

# Surface Mount RF Transformer

50Ω 0.4 to 500 MHz

TC1-1TG2+

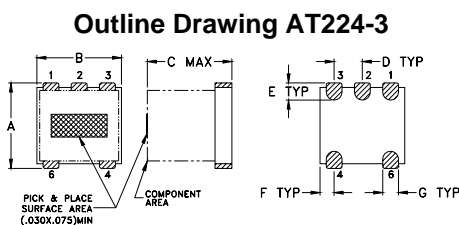


## Maximum Ratings

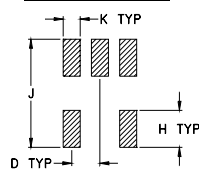
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

## Pin Connections

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



## PCB Land Pattern



Suggested Layout,  
Tolerance to be within ±0.02

## 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	

## Features

- usable over 0.4-500 MHz
- excellent amplitude unbalance, 0.1 dB typ and phase unbalance, 2 deg typ. in 1 dB bandwidth
- good return loss
- aqueous washable

## Applications

- VHF/UHF receivers/transmitters
- push-pull amplifiers

CASE STYLE: AT224-3  
PRICE: \$1.39 ea. QTY (100)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

## Transformer Electrical Specifications

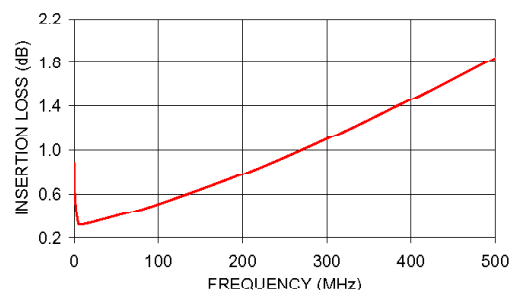
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	0.4-500	0.4-500	0.5-300	1-100	2	5	0.1	0.6

\*Insertion Loss is referenced to mid-band loss, 0.35 dB typ.

## Typical Performance Data

FREQUENCY (MHz)	INERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.30	0.88	15.46	0.06	0.03
1.00	0.57	21.01	0.04	0.05
5.00	0.33	27.35	0.02	0.01
10.00	0.32	28.55	0.02	0.15
50.00	0.40	23.46	0.02	0.63
100.00	0.51	18.34	0.06	1.24
200.00	0.78	13.01	0.21	2.57
300.00	1.10	10.06	0.47	3.99
400.00	1.46	8.16	0.82	5.66
500.00	1.84	6.90	1.26	7.50

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INSERTION LOSS



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REV. OR  
M105864  
TC1-1TG2+  
ED-9236/2  
IG/TD/CP  
060620