





0.9 mm **Sup∈rMini**DC to 67 GHz

Ultra-Miniature Threaded Coupling Coaxial Assemblies

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



0.9 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 18.0 GHz 1.13:1 max 18.0 to 40.0 GHz 1.19:1 max 40.0 to 50.0 GHz 1.20:1 max 50.0 to 67.0 GHz 1.25:1 max
 - Low RF Leakage ≤ -100 dB @ 26.5 GHz
 - · Low Insertion Loss

Temperature:

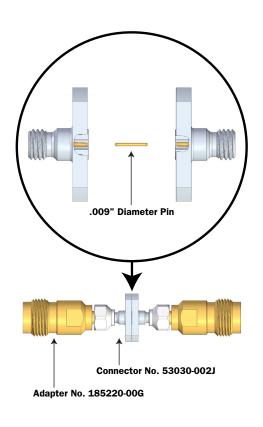
• -55°C to + 165°C

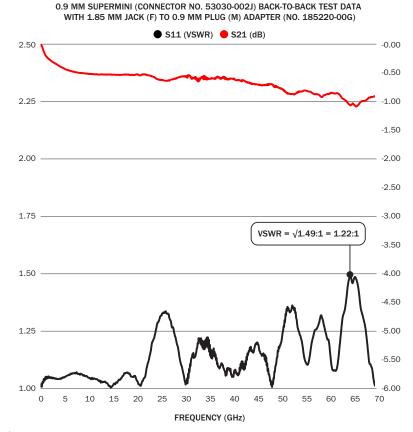
Materials / Construction:

 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.



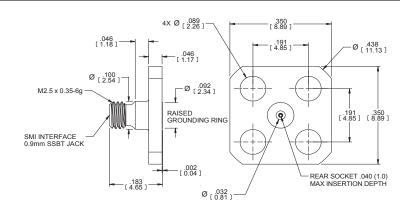


 $VSWR = \sqrt{1.49:1} = 1.22:1 \ \text{for each connector with adapter, as shown.} \\$ Contact Southwest Microwave for performance specifications for all other 0.9 mm SuperMini connectors.

FLANGE JACK (FEMALE): 4 HOLE .350 SQUARE

ACCEPTS PIN DIA. CONNECTOR NO.

.012 53030-001J .009 53030-002J



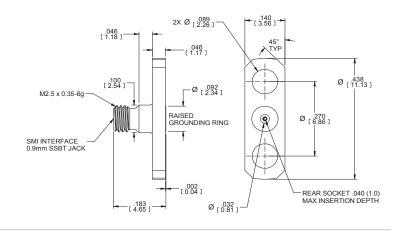
FLANGE JACK (FEMALE): 2 HOLE .438 X .140

ACCEPTS PIN DIA.

CONNECTOR NO. .012

.009 53029-003J

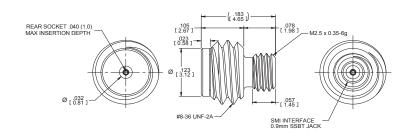
53029-005J



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

ACCEPTS PIN DIA. CONNECTOR NO.

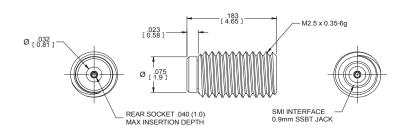
.012 53022-002J .009 53022-008J



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

ACCEPTS PIN DIA. CONNECTOR NO.

.012 53022-007J .009 53022-006J



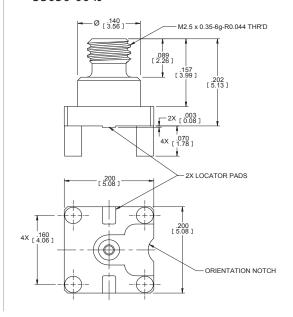
THE PERFORMANCE LEADER IN MICROWAVE CONNECTORS



BOARD MOUNT CONNECTORS (SOLDER-ON) 0.9mm SuperMini DC to 67 GHz

END LAUNCH JACK (FEMALE) 53056-005J .289 -Ø [.006 [0.15] M2.5 x 0.35- 6g THD 2X [0.38] .125 [3.18] .060 [1.51] .020 [0.51] Ø [.031 [0.79] .090 .199 [5.05] _ :109 [2.77] - -Ø ([0.15]) .160 [4.06 1 (1.73) . .018 . .038

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



CABLE ASSEMBLIES

.180 [4.57]

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







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