

DC to 18 GHz 2.92 mm Female to SMA Female Straight 50Ω

#### **THE BIG DEAL**

- Inter Series Adapter: 'K' Female (2.92mm) to 'SMA' Female
- Low Insertion Loss, 0.05 dB Typ.
- Excellent VSWR, 1.06:1 Typ.
- Flat Response, Less Than 0.1 dB Up To 18 GHz
- Wideband, DC to 18 GHz

#### **APPLICATIONS**

- Test & Measurement Equipment
- R&D Lab, Production, and OTA Test Systems
- · Communications, Radar, EW, and ECM Defense Systems
- 5G MIMO and Back Haul Radio Systems



**KF-SF50+** 

Generic photo used for illustration purposes only

Model No.	KF-SF50+
Case Style	DJ1860-1
Connectors	2.92 mm Female to SMA Female

+RoHS Compliant			
The +Suffix identifies RoHS Compliance.			
See our website for methodologies and qualifications			

#### **PRODUCT OVERVIEW**

Mini-Circuits' KF-SF50+ is a coaxial 2.92mm Female to SMA Female adapter. This is straight variant of Mini-Circuits model SFR-KF50+ right angle adapter. Both adapters support a wide range of applications from DC to 18 GHz. The KF-SF50+ provides excellent VSWR, low insertion loss, and flat response versus frequency. The construction features brass alloy, tri-metal plated and measures only 0.61" in length.

#### **KEY FEATURES**

Features	Advantages
Inter series adapter	'K' (2.92mm) to 'SMA' enables test of multiple different interfaces over common frequency coverage
Wideband, DC to 18 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use
Excellent VSWR, 1.06:1 Typ.	Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.
Low insertion loss, 0.05 dB Typ.	Provides excellent signal power transmission from input to output.
Brass alloy, tri-metal plated body and Gold-plated beryllium copper center contact	Stands up to wear and tear in demanding environments and provides excellent reliability.
Very wide operating temperature range, -55 to +120 °C	Withstands extreme operating conditions and is suitable for use near high power components where heat rise is common.





# Adapter



Mini-Circuits

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#### **ELECTRICAL SPECIFICATIONS AT 25°C**

Parameter	Frequency (GHz)	Min.	Тур.	Max.	Units
Frequency Range	-	DC	-	18	GHz
	0.01-6	-	0.02	-	
Insertion Loss	6-12	-	0.06	0.15	dB
	12-18	-	0.08	-	
	0.01-6	-	1.02	-	
VSWR <sup>1</sup>	6-12	-	1.09	1.20	:1
	12-18	-	1.06	-	

1. VSWR is the average VSWR of both connectors

#### **ABSOLUTE MAXIMUM RATINGS**

Parameter	Ratings	
Operating Temperature	-55°C to 120°C	
Storage Temperature	-55°C to 120°C	

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



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**KF-SF50+** 

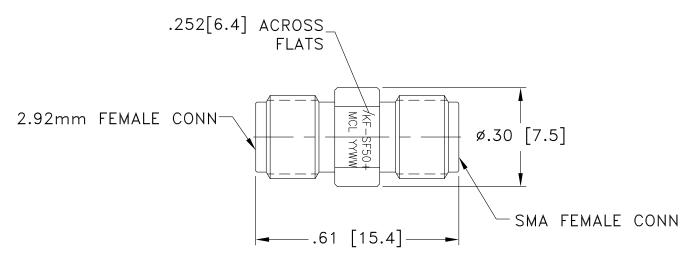
#### **COAXIAL CONNECTIONS**

Connector 1	2.92mm-Female	
Connector 2	SMA Female	

#### **CONNECTOR SPECIFICATIONS**

Description	Connector 1	Connector 2			
Connector Type	2.92mm-F	SMA-F			
Orientation	Straight	Straight			
Mounting Type	Standard	Standard			
Impedance	50 Ω	50 Ω			
MECHANICAL INFORMATION					
Body	Brass Alloy, Tri-Metal Plated				
Pin	Gold-Plated Beryllium Copper				
Insulator	Teflon (PTFE)				

**OUTLINE DRAWING** 



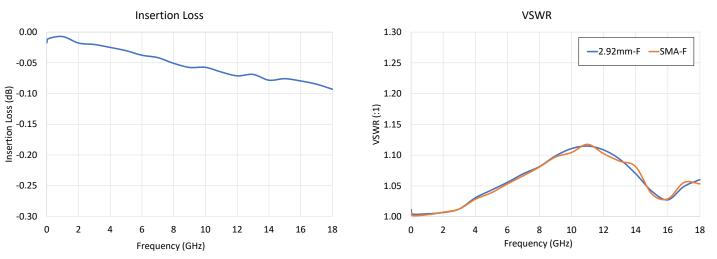
Weight: 2.33 grams Max. Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 Pl. ± .015



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**TYPICAL PERFORMANCE CURVES** 

#### 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.
- 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 C. 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

