

2.92 mm “JK” Connector Series



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Adapters: 2.92 mm “JK” Adapters can be found in the Adapter section.

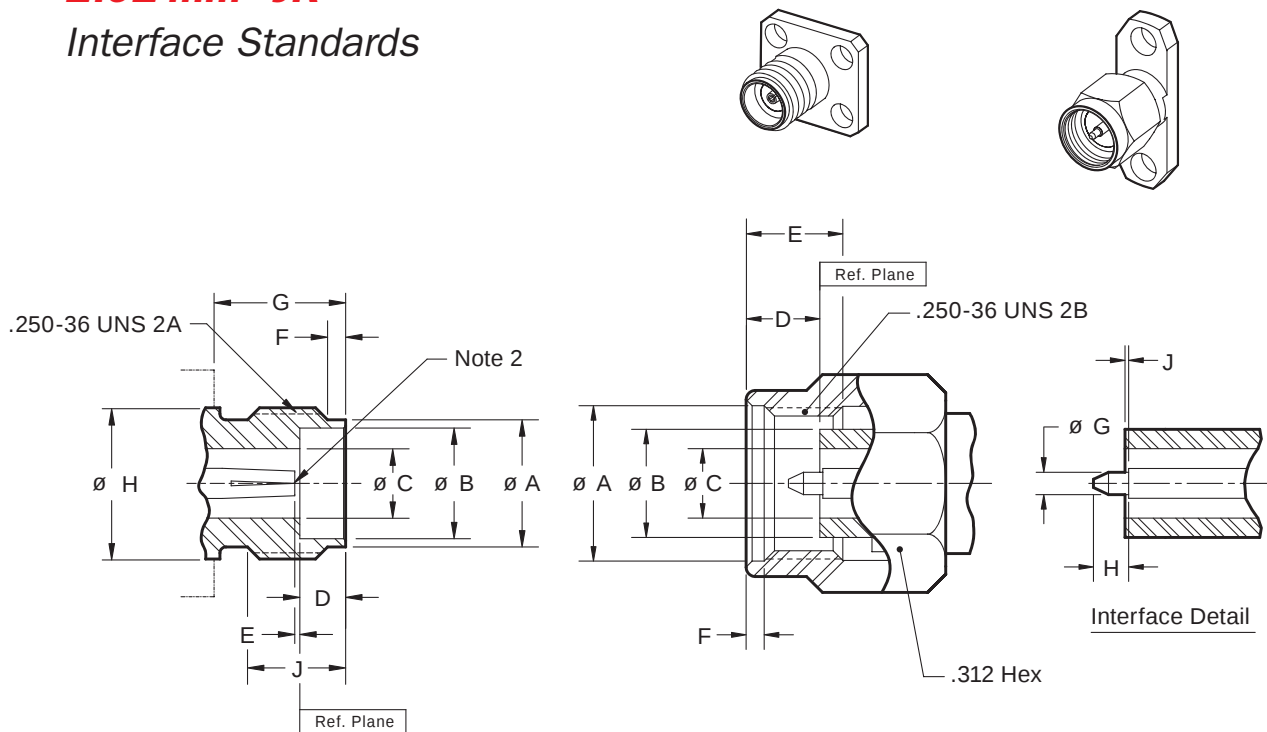
Cable Connectors: 2.92 mm “JK” Cable Connectors can be found in the Cable Connector section.

End Launch Connectors: 2.92 mm “JK” End Launch Connectors can be found in the End Launch section.

Unless otherwise specified, all dimensions are in inches.

2.92 mm “JK”

Interface Standards



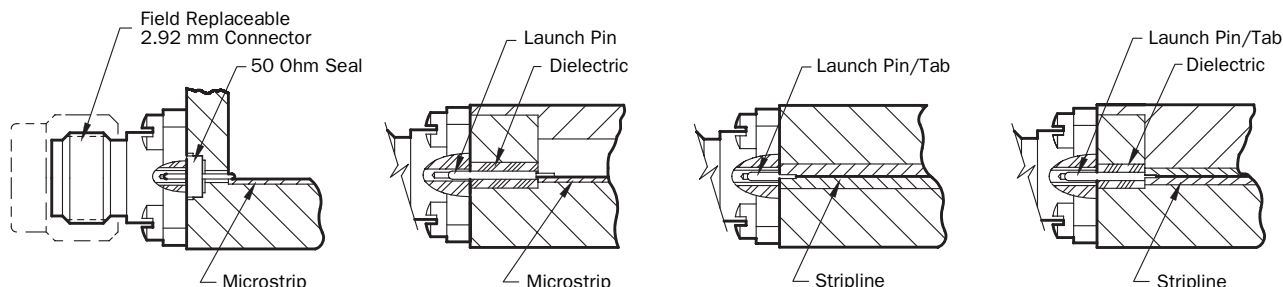
2.92 mm Jack (Socket Contact)				
LTR	Inches (Millimeters)			
	Minimum		Maximum	
A	.206	(5.23)	.214	(5.44)
B	.181	(4.60)	.183	(4.65)
C	.1145	(2.908)	.1155	(2.934)
D	.075	(1.91)	.077	(1.96)
E	.000	(0.00)	.005	(0.13)
F	.020	(0.51)	.040	(1.02)
G	.218	(5.54)	—	—
H	—	—	.2495	(6.337)
	Inch	(mm)	Inch	(mm)

2.92 mm Plug (Pin Contact)				
LTR	Inches (Millimeters)			
	Minimum		Maximum	
A	.255	(6.48)	.265	(6.73)
B	.1780	(4.521)	.1808	(4.592)
C	.1145	(2.908)	.1155	(2.934)
D	—	—	.132	(3.35)
E	.150	(3.81)	.170	(4.32)
F	.020	(0.51)	.040	(1.02)
G	.0360	(0.914)	.0368	(0.935)
H	.045	(1.14)	.055	(1.40)
J	.000	(0.00)	.005	(0.13)
	Inch	(mm)	Inch	(mm)

Notes: 1. Interface I.A.W. MIL-PRF-39012 and MIL-STD-348, Figures 323-1 and 323-2.
2. I.D. to meet VSWR when mated with .0360/.0368 (0.9144 mm/0.9347 mm) Diameter Pin.

Specifications

Applications



Available Accessories:

- 50 Ohm Seal
- Launch Pin & Dielectric
- Launch Pin/Tab
- Launch Pin/Tab & Dielectric

See Launch Accessories Section.

Electrical:

- Mode Free Through 40.0 GHz
- Low VSWR: DC to 27.0 GHz.....1.10:1 max
27.0 to 40.0 GHz.....1.15:1 max
- Low RF Leakage $\leq$ -100 dB
- Low Insertion Loss

Materials / Construction:

- Housing: Steel, CRES Alloy UNS S30300 Per ASTM A582, Passivated Per ASTM A967
- Contact: Beryllium Copper (BeCu), UNS C17300 Per ASTM B196, Gold Plated Per MIL-G-45204 or ASTM B488
- Center Contact Capture: Rigid Two Bead Capture with Ultem 1000 Per ASTM D5205 and KEL-F Per ASTM D1430
- Connector Interface: Per MIL-STD-348, Figs. 323-1 and 323-2
- Raised Metal Grounding Ring for 360° Metal-to-metal Contact

Environmental:

- Temperature: -55° C to +135° C



2.92 mm "JK" Series DC to 40.0 GHz

上海馥莱电子有限公司

021-5291 8556

187-6444-0515

sales@fulai-elec.com

www.fulai-elec.com

2.92 mm Jack (Female) 4 Hole .500" Square		*ACCEPTS PIN DIA.	Connector No.
		.020	1012-05SF
		.012	1012-01SF
		.009	1012-22SF

2.92 mm Jack (Female) 4 Hole .375" Square		*ACCEPTS PIN DIA.	Connector No.
		.020	1012-16SF
		.012	1012-11SF
		.009	1012-09SF

2.92 mm Jack (Female) 2 Hole .625" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1014-05SF
		.012	1014-01SF
		.009	1014-09SF

2.92 mm Jack (Female) 2 Hole .550" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1014-15SF
		.012	1014-11SF
		.009	1014-08SF

2.92 mm Jack (Female) 2 Hole .500" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1014-25SF
		.012	1014-21SF
		.009	1014-07SF

2.92 mm Jack (Female) Thread-in		*ACCEPTS PIN DIA.	△ .250-36 UNS 2A REAR THREAD	△ M6x.75-6g REAR THREAD
		.020	1020-02SF	—
		.012	1020-01SF	—
		.009	1020-03SF	1020-10SF

2.92 mm “JK” Series DC to 400 GHz

2.92 mm Plug (Male) 4 Hole .500" Square		*ACCEPTS PIN DIA.	Connector No.
		.020	1011-05SF
		.012	1011-01SF
		.009	1011-07SF
2.92 mm Plug (Male) 4 Hole .375" Square		*ACCEPTS PIN DIA.	Connector No.
		.020	1011-15SF
		.012	1011-11SF
2.92 mm Plug (Male) 2 Hole .625" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1013-05SF
		.012	1013-01SF
2.92 mm Plug (Male) 2 Hole .550" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1013-15SF
		.012	1013-11SF
2.92 mm Plug (Male) 2 Hole .500" Long		*ACCEPTS PIN DIA.	Connector No.
		.020	1013-25SF
		.012	1013-21SF
2.92 mm Plug (Male) Thread-in		*ACCEPTS PIN DIA.	Connector No.
		.020	1021-02SF
		.012	1021-01SF
		.009	1021-09SF
			1021-10SF

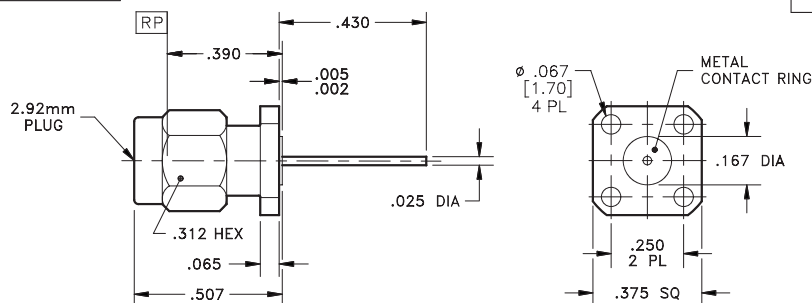
2.92 mm "JK" Series Waveguide Connectors

Design Summary

- DC to 40.0 GHz
- Mode Free Through 40.0 GHz.
- Low VSWR: DC to 27 GHz.....1.10:1 max.
27 to 40 GHz.....1.15:1 max.
- Performance Consistency Unit-to-unit
- Temperature Rating -55°C to +135°C
- Interface in Accordance with MIL-PRF-39012 and MIL-STD-348A, figure 323-1 and 323-2

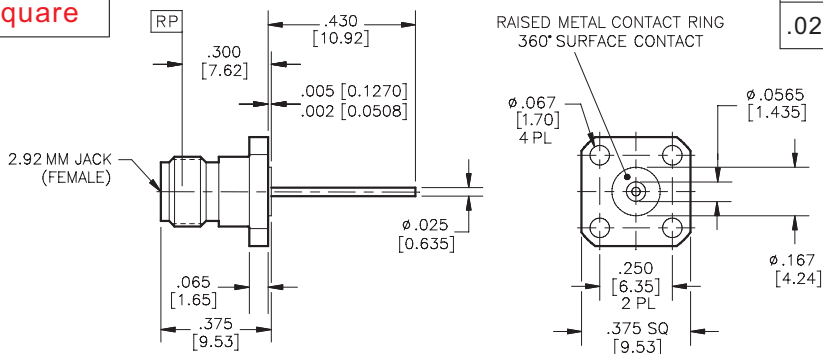
2.92 mm Plug (Male) 4 Hole .375" Square

Probe Size	Connector No.
.025D x .430L	1011-16SF



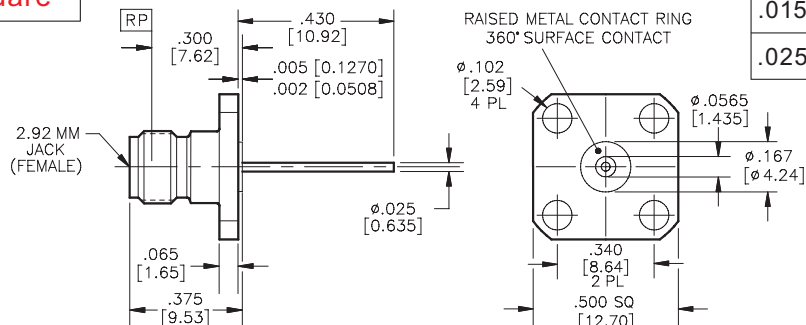
2.92 mm Jack (Female) 4 Hole .375" Square

Probe Size	Connector No.
.025D x .430L	1012-23SF



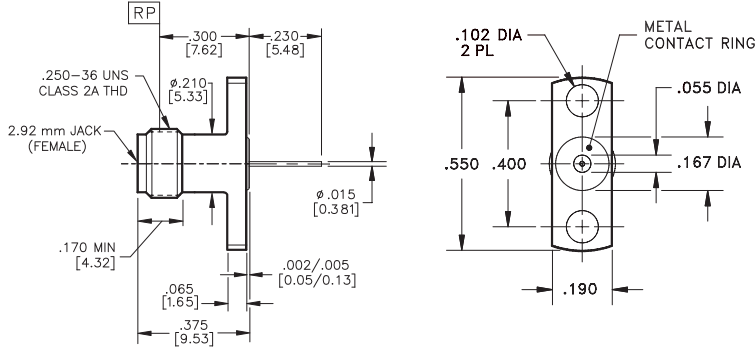
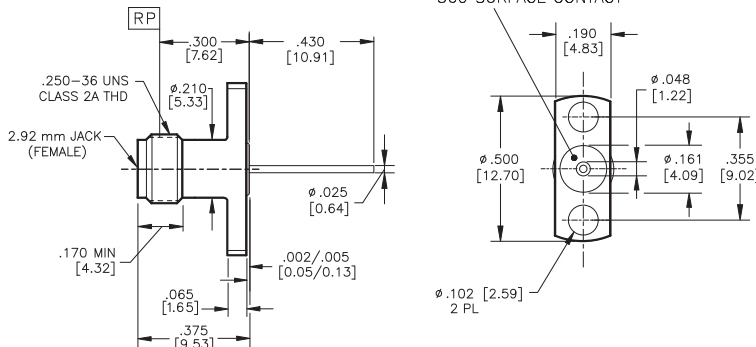
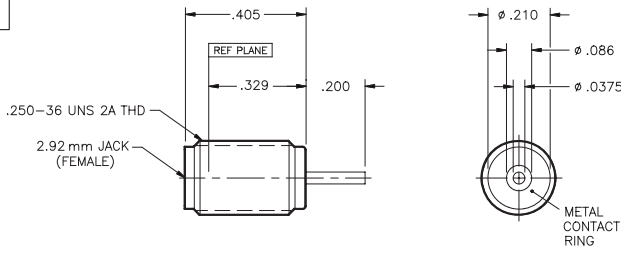
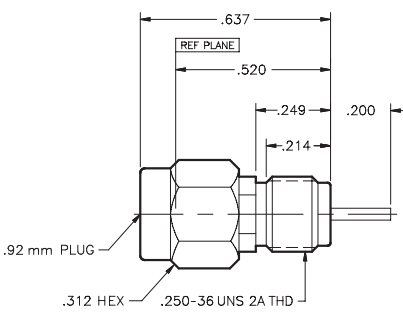
2.92 mm Jack (Female) 4 Hole .500" Square

Probe Size	Connector No.
.015D x .230L	1012-21SF
.025D x .430L	1012-24SF



2.92 mm “JK” Waveguide Connectors

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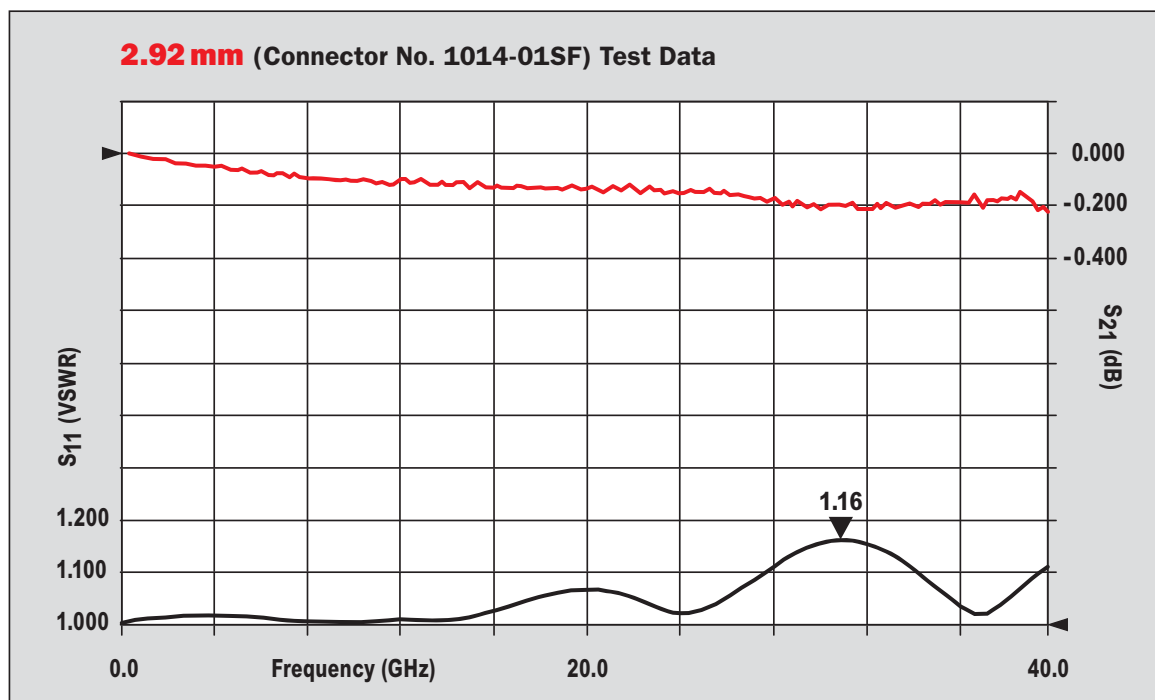
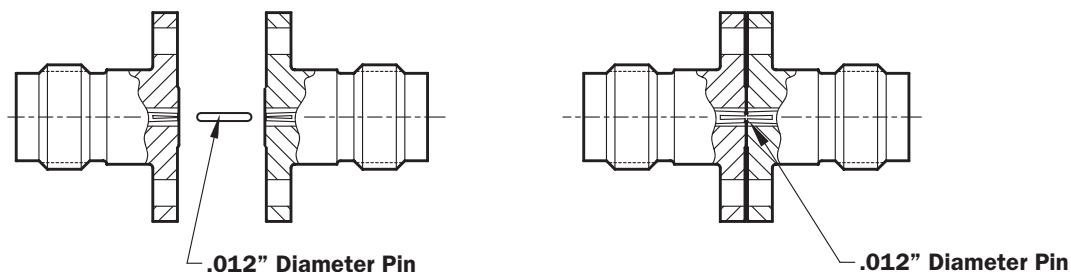
2.92 mm Jack (Female) 2 Hole .550" Long	Probe Size .015D x .230L Connector No. 1014-27SF
	
2.92 mm Jack (Female) 2 Hole .500" Long	Probe Size .025D x .430L Connector No. 1014-33SF
	
2.92 mm Jack (Female) Thread-in	Probe Size .037D x .200L Connector No. 1020-05SF
	
2.92 mm Plug (Male) Thread-in	Probe Size .037D x .200L Connector No. 1021-06SF
	

Typical Test Data

Back-to-Back Connector Testing

Back-to-back testing shows data for two connectors. Any internal mismatches within the connector will phase together when tested through 40.0 GHz. Taking the square root of the peak VSWR will provide the value for a single connector.

Connector No. 1014-01SF with .012” **Test Pin**



$$\sqrt{1.16} = 1.07 \text{ Maximum for each connector}$$

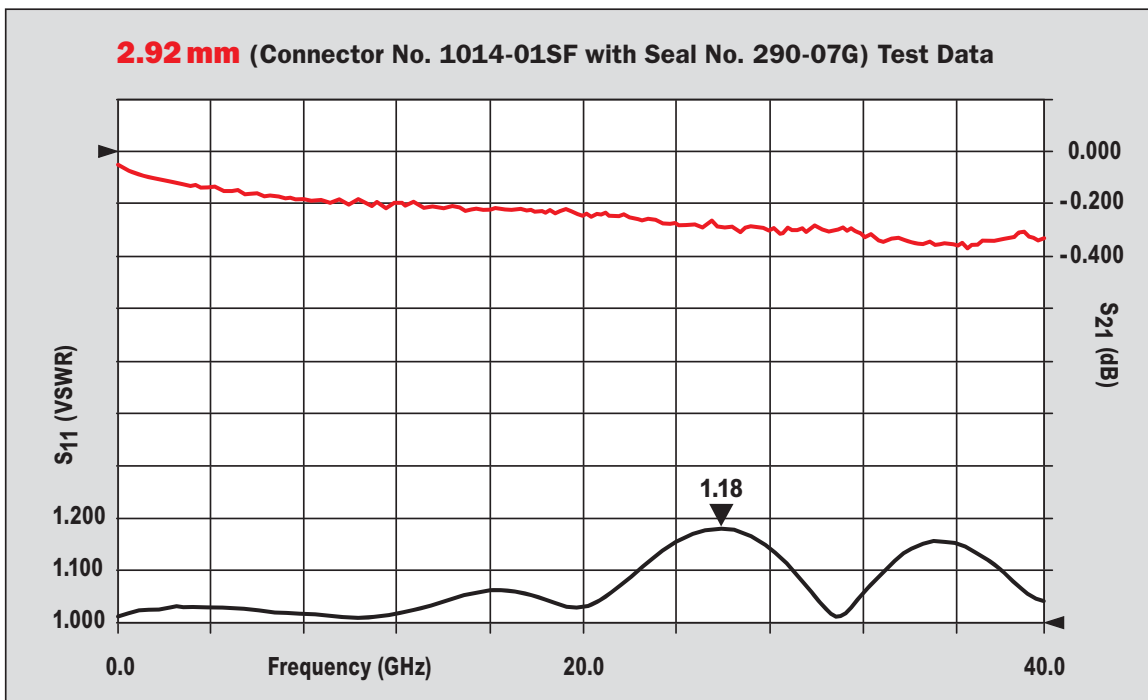
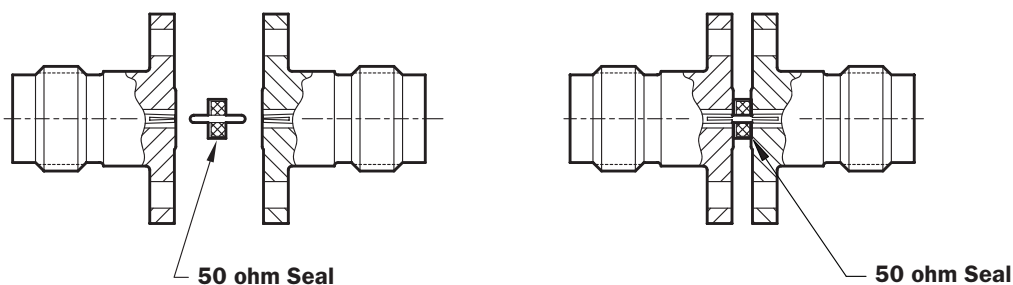
Typical Test Data

Back-to-Back Connector Testing

Back-to-back testing shows data for two connectors and 50 ohm seal.

Connector No. 1014-01SF with .012” Test Pin

50 ohm Seal (Seal No. 290-07G)



$$\sqrt{1.18} = 1.08 \text{ Maximum for each connector}$$