

TC1-1G2+

50Ω 1.5 to 500 MHz



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

Maximum Ratings

Operating Temperature	-40°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
NOT USED	2

Features

- suitable for tin/lead and RoHS solder systems
- good return loss
- usable over 0.4-500 MHz
- excellent amplitude unbalance, 0.1 dB typ.
- and phase unbalance, 2 deg. typ. in 1 dB bandwidth
- aqueous washable

+RoHS Compliant

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

Applications

- balanced to unbalanced transformation
- push-pull amplifiers

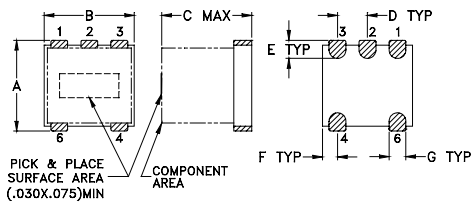
Available Tape and Reel at no extra cost	
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Transformer Electrical Specifications

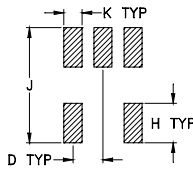
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
1	1.5-500	1.5-500	2.5-400	5-350

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

Outline Drawing AT224-3



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

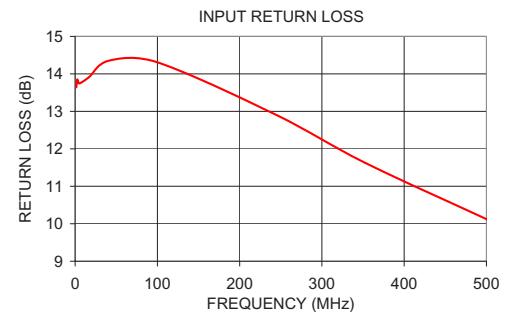
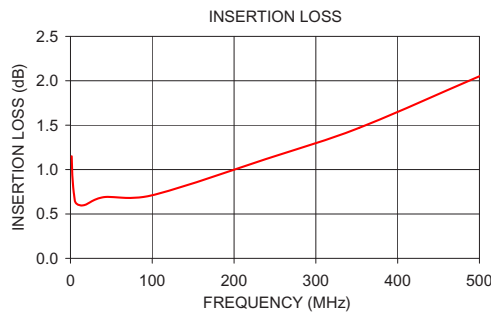
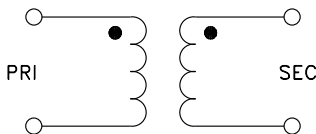
Outline Dimensions (inch/mm)

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)
1.51	1.15	13.64
2.49	0.91	13.85
4.35	0.72	13.75
6.87	0.62	13.76
16.75	0.60	13.91
40.86	0.69	14.35
99.67	0.71	14.31
243.10	1.13	12.92
353.08	1.47	11.62
502.30	2.06	10.10

Config. C



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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