Coaxial

RF Transformer

FTB-1-1-75+

75Ω 0.5 to 500 MHz

Generic photo used for illustration purposes only

CASE STYLE: H16-1

BNC Connectors	Model
FEMALE/FEMALE	FTB-1-1-75*A15+
MALE/FEMALE	FTB-1-1-75*C15+
BRACKET (OPTION "B")	

+RoHS Compliant

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

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	250mW
DC Current	30mA

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

Coaxial Connections

	Marking
PRIMARY	BAL
SECONDARY	UNBAL

Features

- wideband, 0.5 to 500 MHz
- balanced to single-ended
- balanced port: isolated Female BNC

Applications

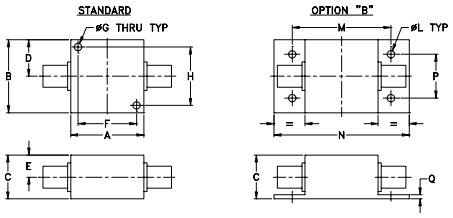
- DC Block

Transformer Electrical Specifications

Ω RATIO	FREQUENCY (MHz)	INSERTION LOSS*		
		3 dB MHz	2 dB MHz	1 dB MHz
1	0.5-500	0.5-500	5-300	10-100

* Insertion Loss is referenced to mid-band loss, 0.6 dB typ.

Outline Drawing



Outline Dimensions (inch / mm)

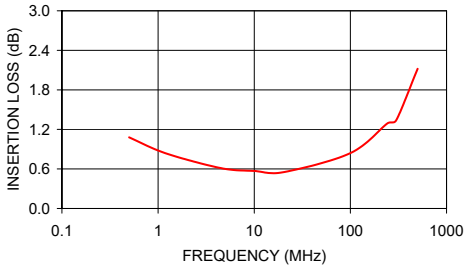
A	B	C	D	E	F	G	H
1.25	1.25	.81	.63	.41	1.000	.125	1.000
31.75	31.75	20.57	16.00	10.41	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.19	.750	.06	grams
--	--	3.18	42.88	55.63	19.05	1.52	70.0

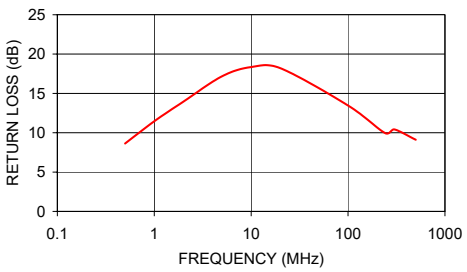
Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	INPUT R. LOSS (dB)
0.50	1.08	8.63
1.00	0.88	11.46
2.00	0.74	13.95
5.00	0.60	17.18
10.00	0.57	18.35
20.00	0.55	18.21
100.00	0.84	13.46
242.19	1.29	9.95
300.00	1.34	10.43
500.00	2.12	9.11

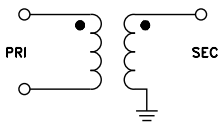
FTB-1-1-75+
INSERTION LOSS



FTB-1-1-75+
INPUT RETURN LOSS



Config. E



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

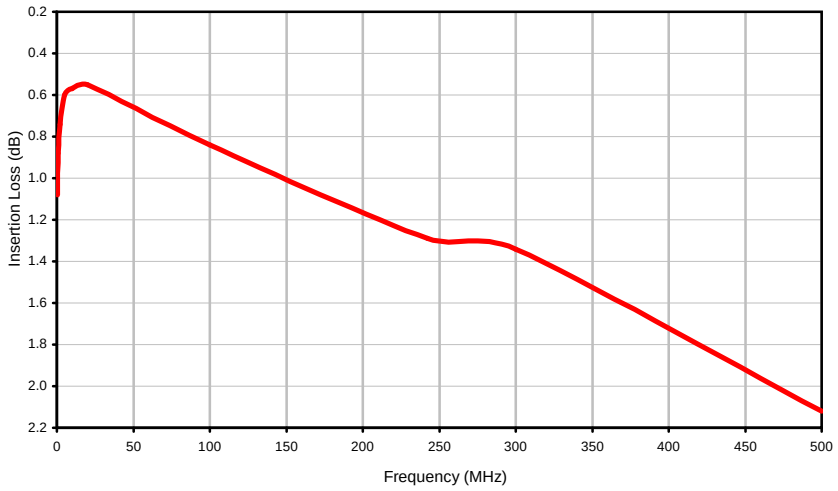
RF Transformer FTB-1-1-75+

Typical Performance Data

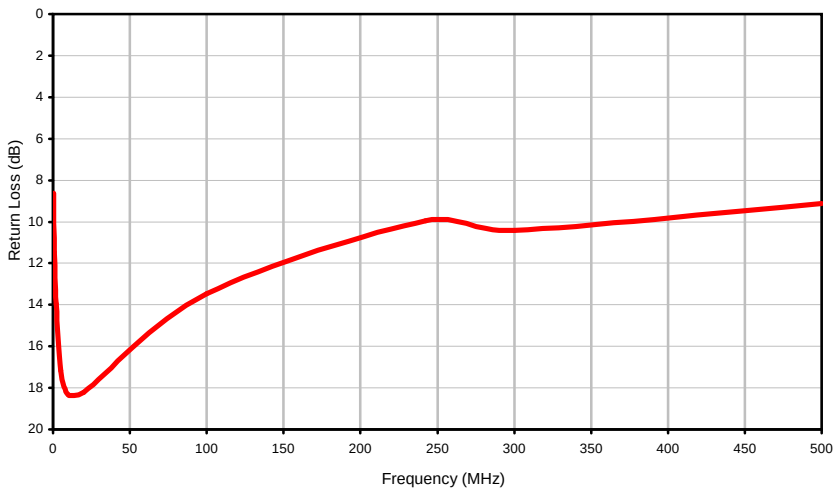
FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
0.50	1.08	8.63
1.00	0.88	11.46
2.00	0.74	13.95
5.00	0.60	17.18
10.00	0.57	18.35
20.00	0.55	18.21
100.00	0.84	13.46
242.19	1.29	9.95
300.00	1.34	10.43
500.00	2.12	9.11

Typical Performance Curves

Insertion Loss



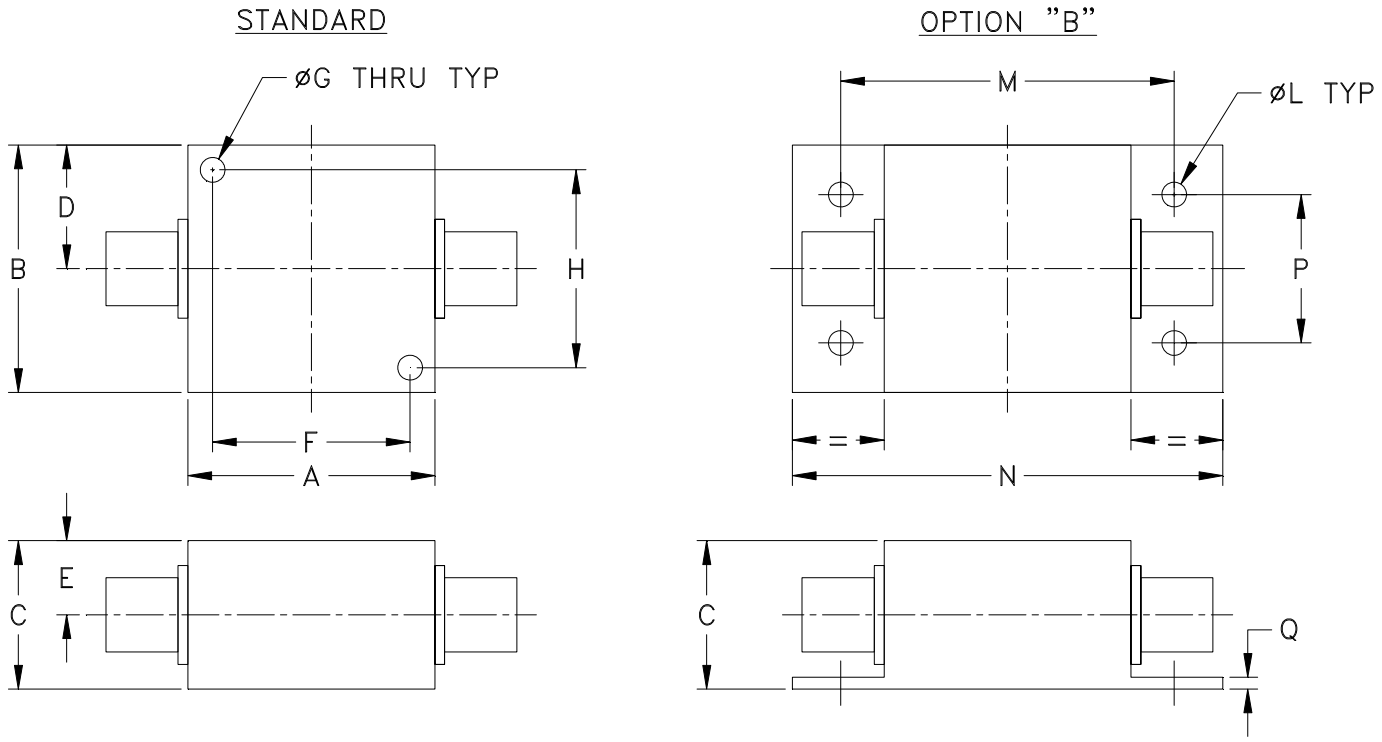
Return Loss



Case Style H

Outline Dimensions

H16-1



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N
H16-1	1.25 (31.75)	1.25 (31.75)	.81 (20.57)	.63 (16.00)	.41 (10.41)	1.000 (25.40)	.125 (3.18)	1.000 (25.40)	--	--	.125 (3.18)	1.688 (42.88)	2.19 (55.63)

CASE#	P	Q	WT.GRAMS
H16-1	.750 (19.05)	.06 (1.52)	70

Dimensions are in inches (mm). Tolerances: 2PL. ± .03; 3PL. ± .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. Mounting bracket available on request. Add suffix B to part number.
4. Bracket version, option B, dimension "C" changes from .81 to 1.00 inches when connectors are type N.
5. Refer to the individual model data sheet for the type of connectors available.

Mini-Circuits®
ISO 9001 ISO 14001 CERTIFIED
ALL NEW minicircuits.com
P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site
The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com
RF/IF MICROWAVE COMPONENTS

This document and its contents are the property of Mini-Circuits

Mini-Circuits

Environmental Specifications ENV28

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	-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

This document and its contents are the property of Mini-Circuits.