



THE DATASHEET OF TC8-1G2+



Surface Mount RF Transformer

TC8-1G2+

50Ω 2 to 500 MHz



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

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	3
SECONDARY	1
SECONDARY CT	2

Features

- suitable for tin/lead and RoHS solder systems
- wideband, 2 to 500 MHz
- good return loss
- aqueous washable

Applications

- push-pull amplifier
- impedance matching

+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

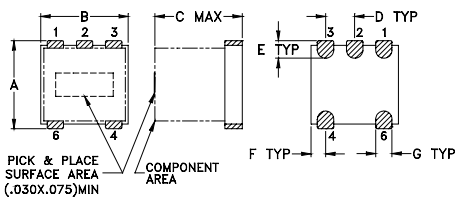
Reel Size	Devices/Reel
7"	20, 50, 100, 200, 500
13"	1000, 2000

Transformer Electrical Specifications

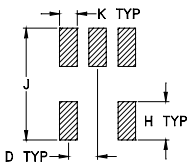
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
8	2-500	2-500	5-400	10-100

* Insertion Loss is referenced to mid-band loss, 0.8 dB typ.

Outline Drawing AT224-3



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

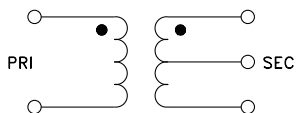
Outline Dimensions (inch/mm)

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	

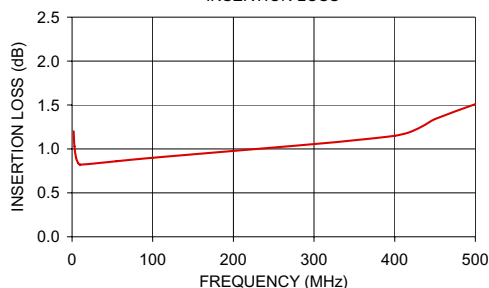
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
2.00	1.20	10.65
3.00	1.03	12.20
5.00	0.90	14.01
7.50	0.84	15.09
10.00	0.82	15.64
55.00	0.86	15.88
100.00	0.90	15.29
400.00	1.15	9.68
450.00	1.34	9.15
500.00	1.51	8.67

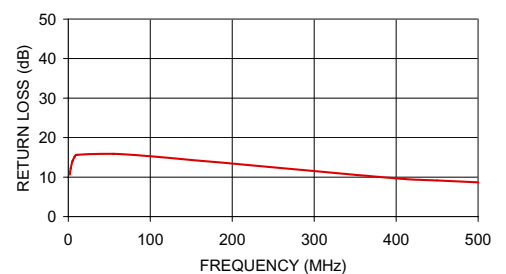
Config. A



TC8-1G2+
INSERTION LOSS



TC8-1G2+
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.
- 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



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