

TC1-1TX+

 50Ω

0.4 to 500 MHz

Features

- usable over 0.4-500 MHz
- excellent amplitude unbalance, 0.1 dB typ. and phase unbalance, 2 deg typ. in 1 dB bandwidth
- good return loss
- plastic base with leads
- · aqueous washable

Applications

- VHF/UHF receivers/transmitters
- push-pull amplifiers



Generic photo used for illustration purposes only

CASE STYLE: AT1521

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Тур.	Max.	Unit
Impedance Ratio			1		Ohm
Frequency Range		0.4		500	MHz
Insertion Loss*	0.4-500		3		
	0.5-300		2		dB
	1-100		1		
Amplitude Unbalance	1-100		0.1		dB
	0.5-300		0.6		
Phase Unbalance	1-100		2		Degree
	0.5-300		5		

 $^{^{\}star}$ Insertion Loss is referenced to mid-band loss, 0.35 dB typ.

Maximum Ratings

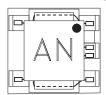
Parameter	Ratings		
Operating Temperature	-40°C to 85°C		
Storage Temperature	-55°C to 100°C		
RF Power	0.25W		
DC Current	30mA		

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

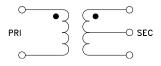
Pin Connections

Function	Pin Number		
PRIMARY DOT	6		
PRIMARY	4		
SECONDARY DOT	1		
SECONDARY	3		
SECONDARY CT	2		

Product Marking

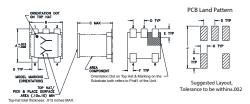


Config. A



Demo Board MCL P/N: TB-145

Outline Drawing



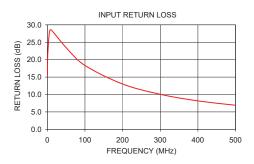
Outline Dimensions (inch)

A B C D E F G H J .150 .150 .160 .050 .040 .025 .028 .065 .190 3.81 3.81 4.06 1.27 1.02 0.64 0.71 1.65 4.83

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)	AMPLITUDE UNBALANCE (dB)	PHASE UNBALANCE (Deg.)
0.30	0.88	15.46	0.06	0.03
1.00	0.57	21.01	0.04	0.05
5.00	0.33	27.35	0.02	0.01
10.00	0.32	28.55	0.02	0.15
50.00	0.40	23.46	0.02	0.63
100.00	0.51	18.34	0.06	1.24
200.00	0.78	13.01	0.21	2.57
300.00	1.10	10.06	0.47	3.99
400.00	1.46	8.16	0.82	5.66
500.00	1.84	6.90	1.26	7.50





Additional 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/MCLStore/terms.jsp