

THE
PERFORMANCE LEADER
IN MICROWAVE CONNECTORS

上海馥莱电子有限公司
021-5291 8556
137-6444-1515
sales@fulai-elec.com
www.fulai-elec.com



0.9 mm SuperMini DC to 67 GHz

Ultra-Miniature Threaded Coupling Coaxial Assemblies



Low VSWR
Low Insertion Loss
Low RF Leakage
High Temperature
Rugged & Durable
Excellent Repeatability

Southwest Microwave, Inc.

+1 (480) 783-0201 | www.southwestmicrowave.com

0.9 mm SuperMini

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0.9mm SuperMini DC to 67 GHz

0.9 mm SuperMini connectors offer the superior performance and quality of Southwest Microwave's standard-size, high frequency connectors in a miniaturized footprint ideal for reduced-size PCB and panel applications. This versatile new line includes field-replaceable flange mount and thread-in connectors, solder-on end launch and vertical launch connectors plus complete cable assemblies. 0.9 mm SuperMini connectors offer well-matched impedance, excellent repeatability and the industry's lowest VSWR, insertion loss and RF leakage.

SPECIFICATIONS

ELECTRICAL

Mode Free Through 67 GHz

Low VSWR:

DC to 18 GHz 1.13:1 MAX

18 GHz to 40 GHz 1.19:1 MAX

40 GHz to 50 GHz 1.20:1 MAX

50 GHz to 67 GHz 1.25:1 MAX

Low RF Leakage: ≤ -100 dB @ 26.5 GHz

Low Insertion Loss

TEMPERATURE

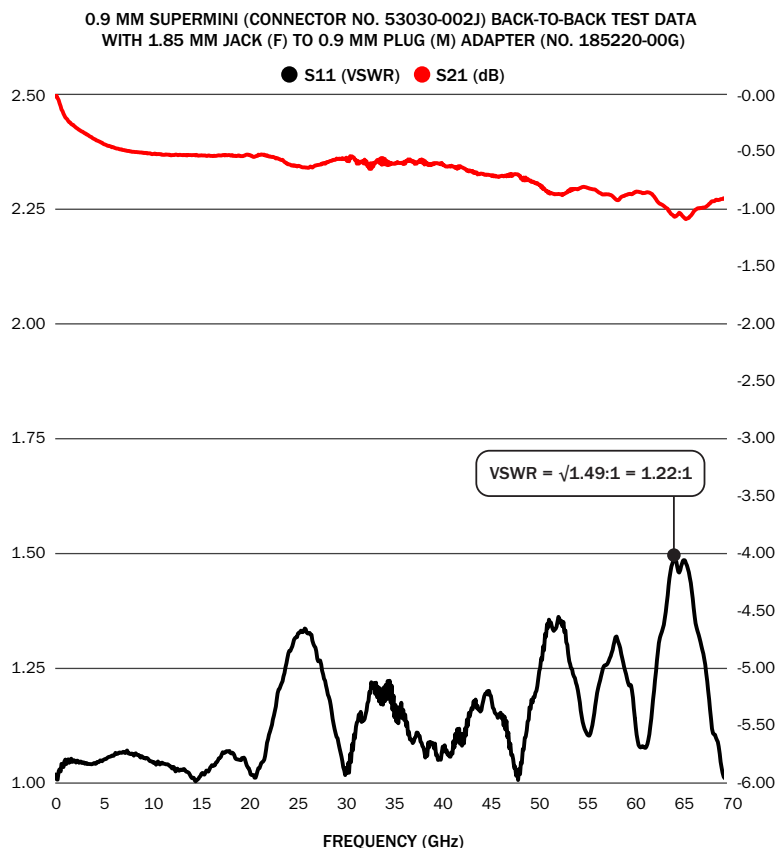
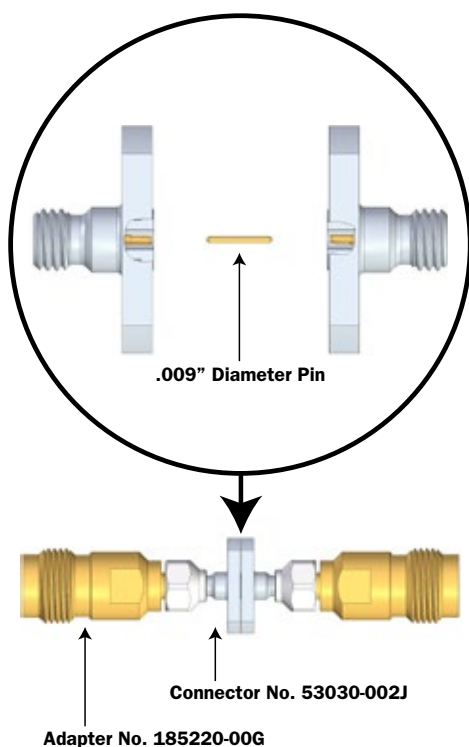
-55°C to +165°C

MATERIALS / CONSTRUCTION

Materials and finishes vary by product type. For data, refer to website or request Product Drawings and Specifications for desired connector.

TEST DATA

Data shown represents two 0.9 mm SuperMini 9 mil pin connectors tested back-to-back with 1.85 mm Jack (F) to 0.9 mm Plug (M) adapters, as calibration standards for the 0.9mm SuperMini interface are not available. To extract VSWR for a single connector with adapter, take the square root of the VSWR data point and divide the insertion loss data point by two.



VSWR = $\sqrt{1.49:1} = 1.22:1$ for each connector with adapter, as shown.

Contact Southwest Microwave for performance specifications for all other 0.9 mm SuperMini connectors.

JACK (FEMALE) CONNECTORS

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FLANGE JACK (FEMALE): 4 HOLE .350 SQUARE

.012

53030-001J

Technical drawing of the rear socket assembly, showing side and top views with dimensions in inches and millimeters.

Side View Dimensions:

- Top flange thickness: .046 [1.18]
- Top flange outer diameter: $4 \times \varnothing .089$ [2.26]
- Top flange inner diameter: .046 [1.17]
- Threaded section length: .100 [2.54]
- Thread specification: M2.5 x 0.35-6g
- SMI INTERFACE 0.9mm SSBT JACK
- RAISED GROUNDING RING
- Bottom flange thickness: .002 [0.04]
- Bottom flange outer diameter: $\varnothing .092$ [2.34]
- Bottom flange inner diameter: .183 [4.65]

Top View Dimensions:

- Overall width: .350 [8.89]
- Distance between mounting holes: .191 [4.85]
- Mounting hole diameter: $\varnothing .438$ [11.13]
- Distance from center to mounting hole: .191 [4.85]
- Distance from center to rear socket: .350 [8.89]
- REAR SOCKET .040 (1.0) MAX INSERTION DEPTH
- Bottom hole diameter: $\varnothing .032$ [0.81]

FLANGE JACK (FEMALE): 2 HOLE .438 X .140

.012

53029-003J

[illegible]

THREAD-IN: STEP THREAD JACK (FEMALE):
STANDARD #8-36 UNF-2A REAR THREAD

.012

53022-002J

REAR SOCKET .040 (1.0)
MAX INSERTION DEPTH

Ø .032
[0.81]

Ø .123
[3.12]

105
[2.67]

023
[0.58]

079
[1.98]

M2.5 x 0.35-6g

057
[1.45]

#8-36 UNF-2A

SMI INTERFACE
0.9mm SSBT JACK

**THREAD-IN: STRAIGHT THREAD JACK (FEMALE):
STANDARD M2.5 X 0.35 STRAIGHT THREAD**

.012

53022-007J

Technical drawing of the SMI Interface 9mm SSBT Jack, showing three views: front, side, and rear.

Front View: Shows the circular connector with a central pin. The diameter is specified as $\varnothing .032$ (0.81).

Side View: Shows the threaded body. The length is specified as $.183$ (4.65). The thread specification is M2.5 x 0.35-6g. The diameter of the body is specified as $\varnothing .075$ (1.9).

Rear View: Shows the rear socket. The diameter is specified as $\varnothing .075$ (1.9). The maximum insertion depth is specified as $.023$ (0.58).

Labels in the drawing include:

- REAR SOCKET .040 (1.0) MAX INSERTION DEPTH
- SMI INTERFACE 9mm SSBT JACK

BOARD MOUNT CONNECTORS (SOLDER-ON)

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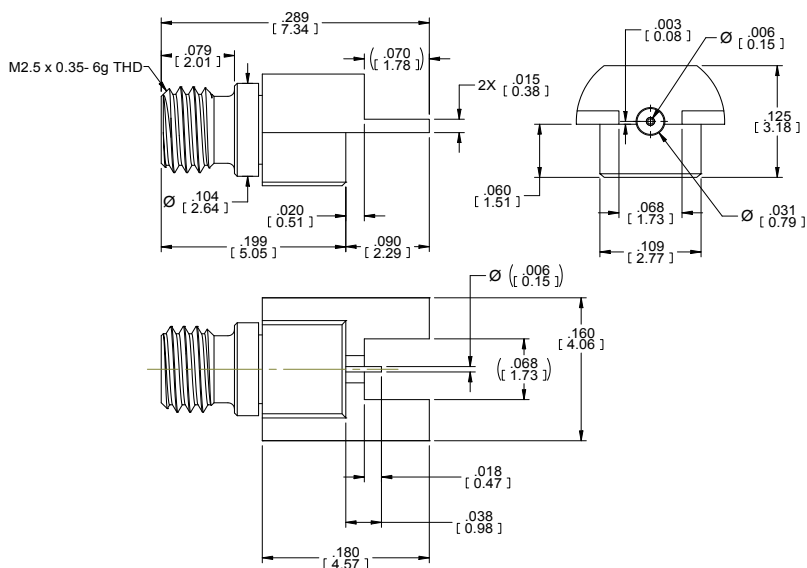
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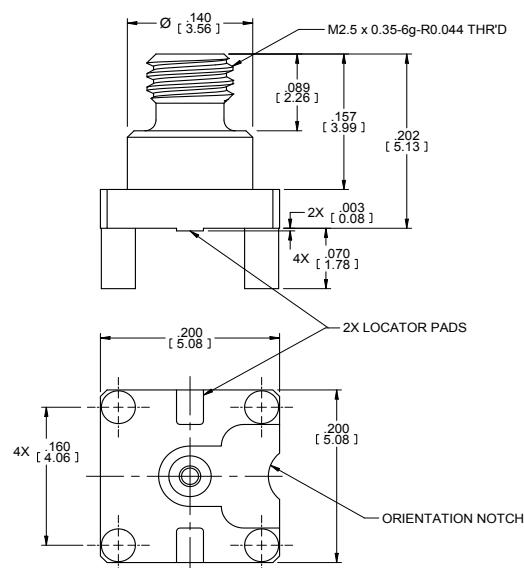
END LAUNCH JACK (FEMALE)

53056-005J



4 POST VERTICAL LAUNCH JACK (FEMALE)

53050-004J



CABLE ASSEMBLIES

Southwest Microwave can supply complete cable assemblies (0.047 and 0.086 cable) to simplify high-performance interface to our full range of 0.9 mm SuperMini connectors. Contact the factory for more information.



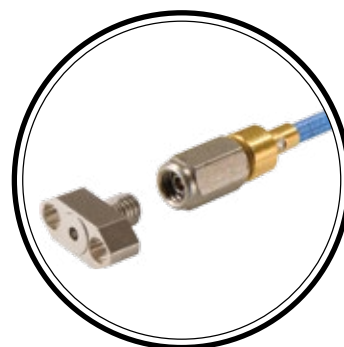
VERTICAL LAUNCH



THREAD-IN



END LAUNCH



FLANGE MOUNT

PRECISION GRADE ADAPTERS

1.85 mm JACK (F) TO 0.9 mm PLUG (M) ADAPTER: 185220-00G

1.85 mm PLUG (M) TO 0.9 mm PLUG (M): 185240-00G

1.85 mm JACK (F) TO 0.9 mm JACK (F) ADAPTER: 185310-00G

1.85 mm PLUG (M) TO 0.9 mm JACK (F) ADAPTER: 185330-00G

0.9 mm PLUG (M) TO 1.0 mm JACK (F) ADAPTER: 245220-00SF

0.9 mm JACK (F) TO 1.0 mm JACK (F) ADAPTER: 245310-00SF

0.9 mm JACK (F) TO 0.9 mm JACK (F) ADAPTER: 535310-00G