

# Engineering Development Model

## RF Transformer

# ADT10-ED7968/1

Impedance Ratio : 10

### Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability. At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.



Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : CD636

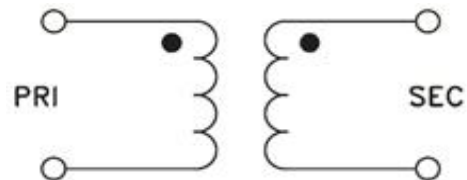
ELECTRICAL SPECIFICATIONS 50Ω @ +25°C					
Parameter		Min.	Typ.	Max.	Units
Frequency		0.3		86.4	MHz
Insertion Loss *	3 dB Bandwidth		0.3 - 86.4		MHz
	2 dB Bandwidth		0.3 - 72.2		MHz
	1 dB Bandwidth		0.3 - 58		MHz

### Note:

\* Insertion Loss is referenced to mid-band loss, 0.37dB typ.

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

### Configuration : C



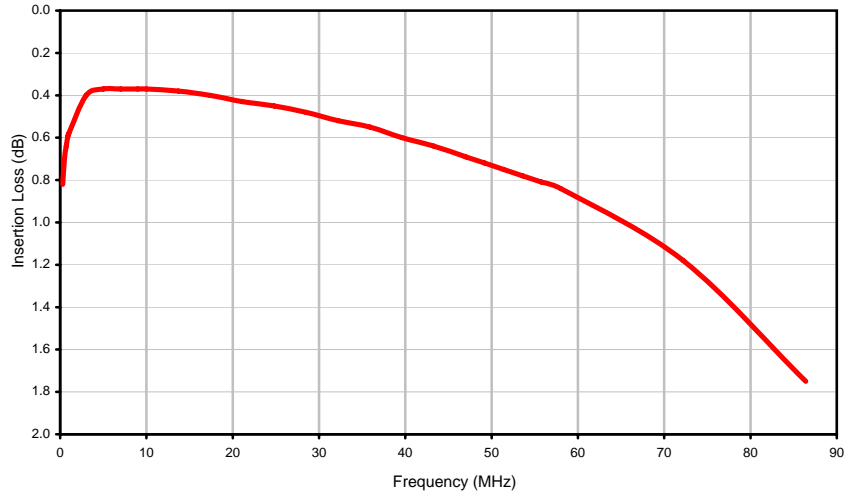
PIN CONNECTIONS	
PRIMARY DOT	1
PRIMARY	3
SECONDARY DOT	6
SECONDARY	4
NOT USED	2,5

## Typical Performance Data

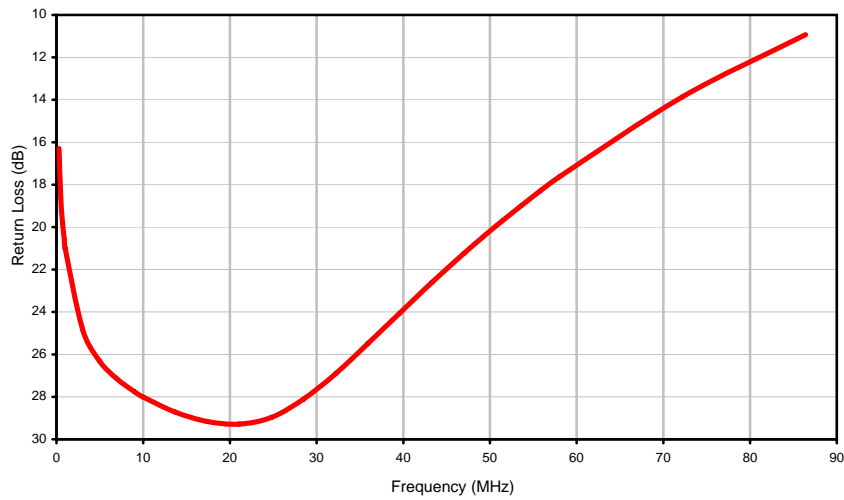
FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
0.30	0.82	16.30
0.50	0.70	18.64
0.70	0.64	19.80
0.90	0.59	20.61
1.00	0.58	20.99
3.00	0.40	24.82
5.00	0.37	26.33
7.00	0.37	27.16
9.00	0.37	27.76
10.00	0.37	28.01
13.70	0.38	28.72
17.40	0.40	29.16
21.10	0.43	29.28
24.80	0.45	28.97
28.50	0.48	28.11
32.20	0.52	26.91
35.90	0.55	25.50
39.60	0.60	24.05
43.30	0.64	22.61
47.00	0.69	21.24
49.20	0.72	20.46
51.40	0.75	19.71
53.60	0.78	18.99
55.80	0.81	18.29
58.00	0.84	17.63
72.20	1.18	13.86
86.40	1.75	10.93

## Typical Performance Curves

### Insertion Loss



### Return Loss



# Case Style

# CD

CD541  
CD542  
CD636  
CD637

## Outline Dimensions



## PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm .002$

CASE#	A	B	C	D	E	F	G	H	J	K	L	WT, GRAM
CD541					.082 (2.08)							.15
CD542	.272 (6.91)	.310 (7.87)	.220 (5.58)	.100 (2.54)	.112 (2.84)	.055 (1.40)	.100 (2.54)	.030 (0.76)	.026 (0.66)	.065 (1.65)	.300 (7.62)	.20
CD636					.162 (4.11)							.25
CD637					.206 (5.23)							.40

Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .01$ ; 3 Pl.  $\pm .005$

### Notes:

- Case material: Plastic.
- Termination finish:
  - For RoHS Case Styles: Tin plate over Nickel plate. All models, (+) suffix.
  - For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.

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# Tape & Reel Packaging TR-F34



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel see note	
16	12	7	Small quantity standard (see note)	20
				50
			Standard	100
				200
		13	Standard	500
				1000

Note: Availability of small reel quantity varies by model.  
Refer to pricing and availability on individual model dashboard.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

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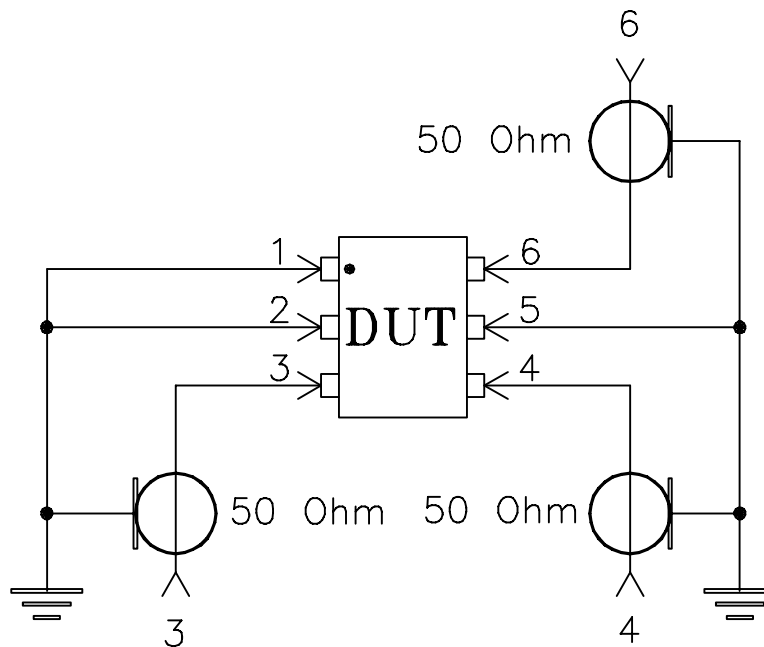
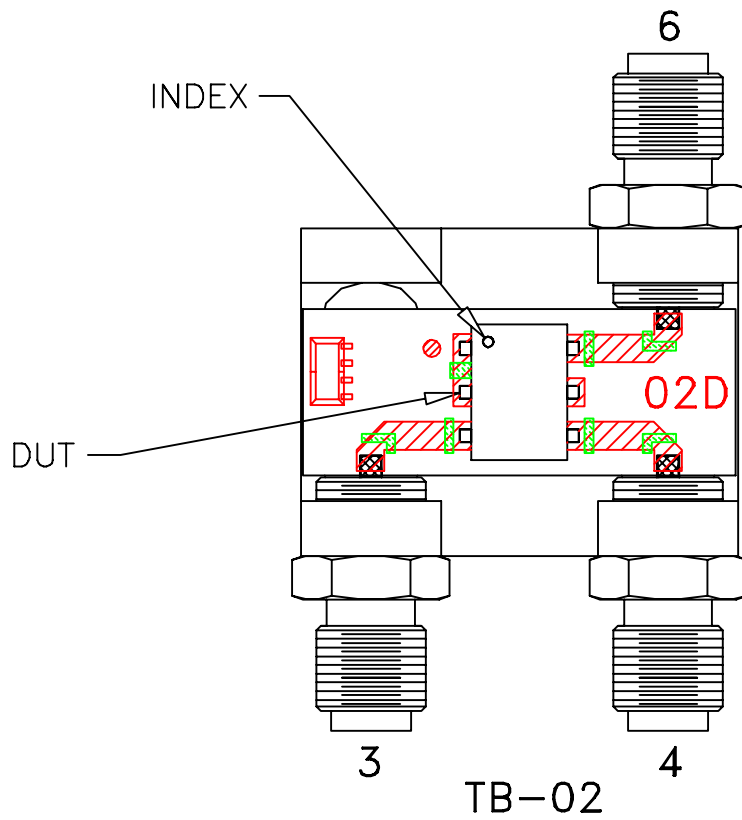
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# Evaluation Board and Circuit

For Pin Connections refer to Data Sheet of the DUT



Schematic Diagram

## Notes:

1. SMA Female connectors.
2. PCB Material: Rogers R04350 or equivalent,  
Dielectric Constant=3.5, Thickness=.030 inch.

