



KEY FEATURES

- Wideband, DC to 27 GHz
- Low Insertion Loss, 0.11 dB Typ.
- Excellent VSWR, 1.03:1 Typ.



Generic photo used for illustration purposes only

PRODUCT OVERVIEW

Mini-Circuits' SB-SF50-27+ is a coaxial SMA Female Bulkhead to SMA Female adapter supporting a wide range of applications from DC to 27 GHz. This model provides excellent VSWR and low insertion loss versus frequency. The SB-SF50-27+ features passivated stainless-steel construction and measures only 0.87" in length.

ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		DC		27	GHz
Insertion Loss	DC-12	—	0.06	0.14	dB
	12-18	—	0.12	0.17	
	18-27	—	0.16	0.21	
VSWR	DC-12	—	1.02	1.20	:1
	12-18	—	1.04	1.20	
	18-27	—	1.04	1.20	

ABSOLUTE MAXIMUM RATINGS¹

Parameter	Ratings
Operating Case Temperature	-65 °C to +125 °C
Storage Temperature	-65 °C to +125 °C

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



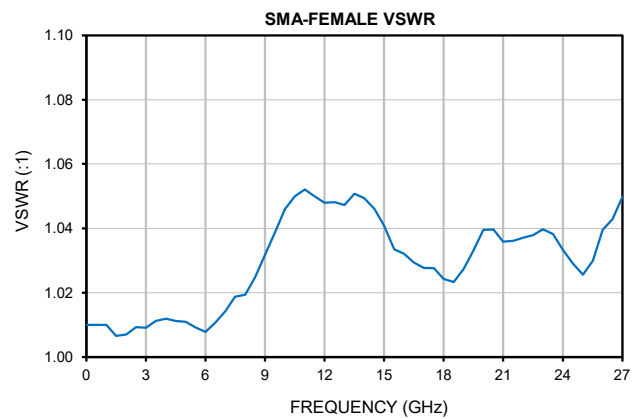
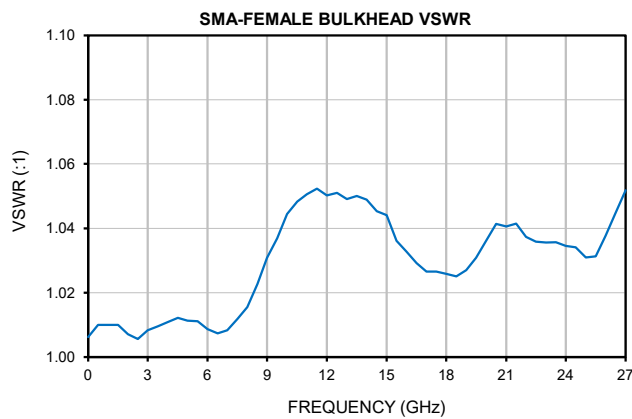
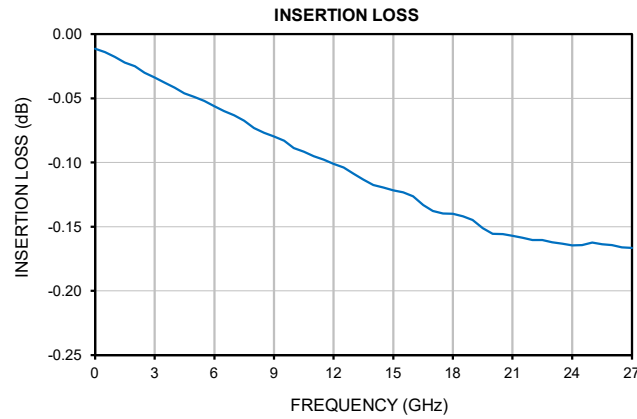
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Adapter

SB-SF50-27+

50 Ω DC to 27 GHz SMA-Female Bulkhead to SMA-Female

TYPICAL PERFORMANCE GRAPHS





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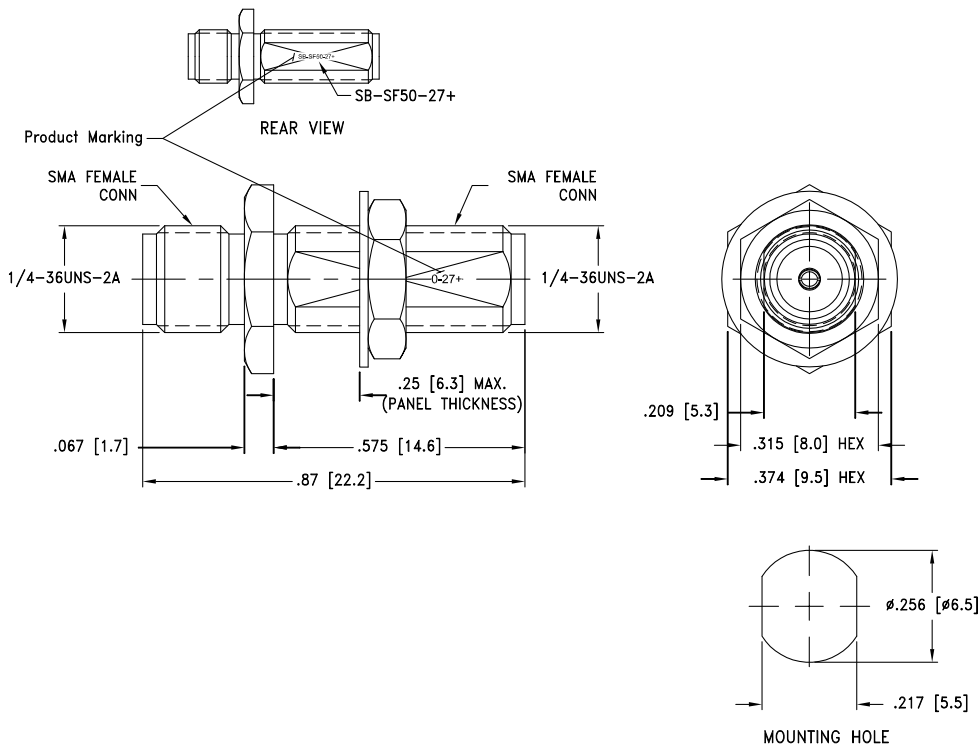
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50Ω DC to 27 GHz SMA-Female Bulkhead to SMA-Female

CONNECTOR SPECIFICATIONS

Description	Connector 1	Connector 2
Connector Type	SMA Female Bulkhead	SMA Female
Orientation	Straight	Straight

CASE STYLE DRAWING



Weight: 3.78 grams

Dimensions are in inches [mm]. Tolerances: 2 Pl. $\pm .030$; 3 Pl. $\pm .015$ Inches

PRODUCT MARKING*: SB-SF50-27+

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



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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

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Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	DJ3521
RoHs Status	Compliant
Environmental Ratings	ENV70T5

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



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