

### **The Big Deal**

- Ultra-wideband, DC-67 GHz
- Flat response
- Low insertion loss, 0.3 dB typ.
- Excellent VSWR, 1.04:1 typ.



CASE STYLE: DJ2591-2

### **Product Overview**

Mini-Circuits' 185M-185F+ is a coaxial 1.85 mm-M to 1.85 mm-F 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 185M-185F+ features passivated stainless steel construction and measures only 1.1" in length.

## **Key Features**

Feature	Advantages		
Wideband, DC to 67 GHz	Wide frequency range provides application flexibility and makes this model ideal for broad- band and multi-band use.		
Excellent VSWR, 1.04:1	Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.		
Low insertion loss, 0.3 dB	Provides excellent signal power transmission from input to output.		
Passivated stainless steel construc- tion.	Stands up to wear and tear in demanding environments and provides excellent reliability.		
Very wide operating temperature range, -55 to +100°C	Withstands extreme operating conditions and is suitable for use near high power componen- try where heat rise is common.		

- 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp



Notes

# Coaxial Adapter 1.85 mm-M to 1.85 mm-F

47X0.75F

.315 [8.0]

#### DC to 67 GHz 50Ω

#### **Maximum Ratings**

M7X0.75F

Operating Temperature	-55°C to 100°C		
Storage Temperature	-55°C to 100°C		
Permanent damage may occur if any o	of these limits are exceeded.		

**Outline Dimensions** 

HEX .276 [7.0]

85 0 C 0Ò

1.10 [28.0] REF

Weight: 50 grams Dimensions are in inches [mm]

HE: .315 [8.0]

#### **Features**

- flat response
- excellent VSWR, 1.04:1 typ.
- low cost adapters, available from stock
- stainless steel body, passivated

#### Applications

• interconnection of RF cable and equipment

# 185M-185F+



Generic photo used for illustration purposes only CASE STYLE: DJ2591-2

Connectors Model 1.85mm-M to 1.85mm-F

185M-185F+

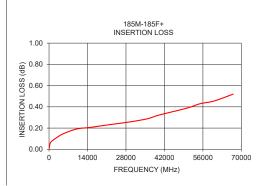
+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

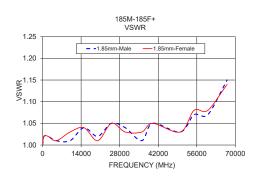
#### Electrical Specifications at 25°C

Parameter	Condition (GHz)	Min.	Тур.	Max.	Units
Frequency Range		DC		67	GHz
	0.01-10		0.14	0.3	
	10-20		0.21	0.4	dB
Insertion Loss	20-40		0.29	0.5	uв
	40-50		0.37	0.6	
	50-67	50-67 0.45	0.7		
	50-67 0.45   0.01-10 1.02	1.25			
	10-20		1.03	1.25	:1
VSWR	20-40		1.04	1.25	;1
	40-50		1.05	1.25	
	50-67		1.06	1.25	

#### **Typical Performance Data**

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)		
		1.85 mm-M	1.85 mm-F	
10	0.01	1.00	1.00	
500	0.06	1.02	1.02	
2000	0.10	1.02	1.02	
5000	0.14	1.01	1.01	
10000	0.19	1.01	1.03	
15000	0.21	1.04	1.04	
20000	0.22	1.02	1.01	
25000	0.24	1.05	1.05	
30000	0.26	1.04	1.03	
36000	0.29	1.01	1.03	
40000	0.32	1.05	1.05	
50000	0.39	1.03	1.03	
55000	0.43	1.07	1.08	
60000	0.45	1.07	1.08	
67000	0.52	1.15	1.14	





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