



**THE DATASHEET OF
ADTL1-4-75+**



Surface Mount RF Transformer

75Ω 0.5 to 1000 MHz

ADTL1-4-75+



Generic photo used for illustration purposes only
CASE STYLE: CD542

+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
13"	500, 1000

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, 0.5 to 1000 MHz
- balanced transmission line
- excellent amplitude unbalance, 0.3 dB typ. and phase unbalance, 1 deg. typ. in 1 dB bandwidth
- aqueous washable
- protected under US patent 6,133,525

Applications

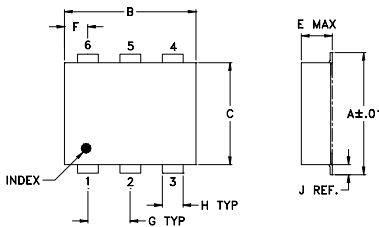
- impedance matching
- balanced amplifier
- baluns
- cellular

Transformer Electrical Specifications

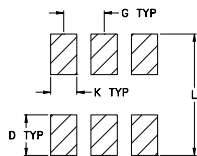
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	0.5-1000	0.5-1000	1-600	5-400	1	2	0.3	0.3

* Insertion Loss is referenced to mid-band loss, 0.2 dB typ.

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

Outline Dimensions (inch/mm)

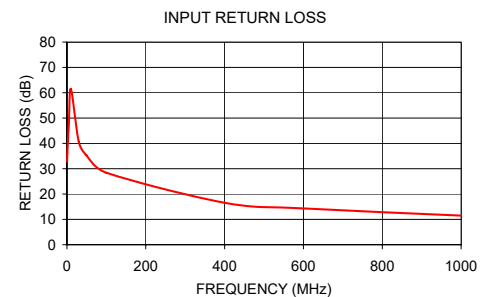
A	B	C	D	E	F	G
.272	.310	.220	.100	.112	.055	.100
6.91	7.87	5.59	2.54	2.84	1.40	2.54
H	J	K	L			wt
.030	.026	.065	.300			grams
0.76	0.66	1.65	7.62			0.20

Config. G



Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.50	0.23	32.81	0.57	4.57
1.00	0.21	36.36	0.48	2.95
5.00	0.17	47.97	0.29	0.91
10.00	0.17	61.49	0.27	0.37
30.00	0.21	40.69	0.27	0.13
50.00	0.22	35.25	0.28	0.27
100.00	0.27	28.41	0.27	0.57
400.00	0.57	16.57	0.02	1.33
600.00	0.81	14.32	0.24	0.63
1000.00	1.41	11.48	0.35	4.51



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.
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