

Surface Mount RF Transformer

NEW!
TC1-1-13M

50Ω 4.5 to 3000 MHz

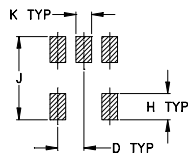
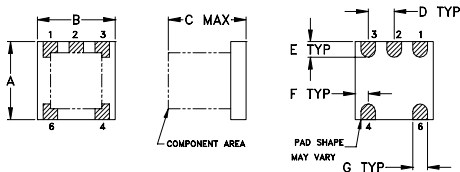
Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW

Pin Connections

PRIMARY DOT	6
PRIMARY	4
SECONDARY DOT	1
SECONDARY	3

Outline Drawing



SUGGESTED LAYOUT FOR PCB LAND PATTERN

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
.150	.150	.150	.050	.030	.025	.028	.065
3.81	3.81	3.81	1.27	0.76	0.64	0.71	1.65
J	K	wt.					
.190	.030	grams					
4.83	0.76	.10					

Features

- transmission line
- leadless surface mount
- good return loss
- excellent amplitude unbalance, 0.5 dB typ. and phase unbalance (2 deg. typ.) in 1 dB bandwidth

Applications

- balanced to unbalanced transformation
- push-pull amplifiers



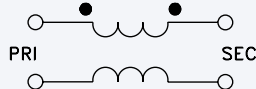
CASE STYLE: AT224
PRICE: \$.99 ea. QTY (100)

Electrical Specifications (T_{AMB}=25°C)

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	4.5-3000	2000-3000	1000-2000	4.5-1000	2	3	0.5	0.5

* Insertion Loss is referenced to mid-band loss, 0.5 dB typ.

configuration G



Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
4.50	0.18	31.52	0.69	176.19
10.00	0.18	34.60	0.56	178.22
50.00	0.19	33.50	0.56	180.11
100.00	0.24	29.68	0.55	179.81
500.00	0.46	19.52	0.45	179.19
1000.00	0.68	16.22	0.14	178.41
1500.00	0.90	15.89	0.29	179.11
2000.00	1.11	16.97	0.71	181.28
2500.00	1.62	12.88	0.78	185.79
3000.00	3.02	6.79	0.49	167.68

