

Surface Mount RF Transformer

50Ω 0.15 to 400 MHz

ADT1-1+ ADT1-1



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.

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

Features

- good return loss, 22 dB in 1 dB bandwidth
- excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 2 deg. typ. in 1dB bandwidth
- aqueous washable
- protected under US patent 6,133,525

Applications

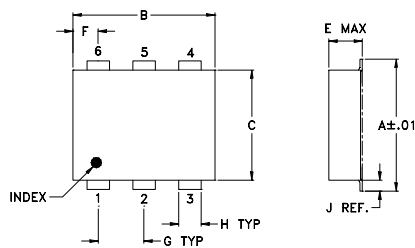
- impedance matching
- baluns

Transformer Electrical Specifications

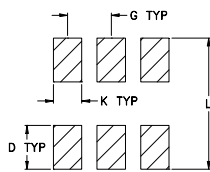
Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
1	0.15-400	0.15-400	0.2-200	0.3-100	2	5	0.1	0.5

* Insertion Loss is referenced to mid-band loss, 0.3 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		

Demo Board MCL P/N: TB-42

Typical Performance Data

FREQUENCY (MHz)	INERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.15	0.58	18.04	0.01	0.06
0.20	0.51	19.90	0.01	0.02
0.30	0.44	22.30	0.02	0.00
1.00	0.30	27.82	0.00	0.08
40.00	0.31	22.47	0.04	1.44
100.00	0.52	15.19	0.22	3.60
150.00	0.64	12.04	0.53	5.83
200.00	1.08	10.90	0.99	7.98
300.00	1.58	7.21	2.21	14.28
400.00	1.82	5.71	4.06	24.39

Config. C

