Surface Mount

RF Transformer

75Ω 5 to 1800 MHz

ADTL1-18-75+
ADTL1-18-75

CASE STYLE: CD542

Maximum Ratings

Operating Temperature	-20°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	1W
DC Current	30mA

Permanent damage may occur if any of these limits are exceeded.

Pin Connections

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

Features

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

+RoHS Compliant

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

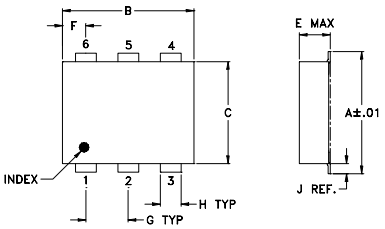
Available Tape and Reel at no extra cost

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

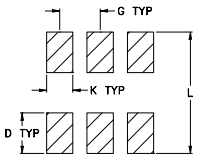
Applications

- impedance matching
- balanced amplifier
- cellular
- GPS

Outline Drawing



PCB Land Pattern



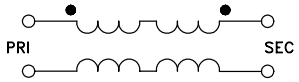
Suggested Layout,
Tolerance to be within ±.002

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



Transformer Electrical Specifications

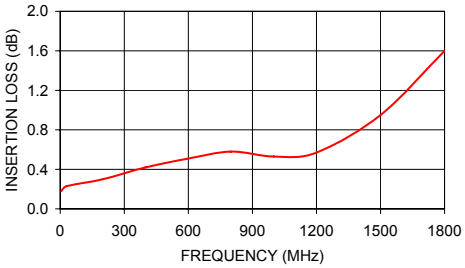
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	5-1800	-	5-1800	25-1200	3	4	0.4	0.4

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

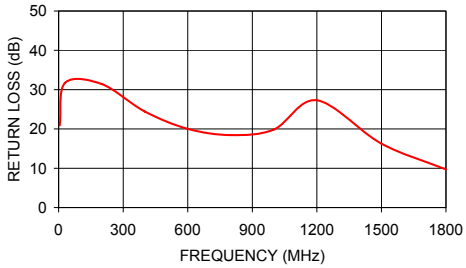
Typical Performance Data

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



Notes
A. 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.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
C. 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