

THE
PERFORMANCE LEADER
IN MICROWAVE CONNECTORS



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.

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0.9 mm SuperMini

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

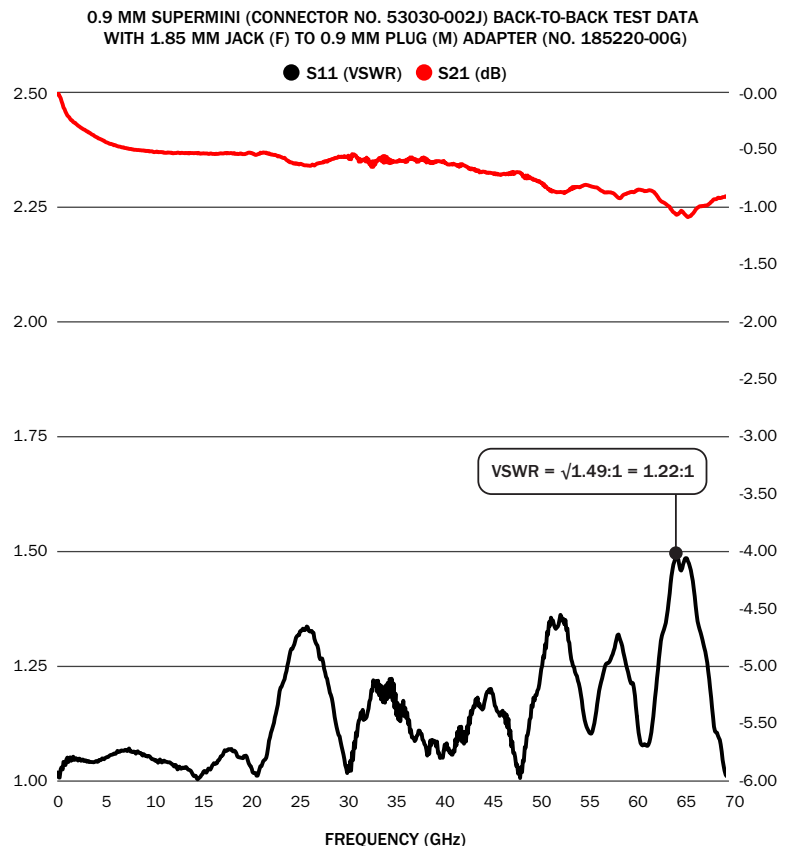
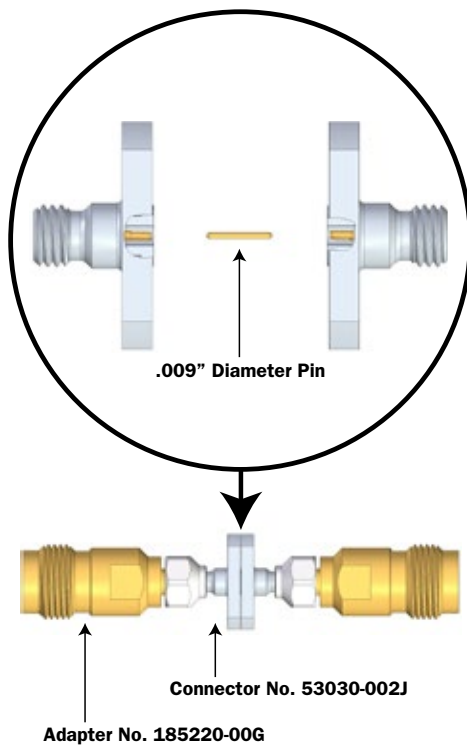
-55°C to +165°C

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.

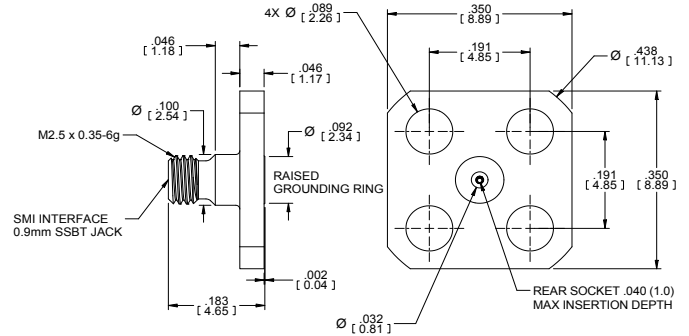
JACK (FEMALE) CONNECTORS

0.9mm SuperMini DC to 67 GHz

FLANGE JACK (FEMALE): 4 HOLE .350 SQUARE

ACCEPTS PIN DIA.
.012
.009

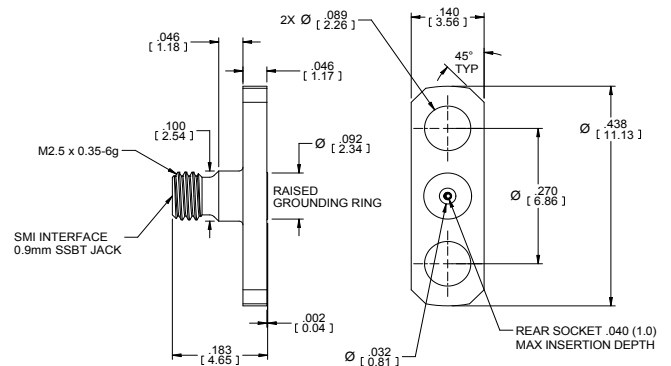
CONNECTOR NO.
53030-001J
53030-002J



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

ACCEPTS PIN DIA.
.012
.009

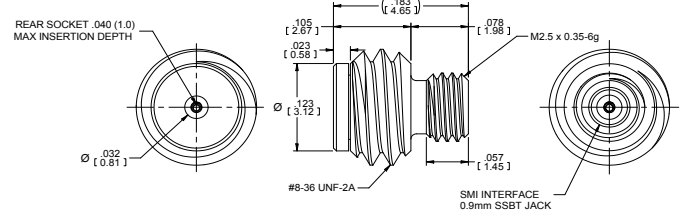
CONNECTOR NO.
53029-003J
53029-005J



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

ACCEPTS PIN DIA.
.012
.009

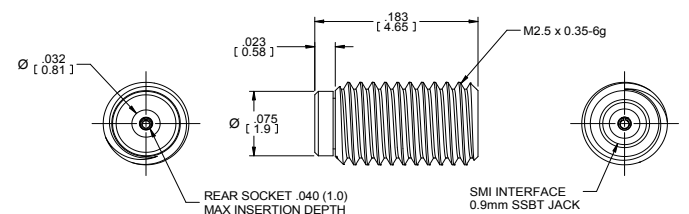
CONNECTOR NO.
53022-002J
53022-008J



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

ACCEPTS PIN DIA.
.012
.009

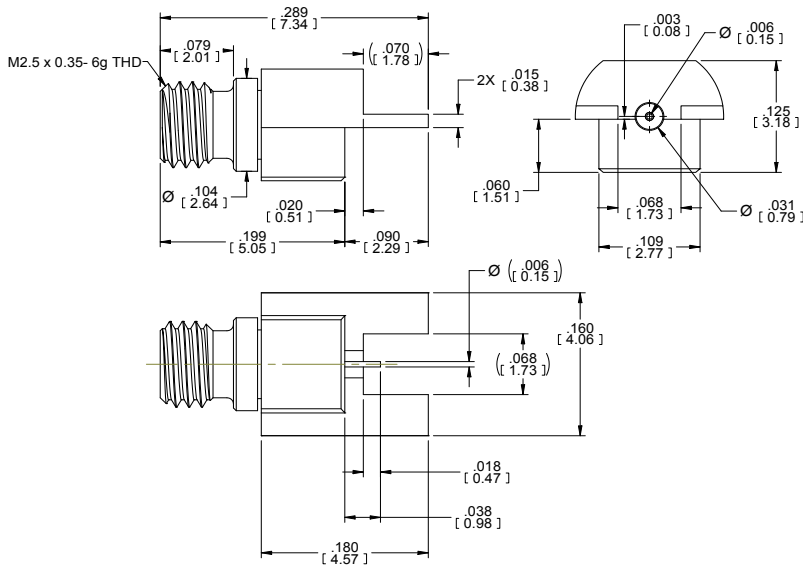
CONNECTOR NO.
53022-007J
53022-006J



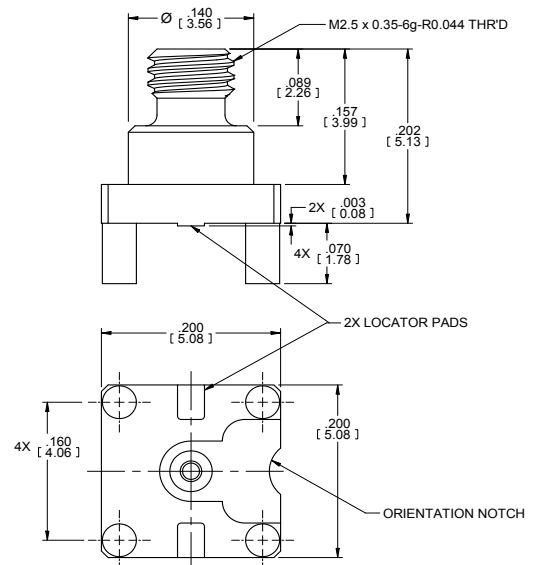
BOARD MOUNT CONNECTORS (SOLDER-ON)

0.9mm SuperMini DC to 67 GHz

END LAUNCH JACK (FEMALE) 53056-005J



4 POST VERTICAL LAUNCH JACK (FEMALE) 53050-004J



CABLE ASSEMBLIES

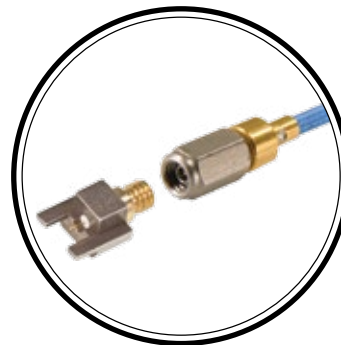
Southwest Microwave can supply complete cable assemblies (0.047 and 0.086 cable) to simplify high-performance interface to our full range of 0.9 mm SuperMini connectors. Contact the factory for more information.



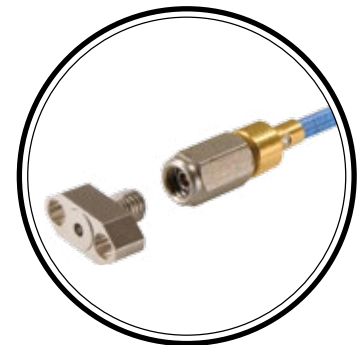
VERTICAL LAUNCH



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**