

# Surface Mount RF Transformer

## ADTL1-18-75+ ADTL1-18-75

75Ω 5 to 1800 MHz



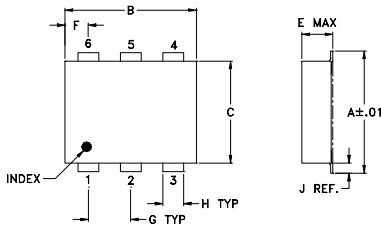
### Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	0.25W
DC Current	30mA

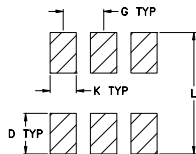
### Pin Connections

PRIMARY DOT	1
PRIMARY	3
SECONDARY DOT	6
SECONDARY	4
NOT USED	2,5

### Outline Drawing



### PCB Land Pattern

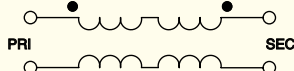


Suggested Layout,  
Tolerance to be within ±.002

### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.112	.055	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54
H	J	K	L			wt
.030	.026	.065	.300			grams
0.76	0.66	1.65	7.62			0.20

### Config. G



### Features

- wideband, 5 to 1800 MHz
- balanced transmission line
- aqueous washable
- protected under US patent 6,133,525

### Applications

- impedance matching
- balanced amplifier
- cellular
- GPS

CASE STYLE: CD542  
PRICE: \$2.95 ea. QTY (10-49)

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

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

### Transformer Electrical Specifications

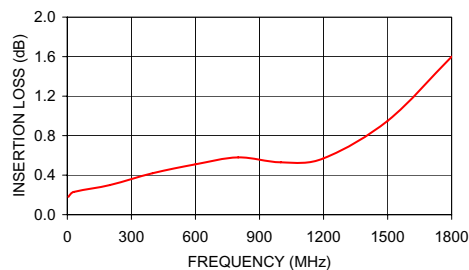
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	5-1800	-	5-1800	25-1200	3	4	0.4	0.4

\* Insertion Loss is referenced to mid-band loss, 0.4 dB typ.

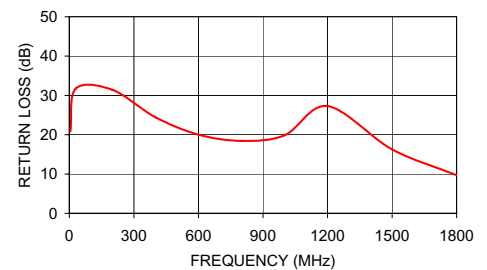
### Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
5.00	0.18	20.90	1.01	20.51
30.00	0.23	31.73	0.72	4.08
200.00	0.30	31.44	0.54	0.47
400.00	0.42	24.44	0.42	2.05
600.00	0.51	20.03	0.28	3.18
800.00	0.58	18.44	0.11	3.74
1000.00	0.53	19.85	0.07	3.93
1200.00	0.57	27.29	0.27	3.67
1500.00	0.95	16.27	0.46	3.10
1800.00	1.60	9.71	0.44	2.21

ADTL1-18-75  
INSERTION LOSS



ADTL1-18-75  
INPUT RETURN LOSS



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RF/IF MICROWAVE COMPONENTS

REV. C  
M102713  
ADTL1-18-75  
ED-6636A/9  
DJ/TD/CP/AM  
070714