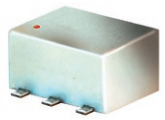
Surface Mount

RF Transformer

50Ω 0.25 to 105 MHz

ADT16-6+
ADT16-6



CASE STYLE: CD636
PRICE: $4.95 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	0.5W
DC Current	30mA

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

Pin Connections

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

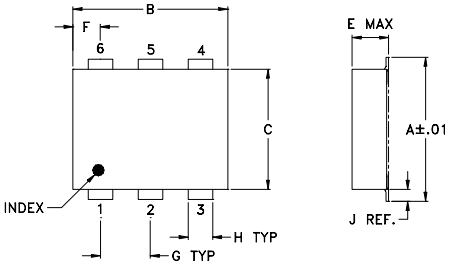
Features

- excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 3 deg. typ. in 1 dB bandwidth
- aqueous washable
- protected under US patent 6,133,525

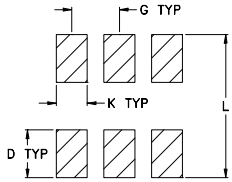
Applications

- impedance matching
- balanced amplifier

Outline Drawing



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.002

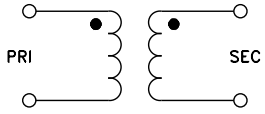
Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.272	.310	.220	.100	.162	.055	.100
6.91	7.87	5.59	2.54	4.11	1.40	2.54

H	J	K	L	wt
.030	.026	.065	.300	grams
0.76	0.66	1.65	7.62	0.25

Demo Board MCL P/N: TB-430

Config. C



Transformer Electrical Specifications

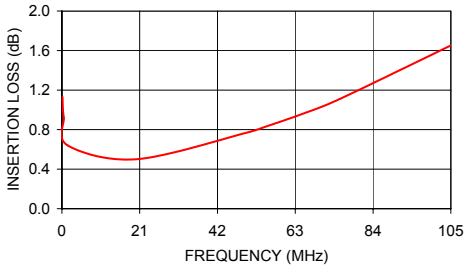
Ω RATIO (Secondary/Primary)	FREQUENCY (MHz)	INSERTION LOSS*			PHASE UNBALANCE (Deg.) Typ.		AMPLITUDE UNBALANCE (dB) Typ.	
		3 dB MHz	2 dB MHz	1 dB MHz	1 dB bandwidth	2 dB bandwidth	1 dB bandwidth	2 dB bandwidth
16	0.25-105	0.25-105	0.45-75	1-40	2	5	0.1	0.2

* Insertion Loss is referenced to mid-band loss, 0.5 dB typ.

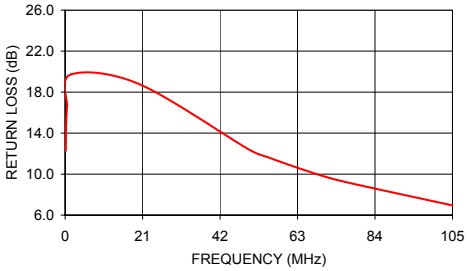
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.17	1.13	12.27	0.01	0.03
0.26	1.01	14.51	0.01	0.03
0.50	0.92	16.52	0.01	0.06
1.60	0.64	19.73	0.01	0.18
20.00	0.50	18.79	0.02	2.32
50.00	0.77	12.36	0.12	4.94
55.00	0.83	11.64	0.13	5.27
65.00	0.96	10.38	0.15	5.75
75.00	1.11	9.32	0.15	6.13
106.00	1.67	6.87	0.01	6.64

ADT16-6
INSERTION LOSS



ADT16-6
INPUT RETURN LOSS



REV. C
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ED-7966/1
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