

Surface Mount RF Transformer

50Ω 1.5 to 160 MHz

ADT16-1T+
ADT16-1T

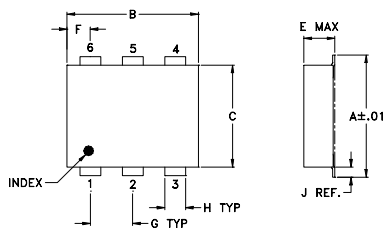
Maximum Ratings

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

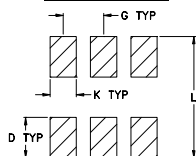
Pin Connections

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

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

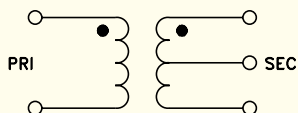
Outline Dimensions (inch/mm)

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

Config. A



Features

- excellent return loss, 16 dB typ. in 1 dB bandwidth
- excellent amplitude unbalance, 0.1 dB typ.
- excellent phase unbalance, 1 deg. typ. in 1 dB bandwidth
- aqueous washable
- protected under US patent 6,133,525

Applications

- impedance matching
- baluns



CASE STYLE: CD542
PRICE: \$4.25 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
16	1.5-160	1.5-160	3-105	5-65	1	1	0.1	0.1

* Insertion Loss is referenced to mid-band loss, 0.9 dB typ.

Typical Performance Data

FREQUENCY (MHz)	INERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
1.00	1.64	10.88	0.01	0.06
3.00	1.05	15.81	0.01	0.03
5.00	0.90	18.12	0.01	0.02
30.00	0.91	16.39	0.01	0.03
65.00	1.18	11.10	0.00	0.04
80.00	1.34	9.60	0.00	0.04
90.00	1.46	8.75	0.00	0.11
105.00	1.64	7.66	0.01	0.03
120.00	1.85	6.75	0.01	0.02
160.00	2.47	4.93	0.04	0.07

ADT16-1T
INSERTION LOSS

