Engineering Development Model

RF Transformer

ADT1-ED10105/5

Impedance Ratio: 1

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.	Тур.	Max.	Units
Frequency		200		1150	MHz
Insertion Loss *	3 dB Bandwidth		200 - 1150		MHz
	2 dB Bandwidth		250 - 1150		MHz
	1 dB Bandwidth		325 - 1075		MHz

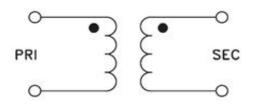
Note:

^{*} Insertion Loss is referenced to mid-band loss, 1.58dB 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		

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

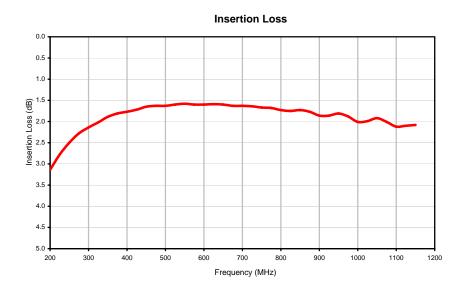
Configuration: C

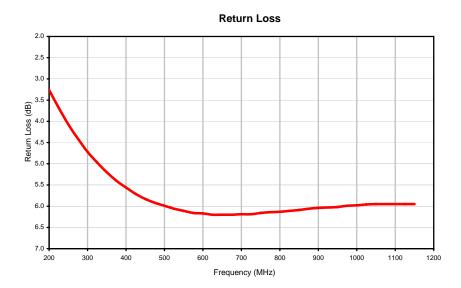


Typical Performance Data

FREQUENCY	INSERTION	RETURN
	LOSS	LOSS
(MHz)	(dB)	(dB)
200.00	3.14	3.26
225.00	2.78	3.68
250.00	2.50	4.07
275.00	2.28	4.41
300.00	2.14	4.72
325.00	2.02	4.97
350.00	1.89	5.20
375.00	1.81	5.40
400.00	1.77	5.56
425.00	1.72	5.71
450.00	1.65	5.83
475.00	1.63	5.92
500.00	1.63	5.99
525.00	1.60	6.06
550.00	1.58	6.11
575.00	1.60	6.16
600.00	1.60	6.17
625.00	1.59	6.20
650.00	1.60	6.20
675.00	1.63	6.20
700.00	1.63	6.19
725.00	1.64	6.19
750.00	1.67	6.16
775.00	1.68	6.14
800.00	1.73	6.13
825.00	1.75	6.11
850.00	1.73	6.09
875.00	1.77	6.06
900.00	1.86	6.04
925.00	1.86	6.03
950.00	1.81	6.02
975.00	1.88	5.99
1000.00	2.01	5.98
1025.00	1.99	5.96
1050.00	1.92	5.95
1075.00	2.01	5.95
1100.00	2.12	5.95
1125.00	2.10	5.95
1150.00	2.08	5.95

Typical Performance Curves





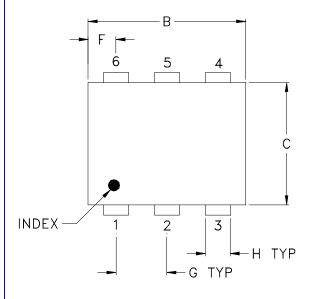
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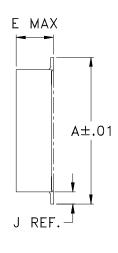
Case Style

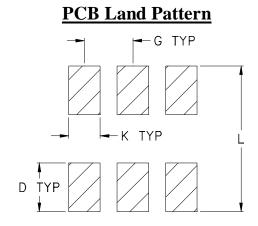
CD

Outline Dimensions

CD541 CD542 CD636 CD637







Suggested Layout, Tolerance to be within ±.002

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

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

Notes:

1. Case material: Plastic.

2. 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.



INTERNET http://www.minicircuits.com

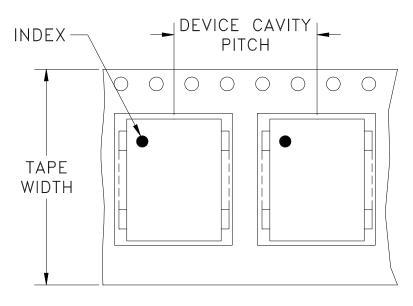
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Tape & Reel Packaging TR-F34

DEVICE ORIENTATION IN T&R



DIRECTION OF FEED

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

Note: Availability of small reel quantity varies by model.

Refer to pricing and availability on individual model dashboard.

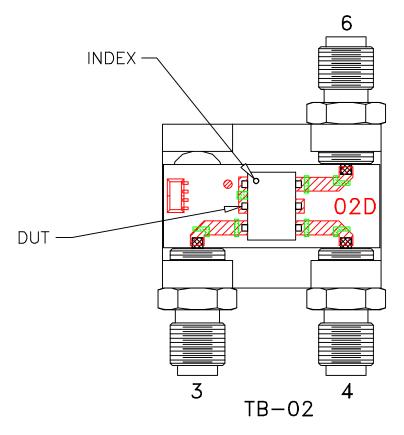
Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

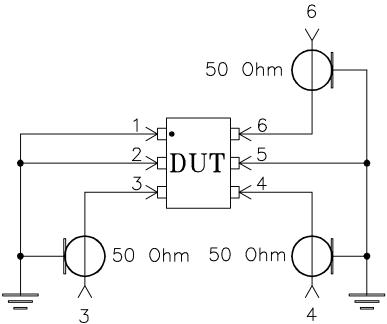
Go to: www.minicircuits.com/pages/pdfs/tape.pdf



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.

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Environmental Specifications

ENV02

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-20° to 85°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Humidity	90 to 95% RH, 240 hours, 50°C	MIL-STD-202, Method 103, Condition A, Except 50°C and end-point electrical test done within 12 hours
Thermal Shock	-55° to 100°C, 100 cycles	MIL-STD-202, Method 107, Condition A-3, except +100°C
Solder Reflow Heat	Sn-Pb Eutetic Process: 225°C peak Pb-Free Process 245° - 250°C peak	J-STD-020, Table 4-1, 4-2 and 5-2, Figure 5-1
Solderability	10X Magnification	J-STD-002, 95% Coverage
Vibration (High Frequency)	20g peak, 10-2000 Hz, 12 times in each of three perpendicular directions (total 36)	MIL-STD-202, Method 204, Condition D
Mechanical Shock	50g, 11 ms, 1/2-sine, 18 shocks: 3 each direction, each of 3 axes	MIL-STD-202, Method 213, Condition A
Marking Resistance to Solvents	Isopropyl alcohol + mineral spirits at 25°C; terpene defluxer at 25°C; distilled water + proylene glycol monomethyl ether + monoethanolamine at 63°C to 70°C	MIL-STD-202, Method 215

ENV02 Rev: A

02/25/11

M130240 File: ENV02.pdf

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