



COAXIAL

Armored Flexible

WBL-1FT-W1F1M+

50Ω DC to 110 GHz 12 Inches 1.0 mm-Female to 1.0 mm-Male

KEY FEATURES

- Ultra-wideband DC to 110 GHz
- Low insertion loss, 4.5 dB, typ.
- Excellent return loss, 21.4 dB, typ.
- Strong protective jacket



Generic photo used for illustration purposes only

APPLICATIONS

- Optical communications
- Test & Measurement
- High-speed data systems
- Instrumentation
- Precision Measurement

HANDLING INSTRUCTIONS
 1.0 mm connectors require specific handling and torque values. See Mini-Circuits Application Note AN-71-001 for detail.

PRODUCT OVERVIEW

WBL-1FT-W1F1M+ cable is ideal for interconnecting coaxial components and subassemblies in a wide range of systems, including test and measurement, instrumentation, and more. This braided flexible cable provides a minimum bend radius of 26 mm to accommodate tight layouts without the need for bending tools, adapters or brackets.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Frequency (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC	-	110	GHz
Length		12			inches
Insertion Loss	DC - 35	-	1.5	6.3	dB
	35 - 75	-	3.2	6.3	
	75 - 110	-	4.5	6.3	
Return Loss	DC - 35	14.0	30.9	-	dB
	35 - 75	14.0	25.2	-	
	75 - 110	14.0	21.4	-	

1. Mainline loss includes coupling loss.

ABSOLUTE MAXIMUM RATINGS¹

Operating Case Temperature	-45°C to +80°C
Storage Temperature	-45°C to +80°C
Average Power Handling at Sea Level	14.4 W at 6 GHz
	7.9 W at 18 GHz
	5.0 W at 40 GHz
	3.6 W at 67 GHz
	2.7 W at 110 GHz

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

REV. OR
 ECO-023939
 WBL-1FT-W1F1M+
 MCL NY
 241212





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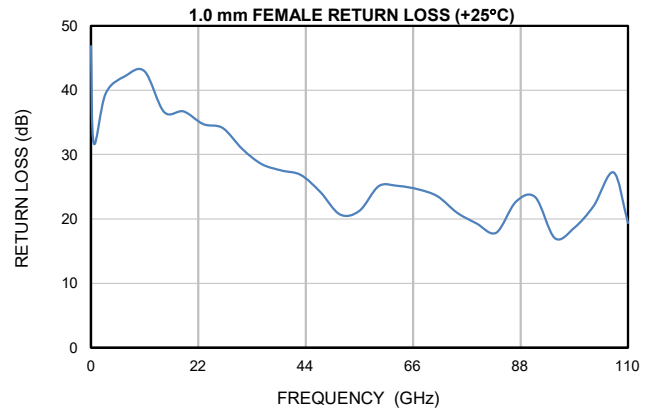
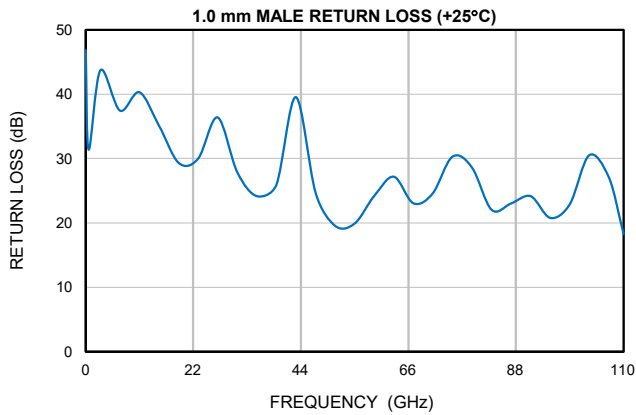
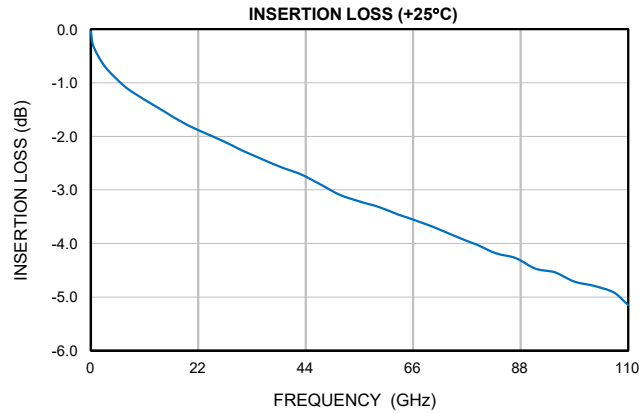
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TYPICAL PERFORMANCE GRAPHS





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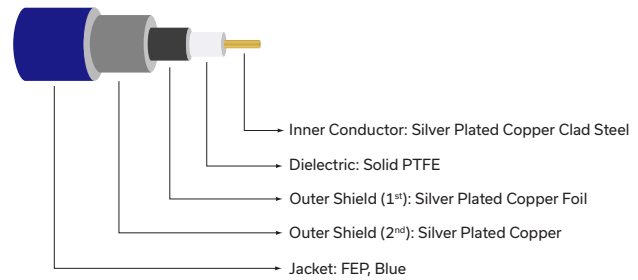
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COAXIAL CONNECTIONS

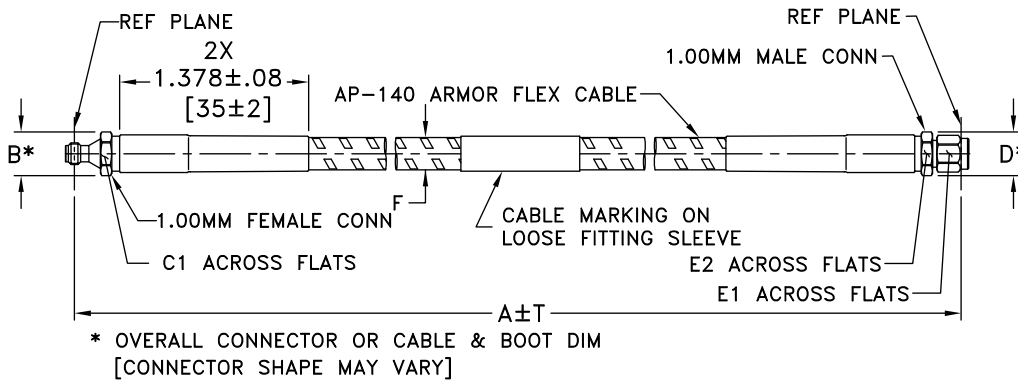
Description	Connector 1	Connector 2
Connector Type	1.0 mm Female	1.0 mm Male
Orientation	Straight	Straight

CABLE CONSTRUCTION²



2. Cable construction drawing does not include the armored braiding

CASE STYLE DRAWING



Unless Otherwise Specified dimensions are in inches [mm],
Tolerances: 2 Pl. ±0.03[0.76]; 3 Pl. ±0.015[0.38] inches[mm]

OUTLINE DIMENSIONS (Inch/mm)

A	B	C1	C2	E1	E2	F	T	wt
12	.32	.276	--	.236	2.76	.221+/- .008	.15	grams
304.80	8.1	7.00	--	6.00	7.00	5.6 +/- 0.2	3.81	28.4

PRODUCT MARKING*: WBL-1FT-W1F1M+

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



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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD [CLICK HERE](#)

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	AAG3496-12
RoHS Status	Compliant
Environmental Ratings	ENV143

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-Circuits' 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 <https://www.minicircuits.com/terms/viewterm.html>

