

Mini-Circuits

SURFACE MOUNT

RF Transformer

ADT1.5-122+

50Ω 20 to 1200 MHz

FEATURES

- Excellent Return Loss, 19 dB Typ. in 1 dB Bandwidth
- Good Amplitude Unbalance, 0.25 dB Typ. and Phase Unbalance, 1.0 Deg. Typ. in 1 dB Bandwidth
- Good Insertion Loss Flatness from 50 MHz to 850 MHz
- Aqueous Washable
- Protected Under US Patent 6,133,525



Generic photo used for illustration purposes only

CASE STYLE: CD542

+RoHS Compliant

The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

APPLICATIONS

- Impedance Matching
- Balanced Amplifier
- Cable TV

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio (Secondary/Primary)			1.5		
Frequency Range		20		1200	MHz
Insertion Loss ¹	20-1200		3		dB
			2		
	50-1000		1		
Amplitude Unbalance	20-1200		0.35		dB
	50-1000		0.25		
Phase Unbalance	20-1200		1.2		Degree
	50-1000		1.0		

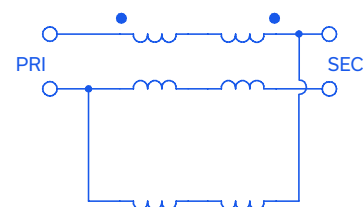
1. Insertion Loss is referenced to mid-band loss, 1 dB typ.

ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
RF Power	0.5 W
DC Current	30 mA

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

CONFIGURATION K



Mini-Circuits

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REV. B
ECO-014934
ADT1.5-122+
MCL NY
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RF Transformer

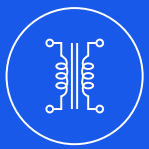
ADT1.5-122+

50Ω 20 to 1200 MHz

PRIMARY DOT, 50Ω Unbalanced	3
PRIMARY	1 & 2 Connect to GND
SECONDARY DOT, 75Ω Balanced	4
SECONDARY, 75Ω Balanced	6
NOT USED	5

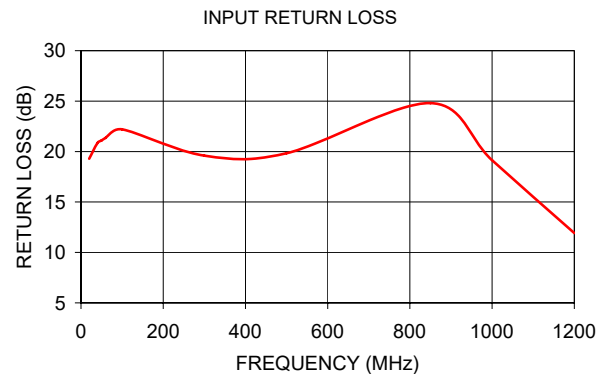
 DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

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



TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Amplitude Unbalance (dB)	Phase Unbalance (deg)
20	1.25	19.29	0.01	0.70
40	1.17	20.85	0.11	0.53
50	1.15	21.10	0.11	0.21
60	1.14	21.36	0.07	0.03
100	1.11	22.20	0.03	1.13
300	1.19	19.59	0.01	1.23
500	1.25	19.83	0.21	2.15
850	1.37	24.80	0.56	0.69
1000	1.51	19.14	0.76	1.45
1200	1.95	11.92	0.95	5.56



NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard. Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html