



KEY FEATURES

- Wideband, DC to 90 GHz
- Low Insertion Loss, 0.29 dB Typ.
- Excellent VSWR, 1.07:1 Typ.
- Straight Body



Generic photo used for illustration purposes only

PRODUCT OVERVIEW

Mini-Circuits' 10M-135F+ is a coaxial 1.0 mm Male to 1.35 mm Female adapter supporting a wide range of applications from DC to 90 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The 10M-135F+ features passivated stainless-steel construction and measures only 0.65" in length.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		90	GHz
Insertion Loss	0.01-30	-	0.14	0.66	dB
	30-60	-	0.29	0.66	
	60-90	-	0.44	0.66	
VSWR	0.01-30	-	1.05	1.32	:1
	30-60	-	1.06	1.32	
	60-90	-	1.09	1.32	

ABSOLUTE MAXIMUM RATINGS¹

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

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



COAXIAL

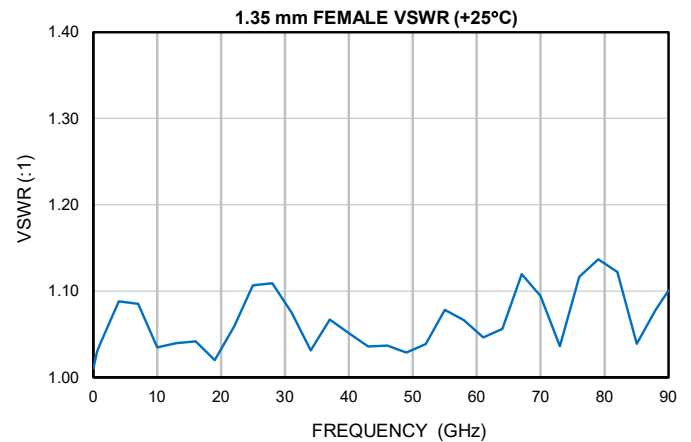
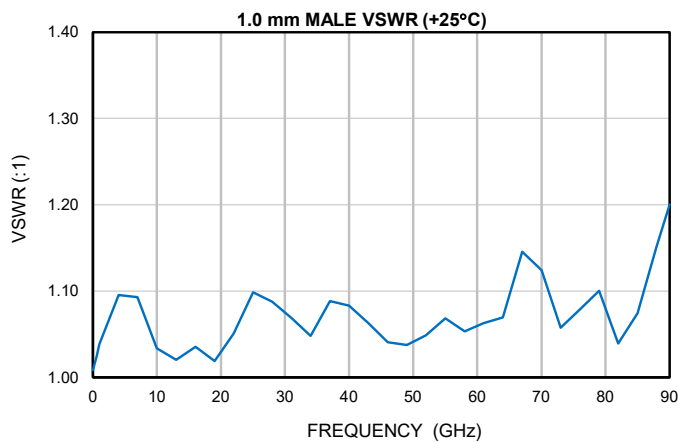
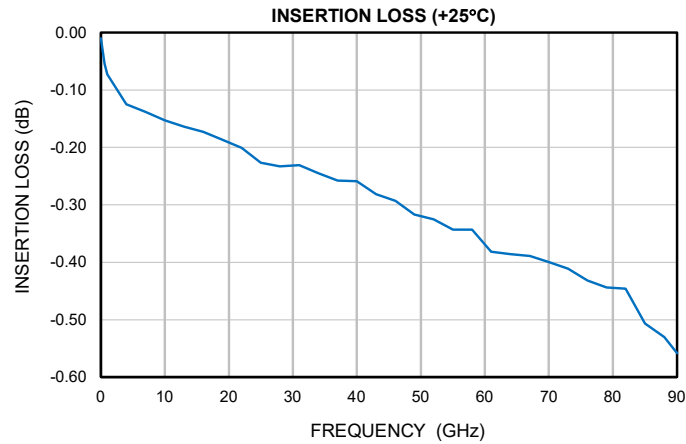
Adapter

10M-135F+

Mini-Circuits

50 Ω DC to 90 GHz 1.0 mm-Male to 1.35 mm-Female

TYPICAL PERFORMANCE GRAPHS





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Adapter

10M-135F+

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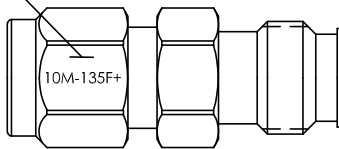
50Ω DC to 90 GHz 1.0 mm-Male to 1.35 mm-Female

CONNECTOR SPECIFICATIONS

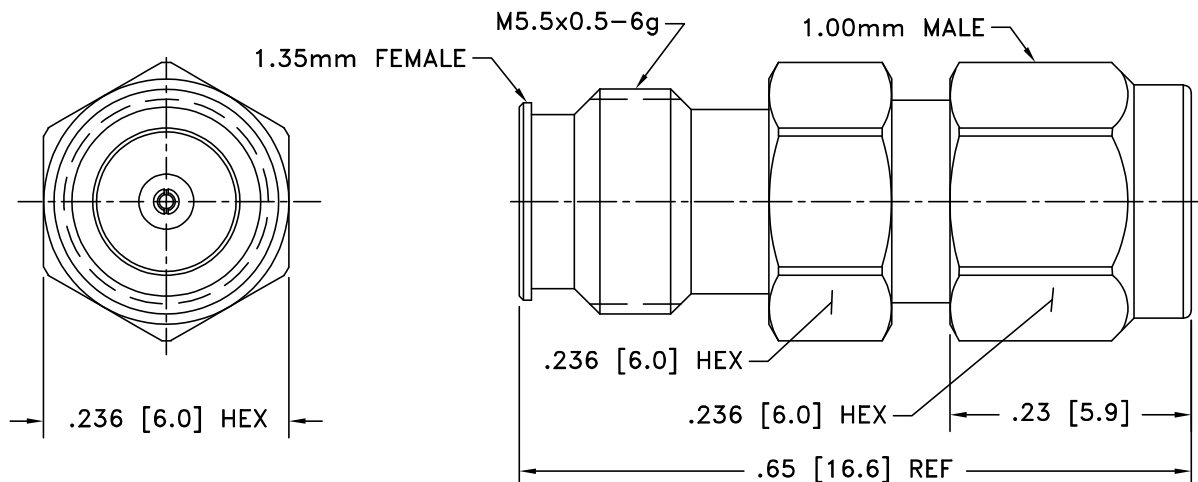
Description	Connector 1	Connector 2
Connector Type	1.0 mm Male	1.35 mm Female
Orientation	Straight	Straight

CASE STYLE DRAWING

PRODUCT MARKING



REAR VIEW



Weight: 2.4 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl. ±.03; 3 Pl. ± .015 inches

PRODUCT MARKING*: 10M-135F+

*Marking may contain other features or characters for internal lot control.





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Adapter

10M-135F+

50Ω DC to 90 GHz 1.0 mm-Male to 1.35 mm-Female

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DJ3602-5
RoHS Status	Compliant
Environmental Ratings	ENV89

NOTES

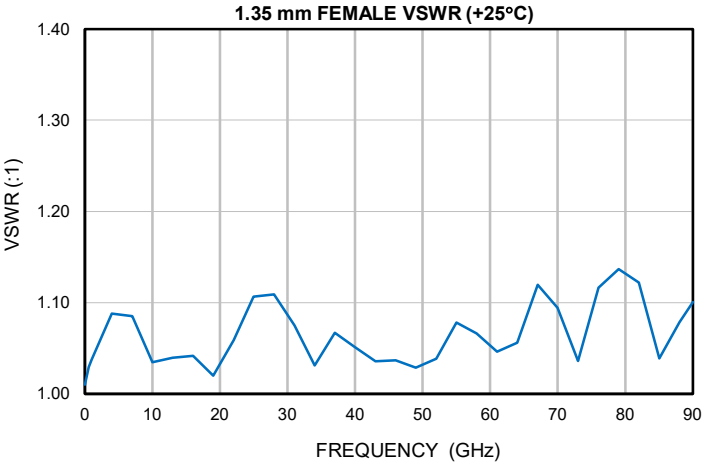
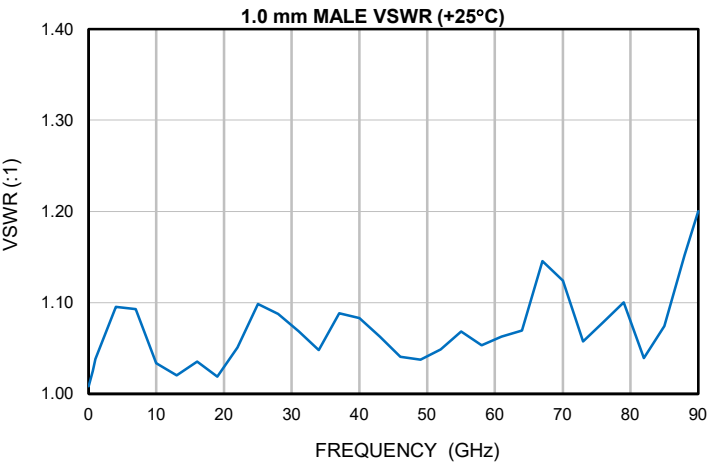
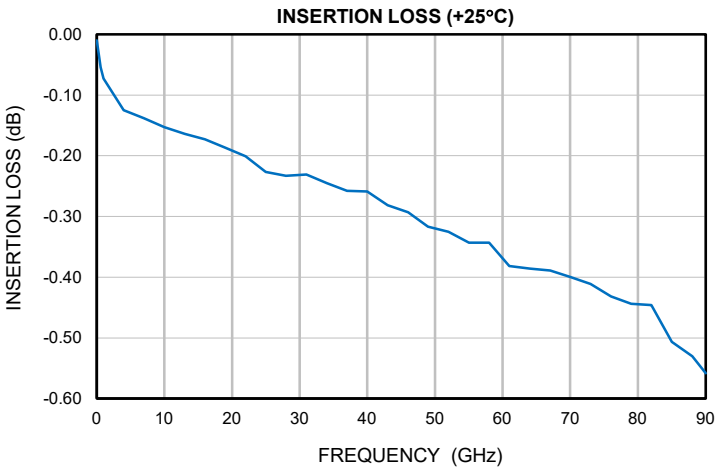
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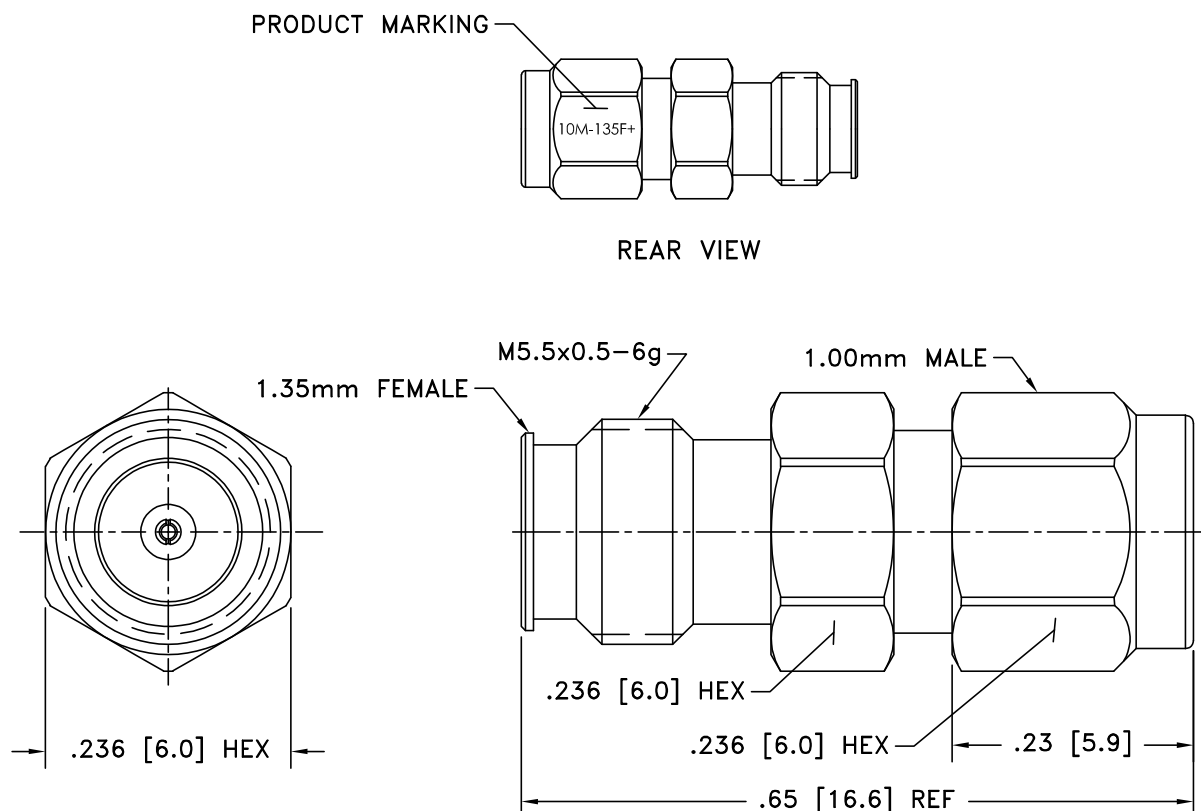


Adaptor 1.0mm-Male to 1.35mm-Female**10M-135F+***Typical Performance Data (+25°C)*

FREQ.	INSERTION LOSS	1.0mm-MALE VSWR	1.35mm-FEMALE VSWR
(GHz)	(dB)	(:1)	(:1)
0.01	0.01	1.01	1.01
0.6	0.05	1.03	1.03
1.0	0.07	1.04	1.04
4.0	0.12	1.10	1.09
7.0	0.14	1.09	1.09
10.0	0.15	1.03	1.03
13.0	0.16	1.02	1.04
16.0	0.17	1.04	1.04
19.0	0.19	1.02	1.02
22.0	0.20	1.05	1.06
25.0	0.23	1.10	1.11
28.0	0.23	1.09	1.11
31.0	0.23	1.07	1.07
34.0	0.25	1.05	1.03
37.0	0.26	1.09	1.07
40.0	0.26	1.08	1.05
43.0	0.28	1.06	1.04
46.0	0.29	1.04	1.04
49.0	0.32	1.04	1.03
52.0	0.32	1.05	1.04
55.0	0.34	1.07	1.08
58.0	0.34	1.05	1.07
61.0	0.38	1.06	1.05
64.0	0.39	1.07	1.06
67.0	0.39	1.15	1.12
70.0	0.40	1.12	1.09
73.0	0.41	1.06	1.04
76.0	0.43	1.08	1.12
79.0	0.44	1.10	1.14
82.0	0.45	1.04	1.12
85.0	0.51	1.07	1.04
88.0	0.53	1.15	1.08
90.0	0.56	1.20	1.10

Typical Performance Curves





Weight: 2.4 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl. $\pm .03$; 3 Pl. $\pm .015$ inches

Notes:

1. Case material: Stainless Steel.
2. Finish: Passivation.
3. Primary dimensions are in inches [millimeters]. Inch equivalents are calculated and subject to roundoff errors.



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



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 or -45° to 100° 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, Condition B except over -55° to 100°C
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12
Drop Test	1 meter height, 5 times	