

# Surface Mount RF Transformer

50Ω 10 to 700 MHz

## Maximum Ratings

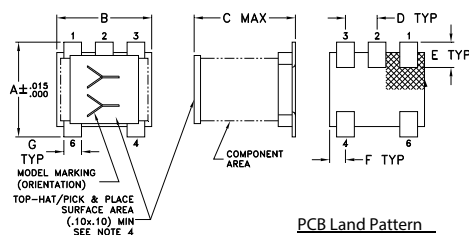
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA

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

## Outline Drawing AT1521



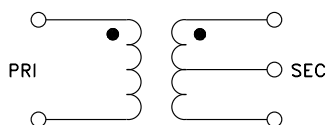
Note:  
1. Case Material Plastic  
2. Termination Finish: Tin plate over Nickel plate.  
3. Lead #1 identifier shall be located in the cross-hatched area shown, on bottom view. Identifier may be either a molded or marked feature.  
4. Top-Hat total thickness: .013 inches max.

Suggested Layout,  
Tolerance to be within ±.002

## Outline Dimensions (inch/mm)

A	B	C	D	E	F
.150	.150	.160	.050	.040	.025
3.81	3.81	4.06	1.27	1.02	0.64
G	H	J	K	wt	
.028	.065	.190	.030	grams	
0.71	1.65	4.83	0.76	0.15	

## Config. A



## Features

- wideband, 10 to 700 MHz
- good return loss
- excellent amplitude unbalance, 0.5 dB typ. and phase unbalance, 1.3 deg typ. in 1 dB bandwidth
- plastic base with leads
- aqueous washable

## Applications

- impedance matching
- balanced to unbalanced transformation
- push-pull amplifiers

TC2-72T+



CASE STYLE: AT1521

## +RoHS Compliant

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

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

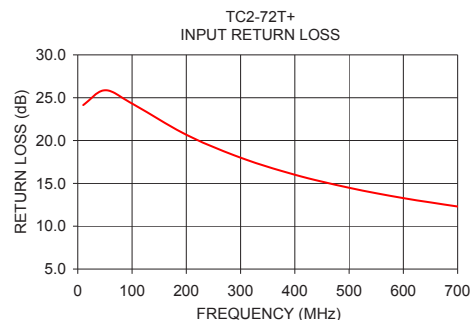
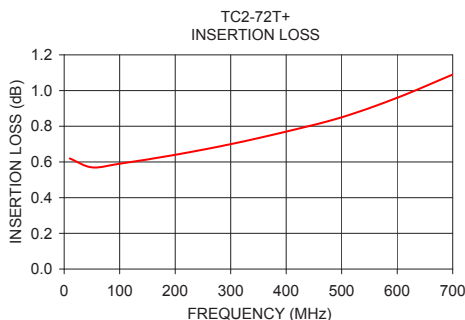
## Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Impedance Ratio (secondary/primary)			2		Ohm
Frequency Range		10	—	700	MHz
Insertion Loss*	10 - 400 400 - 700	— —	0.4 0.9	1.3 1.8	dB
Amplitude Unbalance	10 - 400 400 - 700	— —	0.5 1.3	0.8 2.0	dB
Phase Unbalance	10 - 400 400 - 700	— —	1.5 2.25	7.0 9.0	Degree

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

## Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
10.00	0.62	24.14	0.00	0.01
50.00	0.57	25.87	0.01	0.24
100.00	0.59	24.32	0.03	0.52
200.00	0.64	20.68	0.11	1.01
300.00	0.70	18.00	0.26	1.53
400.00	0.77	16.01	0.46	2.04
500.00	0.85	14.49	0.71	2.49
600.00	0.96	13.28	1.02	2.88
700.00	1.09	12.30	1.39	3.17



## 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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