COAXIAL

Adapter

185B-185B+

50Ω DC to 67 GHz

1.85mm-F to 1.85mm-F with Bulkhead

THE BIG DEAL

- Excellent VSWR, 1.08 typ. up to 67 GHz
- Low insertion loss, 0.6 dB typ. up to 67 GHz
- Stainless steel body, passivated

Generic photo used for illustration purposes only

Model No.	185B-185B+
Case Style	DJ2477-3
Connectors	1.85mm-F to 1.85mm-F w/Bkhd

+RoHS Compliant

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

APPLICATIONS

- Interconnection of RF cables and equipment
- Connector saver

PRODUCT OVERVIEW

Mini-Circuits' 185B-185B+ is a coaxial 1.85 mm-F to 1.85 mm-F with bulkhead adapter supporting a wide range of applications from DC to 67 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The 185B-185B+ features passivated stainless steel construction and measures only 0.91" in length.

KEY FEATURES

Feature	Advantages
Excellent VSWR, 1.08 typ. up to 67 GHz	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range.
Low insertion loss, 0.6 dB typ. up to 67 GHz	Provides excellent signal power transmission from input to output.
Very wide operating temperature range, -55 to +100˚C	Withstands extreme operating conditions and is suitable for use near high power componentry where heat rise is common.
Bulkhead	Useful for installation on front panel of rack mount equipment.
Passivated stainless steel construction	Stands up to wear and tear in demanding environments and provides excellent reliability.

REV. OR
ECO-010346
185B-185B+
MCL NY
211027

COAXIAL

Adapter

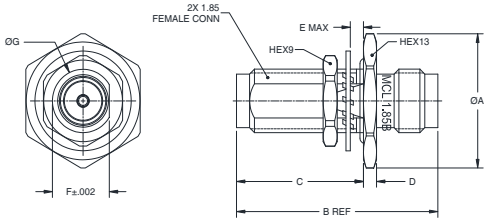
185B-185B+

MAXIMUM RATINGS

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C

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

OUTLINE DRAWING



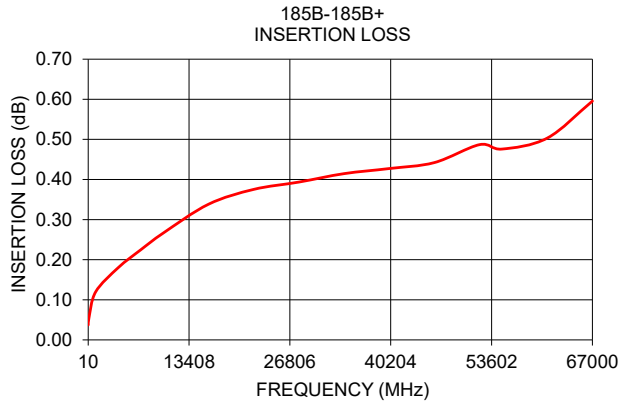
CASE#	A	B	C	D	E	F	G	WT.GRAM
DJ2477-3	.58 (14.8)	.91 (23.0)	.57 (14.5)	.06 (1.5)	.22 (5.5)	.26 (6.5)	.28 (7.0)	6

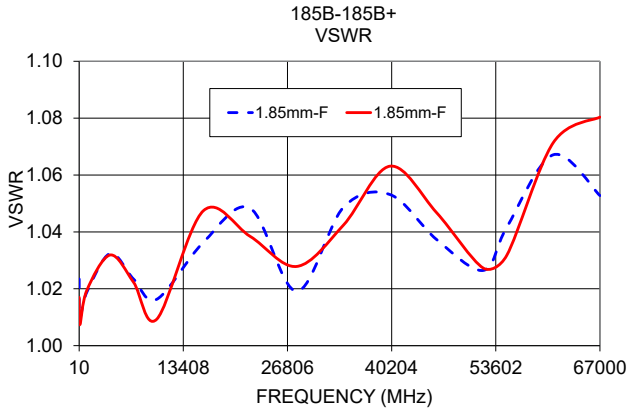
ELECTRICAL SPECIFICATIONS AT 25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		67	GHz
Insertion Loss	DC - 20	—	0.3	0.7	dB
	20 - 40	—	0.4	0.8	
	40 - 55	—	0.5	0.8	
	55 - 67	—	0.5	0.9	
VSWR	DC - 20	—	1.03	1.25	:1
	20 - 40	—	1.04	1.25	
	40 - 55	—	1.03	1.25	
	55 - 67	—	1.06	1.25	

TYPICAL PERFORMANCE DATA

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	
		1.85mm-F	1.85mm-F
10	0.04	1.02	1.02
100	0.05	1.01	1.01
1000	0.12	1.02	1.02
4000	0.18	1.03	1.03
7000	0.22	1.02	1.02
10000	0.27	1.02	1.01
16000	0.34	1.04	1.05
22000	0.38	1.05	1.04
28000	0.39	1.02	1.03
34000	0.41	1.05	1.04
40000	0.43	1.05	1.06
46000	0.44	1.04	1.05
52000	0.49	1.03	1.03
55000	0.48	1.04	1.03
61000	0.50	1.07	1.07
67000	0.60	1.05	1.08





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.

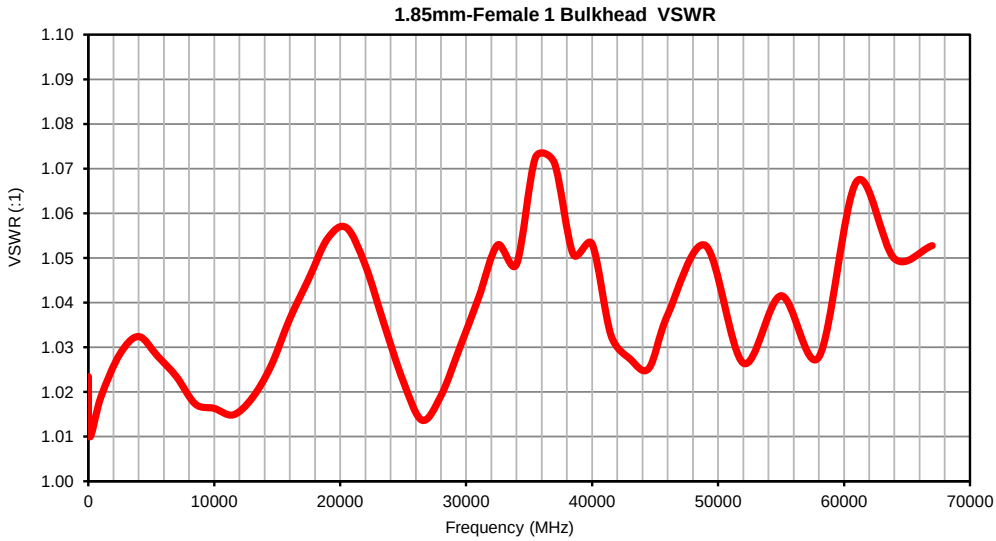
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

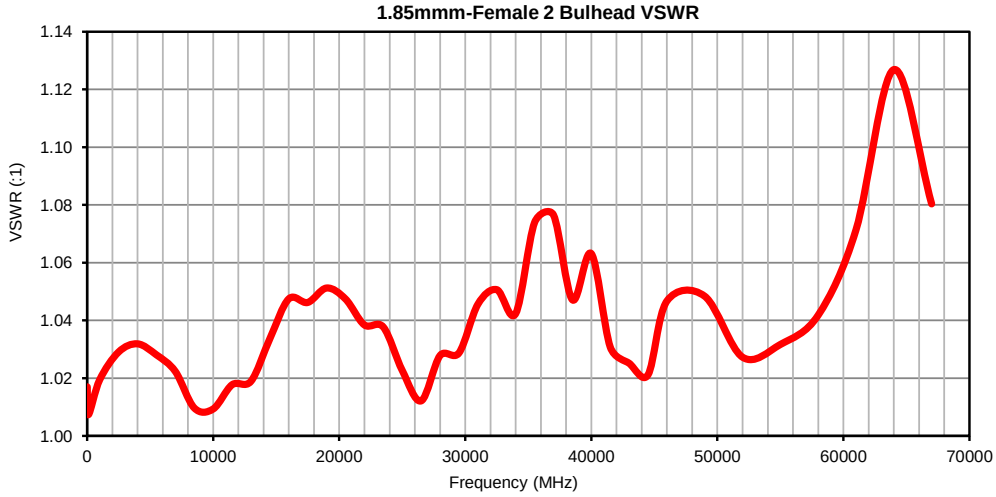
C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard. Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Typical Performance Data

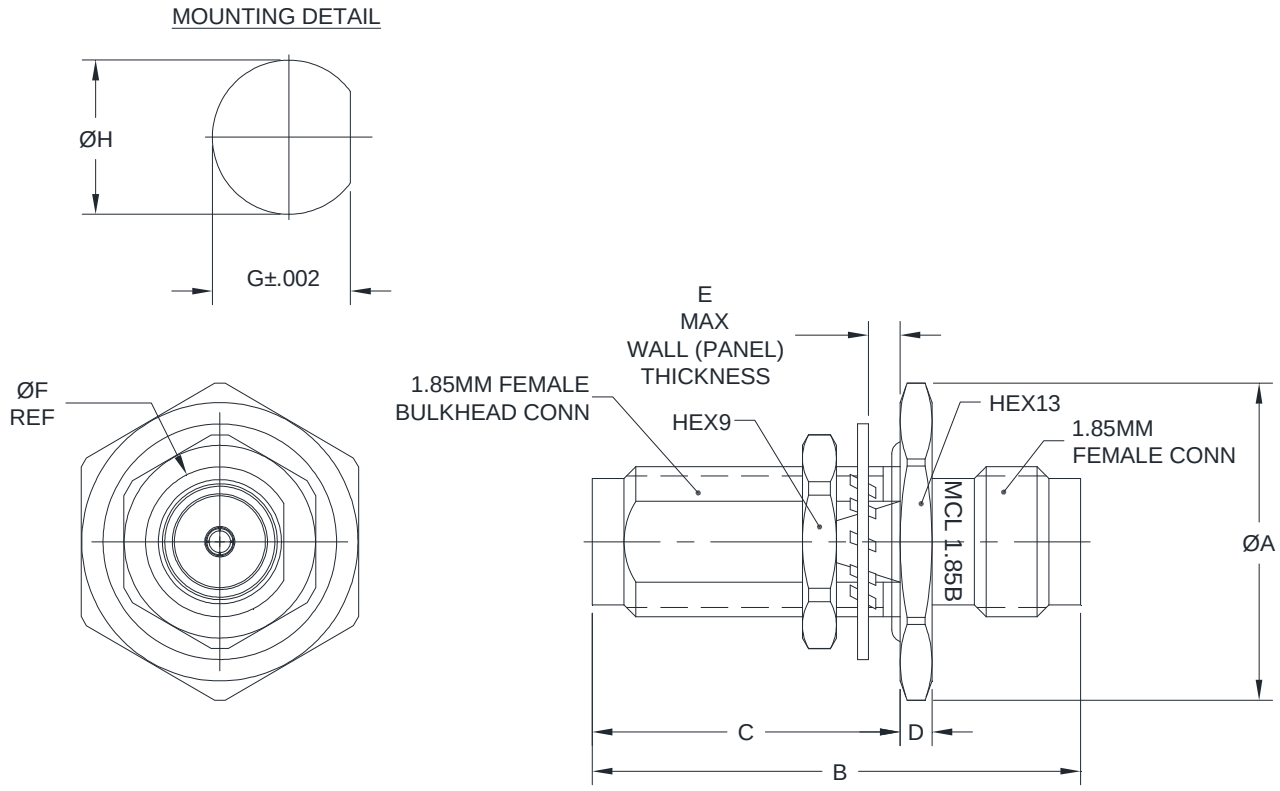
FREQUENCY (MHz)	INSERTION LOSS (dB)	1.85mm-FEMALE 1 BULKHEAD VSWR (:1)	1.85mm-FEMALE 2 BULKHEAD VSWR (:1)
10	0.04	1.02	1.02
100	0.05	1.01	1.01
1000	0.12	1.02	1.02
2500	0.15	1.03	1.03
4000	0.18	1.03	1.03
5500	0.20	1.03	1.03
7000	0.22	1.02	1.02
8500	0.25	1.02	1.01
10000	0.27	1.02	1.01
11500	0.28	1.01	1.02
13000	0.30	1.02	1.02
14500	0.32	1.03	1.03
16000	0.34	1.04	1.05
17500	0.35	1.05	1.05
19000	0.36	1.05	1.05
20500	0.37	1.06	1.05
22000	0.38	1.05	1.04
23500	0.38	1.04	1.04
25000	0.38	1.02	1.02
26500	0.39	1.01	1.01
28000	0.39	1.02	1.03
29500	0.40	1.03	1.03
31000	0.40	1.04	1.05
32500	0.41	1.05	1.05
34000	0.41	1.05	1.04
35500	0.43	1.07	1.07
37000	0.42	1.07	1.08
38500	0.43	1.05	1.05
40000	0.43	1.05	1.06
41500	0.43	1.03	1.03
43000	0.44	1.03	1.03
44500	0.44	1.03	1.02
46000	0.44	1.04	1.05
49000	0.45	1.05	1.05
52000	0.49	1.03	1.03
55000	0.48	1.04	1.03
58000	0.50	1.03	1.04
61000	0.50	1.07	1.07
64000	0.53	1.05	1.13
67000	0.60	1.05	1.08

Typical Performance Curves





OUTLINE DIMENSIONS DJ2477-3



CASE#	A	B	C	D	E	F	G	H	WT. GRAM
DJ2477-3	.58 (14.8)	.91 (23.0)	.57 (14.5)	.06 (1.5)	.22 (5.5)	.275 (7.0)	.26 (6.5)	.283 (7.2)	6

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .030[0.76]; 3 Pl. ± .015[0.38]

Notes:

1. Case material: Stainless steel.
2. Finish: Passivation.

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

Mini-Circuits

Environmental Specifications **ENV106**

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 or -55° to 85° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-55° to 100° C Ambient Environment	Individual Model Data Sheet
Thermal Shock	-55° to 100°C, 5 cycles	MIL-STD-202, Method 107, conditionB-3,except over -55° to 100°C
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12

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