

DC Pass

# Matching Transformer

Z7550-FMSF+

50/75Ω

DC to 2300 MHz

## The Big Deal

- Low matching loss of 0.5 dB typical
- Wideband coverage, DC-2300MHz
- Maximum DC current handling capability of 5A
- Connectorized package



CASE STYLE: H795-3

## Product Overview

Z7550-FMSF+ is a DC passing matching transformer that allows impedance matching between 50Ω and 75Ω systems with minimum reflection in to the circuit. This matching transformer will find its application in any system where 50Ω-75Ω matching is required

## Key Features

Feature	Advantages
Low insertion loss	This introduced minimum reflection in to the circuit.
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

### 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.  
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## Z7550-FMSF+

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### Maximum Ratings

Operating Temperature	-55°C to 100°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.

### Features

- Low matching loss of 0.5 dB typical
- Wideband coverage, DC-2300MHz
- Maximum DC current handling capability of 5A
- Connectorized package

CASE STYLE: H795-3  
 Connectors Model  
 75Ω F-M Z7550-FMSF+  
 50Ω S-F

### +RoHS Compliant

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

### Applications

- Impedance matching

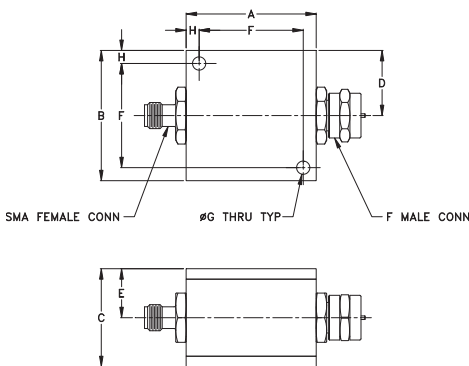
### Coaxial Connections

Input	SMA-Female
Output	F-Male

### Electrical Specifications at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
Frequency Range	-	DC	-	2300	MHz
Insertion Loss	10	-	-	1.0	dB
	950-2300	-	0.5	1.2	
VSWR	10	-	-	1.8	:1
	950-2300	-	-	1.5	
Power	DC-2300	-	-	2	W

### Outline Drawing



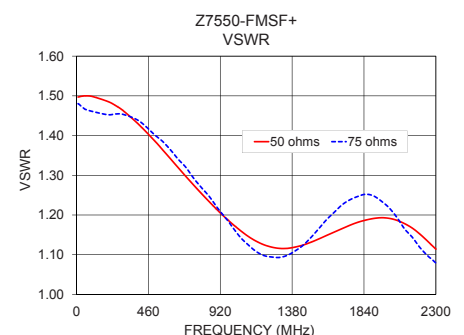
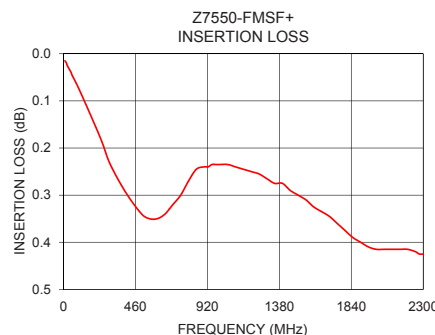
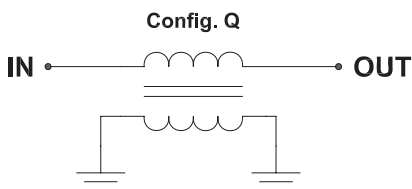
### Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	VSWR	
		50 Ω	75 Ω
10	0.02	1.50	1.48
20	0.02	1.50	1.48
100	0.08	1.50	1.46
250	0.19	1.48	1.45
300	0.24	1.46	1.45
950	0.24	1.19	1.19
1000	0.24	1.18	1.17
1500	0.30	1.13	1.14
2000	0.42	1.19	1.22
2300	0.43	1.11	1.08

### Outline Dimensions (inch mm)

A	B	C	D	E
1.25	1.25	.94	.63	.47
31.75	31.75	23.88	16.00	11.94
F	G	H	wt	
1.000	.125	.125	grams	
25.40	3.18	3.18	49.8	

### Functional Schematic



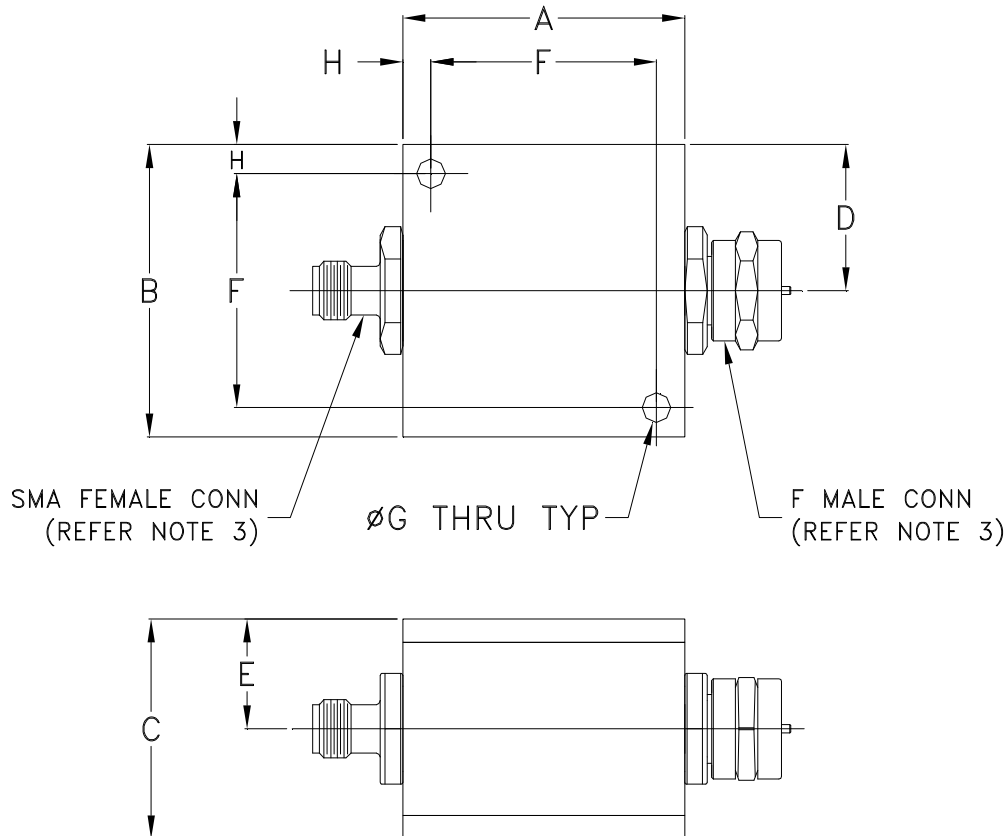
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## Outline Dimensions

H795-3



CASE#	A	B	C	D	E	F	G	H	WT.GRAMS
H795-3	1.25 (31.75)	1.25 (31.75)	.94 (23.88)	.63 (16.00)	.47 (11.94)	1.000 (25.40)	.125 (3.18)	.125 (3.18)	49.8

Dimensions are in inches (mm). Tolerances: 2PL.  $\pm .03$ ; 3PL.  $\pm .015$

### Notes:

1. Case material: Aluminum alloy.
2. Case finish:  
For RoHS Case Styles: Clear chemical conversion coating, non-chrome or trivalent chrome based.
3. Refer to the individual model data sheet for the type of connectors available.

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RF/IF MICROWAVE COMPONENTS

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.

<b>Specification</b>	<b>Test/Inspection Condition</b>	<b>Reference/Spec</b>
Operating Temperature	-55° to 100°C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Barometric Pressure	100,000 Feet	MIL-STD-202, Method 105, Condition D
Humidity	90% RH, 65°C Units may require bake-out after humidity to restore full performance.	MIL-STD-202, Method 103
Thermal Shock	-65° to 125°C, 5 cycles	MIL-STD-202, Method 107, Condition B
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	100g, 6ms sawtooth, 3 shocks each direction 3 axes (total 18)	MIL-STD-202, Method 213, Condition I