COAXIAL

Adapter

135M-135M+

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

KEY FEATURES

- Ultra-wideband, DC to 90 GHz
- Low Insertion Loss, 0.24 dB Typ.
- Excellent VSWR, 1.07:1 Typ.
- Straight Body

Generic photo used for illustration purposes only

PRODUCT OVERVIEW

Mini-Circuits' 135M-135M+ is a coaxial 1.35mm Male to 1.35mm Male adapter supporting a wide range of applications from DC to 90 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The 135M-135M+ features passivated stainless-steel construction and measures only 0.734" in length.

ELECTRICAL SPECIFICATIONS AT +25°C

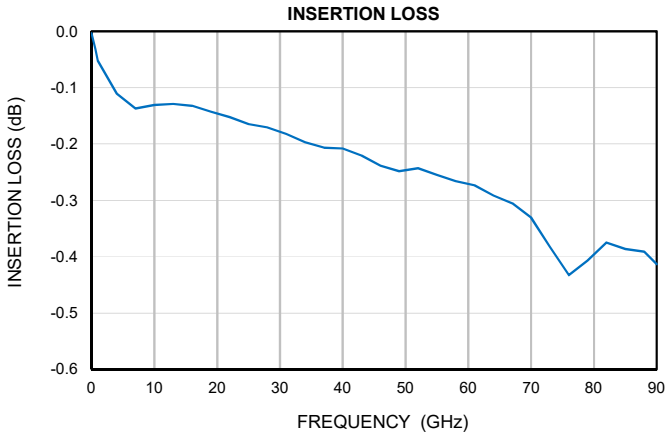
Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		90	GHz
Insertion Loss	0.01-30	-	0.13	0.66	dB
	30-60	-	0.23	0.66	
	60-90	-	0.36	0.66	
VSWR	0.01-30	-	1.04	1.28	:1
	30-60	-	1.07	1.28	
	60-90	-	1.10	1.28	

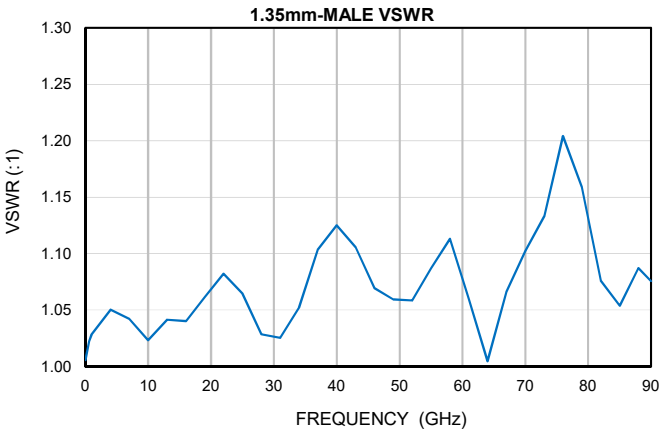
ABSOLUTE MAXIMUM RATINGS[1]

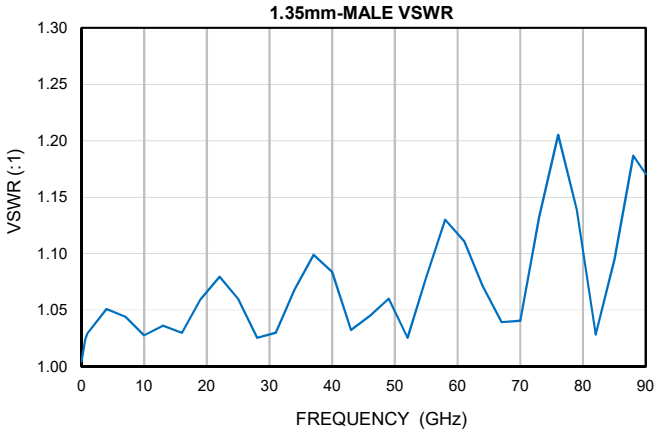
Operating Case Temperature	-55° C to +100° C
Storage Temperature	-55° C to +100° C

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

TYPICAL PERFORMANCE GRAPHS







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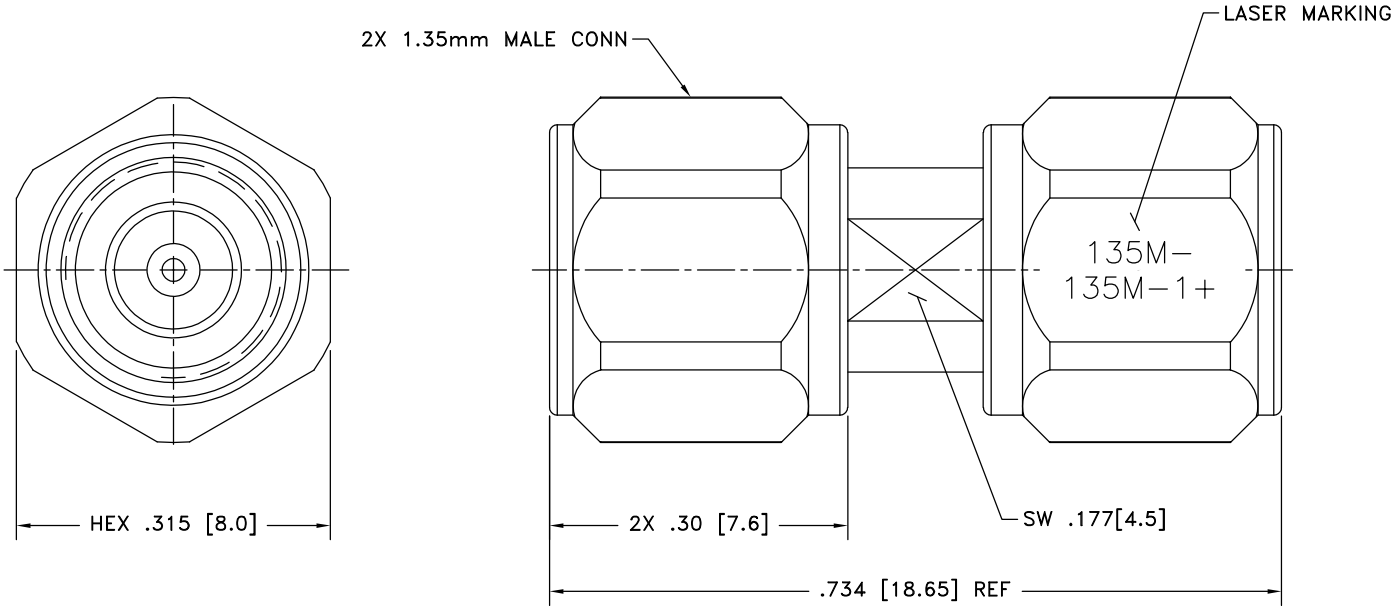
CONNECTOR SPECIFICATIONS

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

CASE STYLE DRAWING



Weight: 4.5 grams
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03 [.76]; 3 Pl.±.015 [.38] inches [mm]

PRODUCT MARKING*: 135M-135M-1+

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

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DJ3602-2
RoHS Status	Compliant
Environmental Ratings	ENV89

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/terms/viewterm.html

Adaptor 1.35mm-Male to 1.35mm-Male 135M-135M+

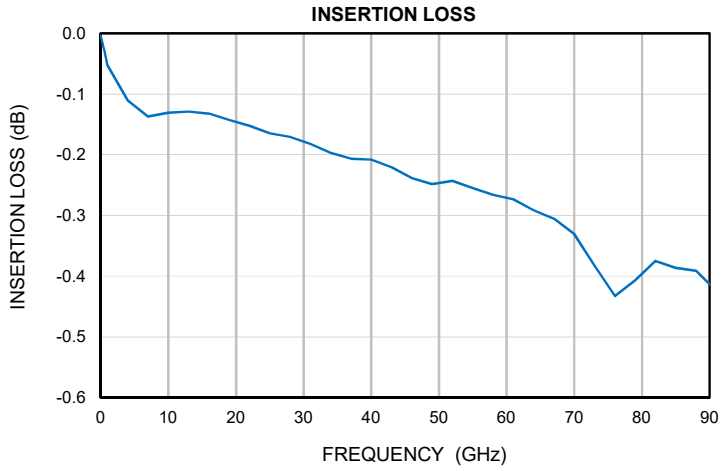
Typical Performance Data

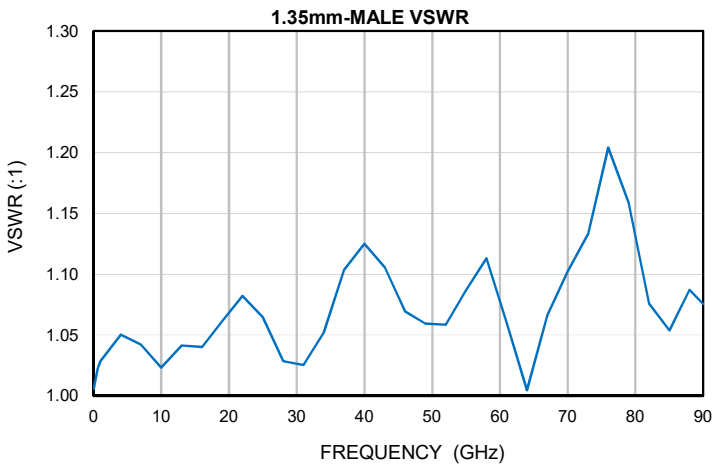
FREQ.	INSERTION LOSS	1.35mm-MALE VSWR	1.35mm-MALE VSWR
(GHz)	(dB)	(:1)	(:1)
0.01	0.00	1.01	1.00
0.6	0.03	1.02	1.02
1.0	0.05	1.03	1.03
4.0	0.11	1.05	1.05
7.0	0.14	1.04	1.04
10.0	0.13	1.02	1.03
13.0	0.13	1.04	1.04
16.0	0.13	1.04	1.03
19.0	0.14	1.06	1.06
22.0	0.15	1.08	1.08
25.0	0.16	1.06	1.06
28.0	0.17	1.03	1.03
31.0	0.18	1.03	1.03
34.0	0.20	1.05	1.07
37.0	0.21	1.10	1.10
40.0	0.21	1.12	1.08
43.0	0.22	1.11	1.03
46.0	0.24	1.07	1.05
49.0	0.25	1.06	1.06
52.0	0.24	1.06	1.03
55.0	0.25	1.09	1.08
58.0	0.27	1.11	1.13
61.0	0.27	1.06	1.11
64.0	0.29	1.00	1.07
67.0	0.31	1.07	1.04
70.0	0.33	1.10	1.04
73.0	0.38	1.13	1.13
76.0	0.43	1.20	1.21
79.0	0.41	1.16	1.14
82.0	0.37	1.08	1.03
85.0	0.39	1.05	1.10
88.0	0.39	1.09	1.19
90.0	0.41	1.08	1.17

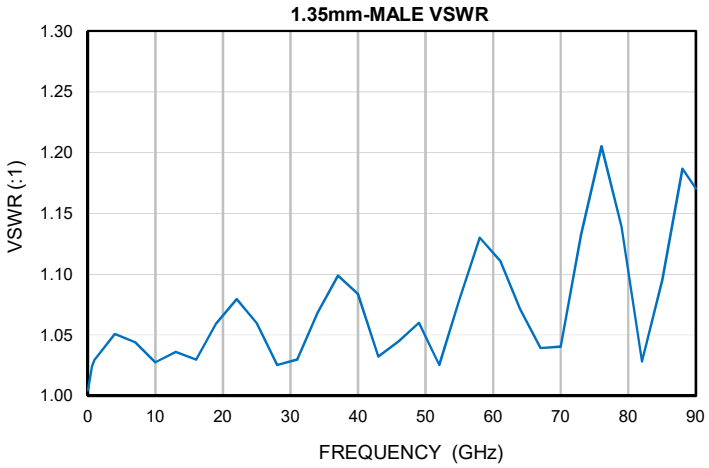
Adaptor 1.35mm-Male to 1.35mm-Male

135M-135M+

Typical Performance Curves



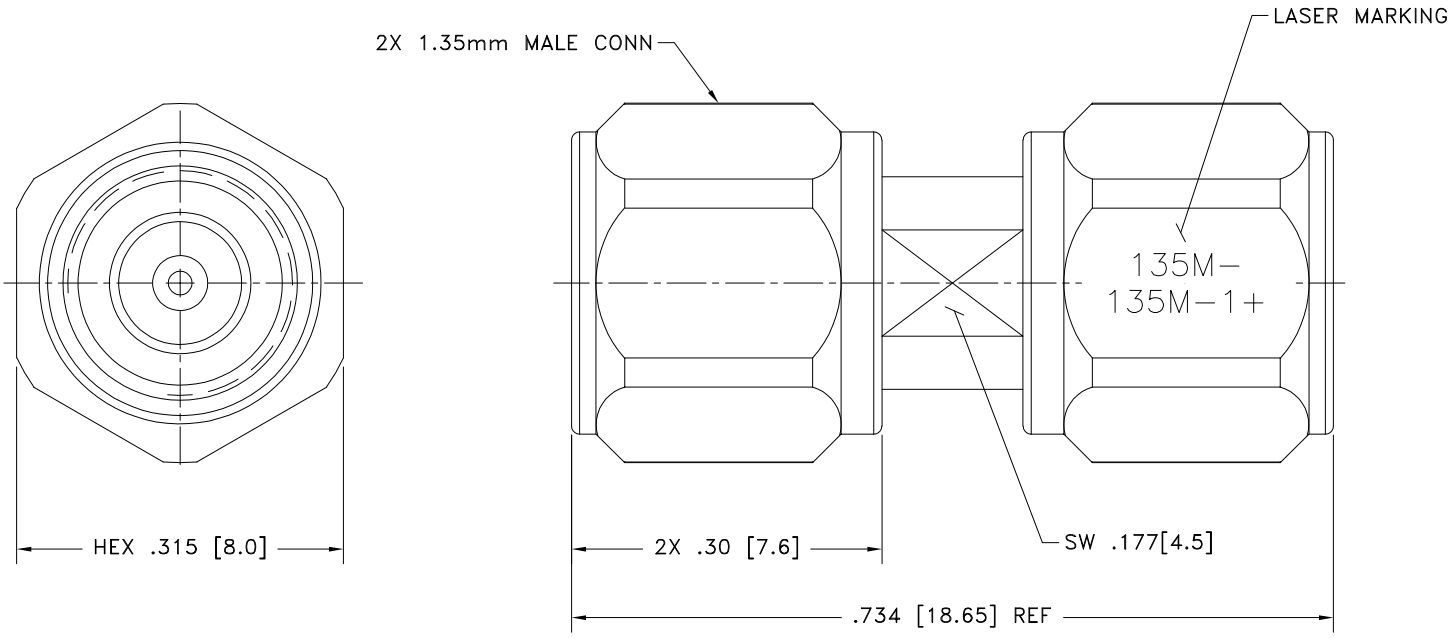




Case Style DJ

Outline Dimensions

DJ3602-2



Weight: 4.5 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03[.76]; 3 Pl. ± .015[.38] inches[mm]

Notes:
1. Case material: Stainless Steel.
2. Finish: Passivation.

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Mini-Circuits

Environmental Specifications ENV89

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	

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