Matching Transformer

Z7550-BFNF+

 $50/75\Omega$

DC to 2500 MHz

The Big Deal

- Low Insertion loss 0.5 dB
- 1W Power Handling
- N-F (50 Ω) to BNC-F (75 Ω) Connectors



CASE STYLE: H795-14

Product Overview

Mini-Circuits' Z7550-BFNF+ is a coaxial $50/75\Omega$ matching transformer covering the DC to 2500 MHz frequency range, supporting impedance matching in a wide range of systems including CATV, broadband networks, matching antenna systems and more. This model is ideal for $50/75\Omega$ impedance matching in systems where minimizing overall signal loss is a priority. The transformer handles RF input power up to 1W and comes housed in a rugged, compact aluminum alloy case (1.25 x 1.25 x 0.75") with N-F (50 Ω) to BNC-F (75 Ω) connectors.

Key Features

Feature	Advantages
Wideband, DC to 2500 MHz	Supports a wide variety of applications including CATV and DOCSIS® 3.1 systems and equipment.
Low insertion loss, 0.5 dB	Enables excellent signal power transmission from input to output, minimizing overall system losses.
1W Power handling	Supports a range of system power requirements.
Compact size, 1.25 x 1.25 x 0.75"	Accommodates tight space requirements for crowded system layouts.
Connectorized package N-F (50 Ω) to BNC-F (75 Ω)connectors	Supports connections between components with different connector types.

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

DC Pass

Matching Transformer

Z7550-BFNF+

$50/75\Omega$

DC to 2500 MHz

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
DC Current	5A max.
DC Resistance	0.2Ω max.

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

- Low loss (0.5 dB) matching device
- Wideband coverage, DC-2500MHz
- · Connectorized package

CASE STYLE: H795-14 Connectors Model **75**Ω BNC-F Z7550-BFNF+ 500 N-F

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

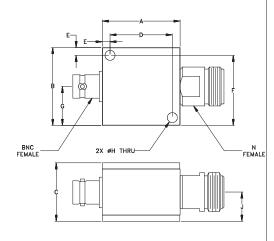
Applications

- Impedance matching
- CATV
- · Matching antenna systems

Coaxial Connections

Input	N-Female
Output	BNC-Female

Outline Drawing



Outline Dimensions (inch)

Α	В	С	D	E	F
1.25	1.25	0.94	1.00	0.125	1.125
31.75	31.75	23.88	25.4	3.18	28.58
G	Н	J			Wt.
0.63	0.125	0.47			grams
16.00	3.18	11.94			60

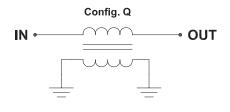
Electrical Specifications at 25°C

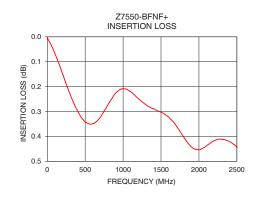
Parameter	Frequency (MHz)	Min.	Тур.	Max.	Unit	
Frequency Range	-	DC	-	2500	MHz	
Insertion Loss	10	-	-	0.3	dB	
Insertion Loss	950-2500	-	0.4	1.2		
VSWR	10	-	-	1.8	:1	
VSWR	950-2500	-	-	1.5		
Power	DC-2500	-	-	1	W	

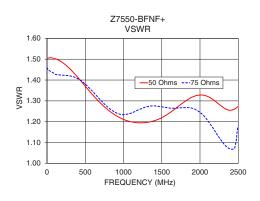
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR		
		50 Ω	75 Ω	
10	0.01	1.51	1.46	
50	0.03	1.51	1.45	
100	0.07	1.50	1.44	
250	0.19	1.47	1.42	
300	0.23	1.45	1.42	
950	0.21	1.22	1.24	
1500	0.30	1.22	1.27	
2150	0.43	1.31	1.21	
2300	0.41	1.27	1.12	
2500	0.44	1.27	1.07	

Functional Schematic







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