



## COAXIAL

# Armored Flexible Cable **WBL-0.5FTW1F1M+**

50Ω DC to 110 GHz 6 Inches 1.0 mm-Female to 1.0 mm-Male

### KEY FEATURES

- Ultra-wideband DC to 110 GHz
- Low insertion loss, 2.5 dB, typ.
- Excellent return loss, 24.2 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-0.5FTW1F1M+ 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		6			inches
Insertion Loss	DC - 35	-	0.9	3.7	dB
	35 - 75	-	1.8	3.7	
	75 - 110	-	2.5	3.7	
Return Loss	DC - 35	14.0	31.6	-	dB
	35 - 75	14.0	24.1	-	
	75 - 110	14.0	24.2	-	

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

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-0.5FTW1F1M+  
MCL NY  
241212



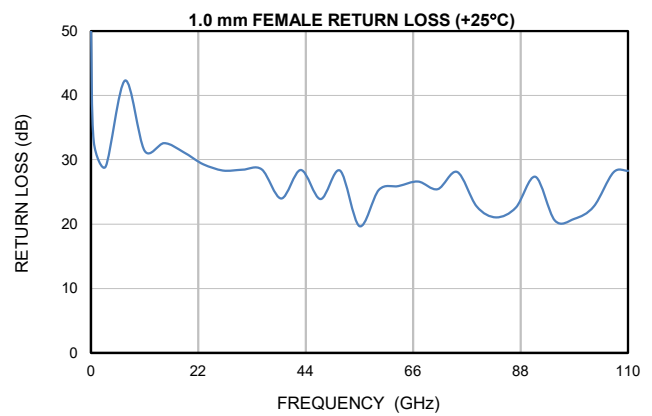
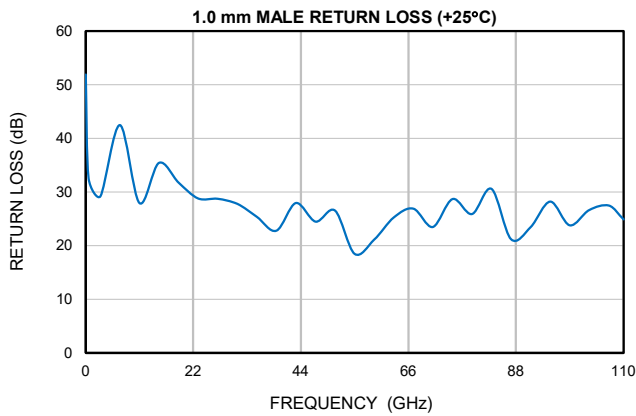
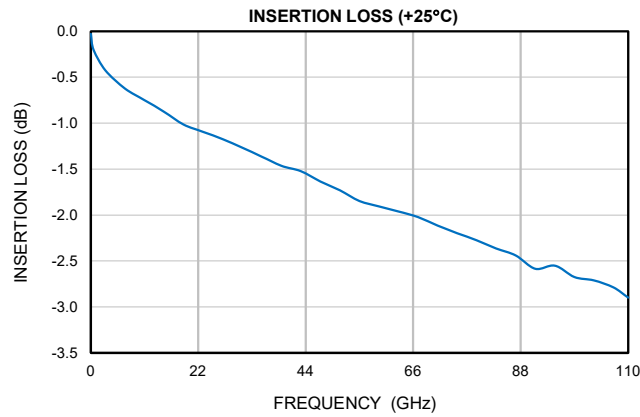


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## TYPICAL PERFORMANCE GRAPHS





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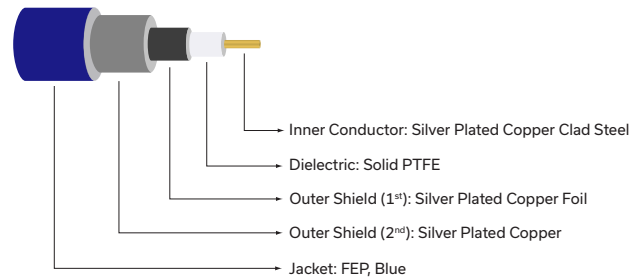
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### COAXIAL CONNECTIONS

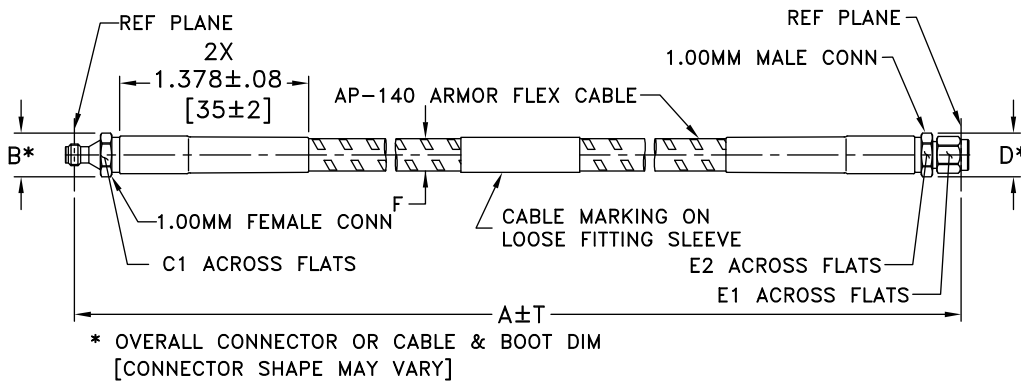
Description	Connector 1	Connector 2
Connector Type	1.0 mm Female	1.0 mm Male
Orientation	Straight	Straight

### CABLE CONSTRUCTION<sup>2</sup>



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	D	E1	E2	F	T	wt
6.00	.32	.276	-	0.32	0.236	0.276	.221±.008	.10	grams
152.40	8.1	7.00	-	8.1	6.00	7.00	5.6 ± 0.2	2.54	20.6

### PRODUCT MARKING\*: WBL-0.5FTW1F1M+

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



Mini-Circuits

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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	AAG3496-6
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>

