



COAXIAL

# Armored Flexible Cable

## WBL-0.5FT-W1F+

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

### KEY FEATURES

- Ultra-wideband DC to 110 GHz
- Low insertion loss, 2.5 dB, typ.
- Excellent return loss, 26.4 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-0.5FT-W1F+ 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	-	0.8	3.7	dB
	35 - 75	-	1.8	3.7	
	75 - 110	-	2.5	3.7	
Return Loss	DC - 35	14.0	31.3	-	dB
	35 - 75	14.0	24.9	-	
	75 - 110	14.0	26.4	-	

### 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-0.5FT-W1F+  
 MCL NY  
 241212





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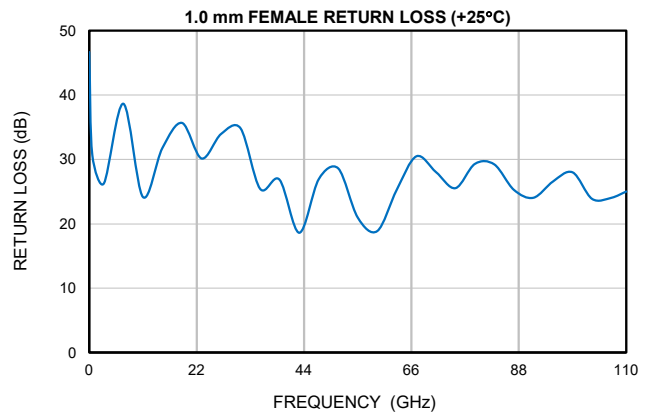
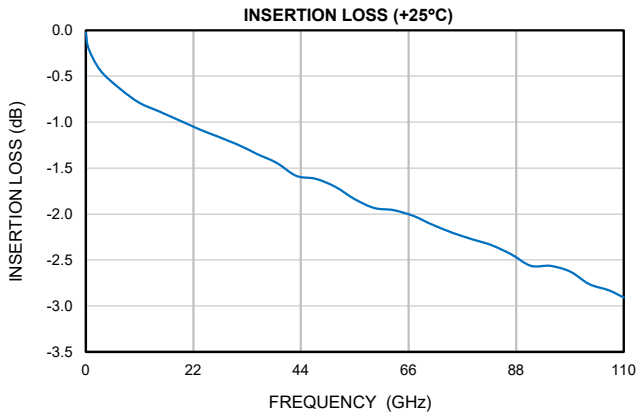
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## TYPICAL PERFORMANCE GRAPHS





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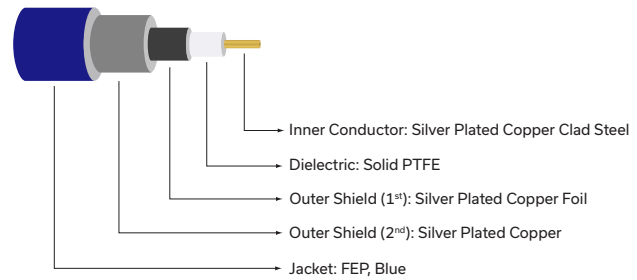
Mini-Circuits

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### COAXIAL CONNECTIONS

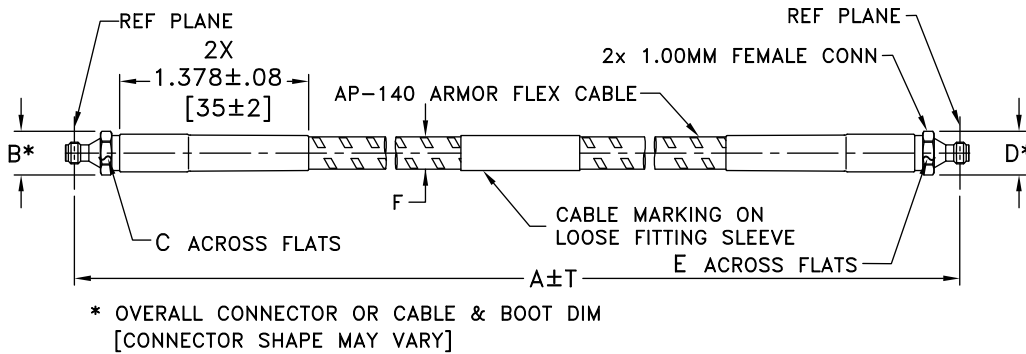
Description	Connector 1	Connector 2
Connector Type	1.0 mm Female	1.0 mm Female
Orientation	Straight	Straight

### 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	C	D	E	F	T	wt
6.00	.32	.276	.32	.276	.221 ± .008	.10	grams
152.40	8.1	7.00	8.1	7.00	5.6 ± 0.2	2.54	20.0

### PRODUCT MARKING\*: WBL-0.5FT-W1F+

\*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	<p>Data</p> <p>Graphs</p> <p>S-Parameter (S2P Files) Data Set (.zip file)</p>
Case Style	AAG3494-6
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>

