

Surface Mount RF Transformer

ADT16-1T+ ADT16-1T

50Ω 1.5 to 160 MHz

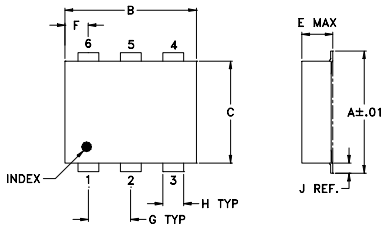
Maximum Ratings

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

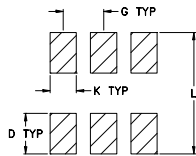
Pin Connections

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

Outline Drawing



PCB Land Pattern



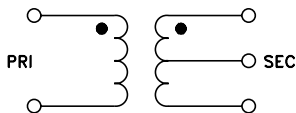
Suggested Layout,
Tolerance to be within ±.002

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	0.20	
0.76	0.66	1.65	7.62			

Demo Board MCL P/N: TB-430

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

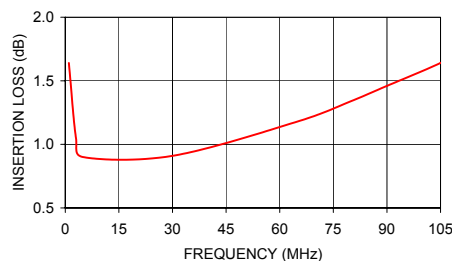
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
16	1.5-160	1.5-160	3-105	5-65	1	1	0.1	0.1

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

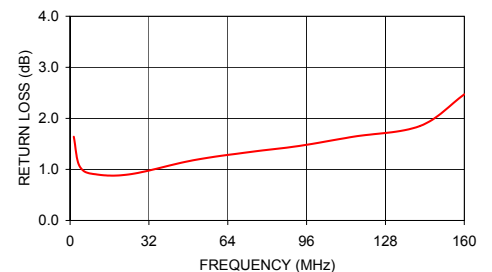
Typical Performance Data

FREQUENCY (MHz)	INSERTION 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



ADT16-1T
INPUT RETURN LOSS



Mini-Circuits®
ISO 9001 ISO 14001 CERTIFIED

ALL NEW
minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

RF/IF MICROWAVE COMPONENTS

REV. C
M112648
ADT16-1T
ED-6916/1
HY/TD/CP/AM
071101