

# **SuperMini**

0.9 mm Ultra-Minature Threaded Coupling Coaxial Assemblies DC to 67 GHz

THE PERFORMANCE LEADER IN MICROWAVE CONNECTORS



- Low VSWR
- Low Insertion Loss
- Low RF Leakage
- High Temperature
- Rugged & 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:

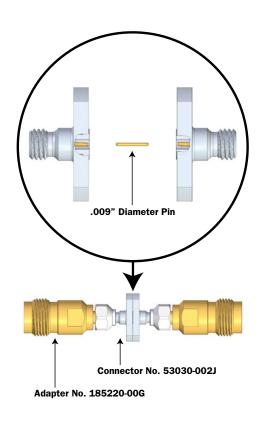
• -55°C to + 165°C

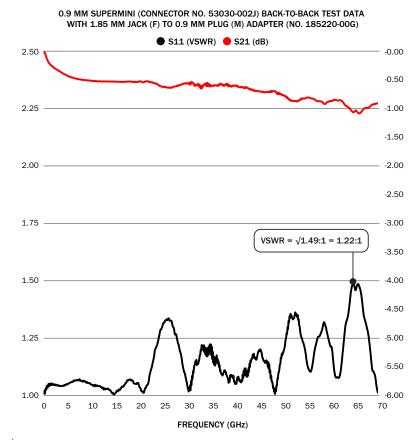
Materials / Construction:

 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.



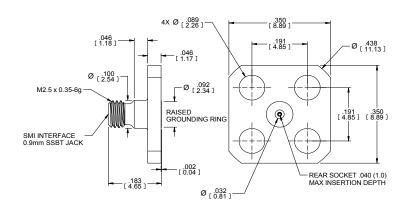


 $VSWR = \sqrt{1.49:1} = 1.22:1 \ \text{for each connector with adapter, as shown.} \\$  Contact Southwest Microwave for performance specifications for all other 0.9 mm SuperMini connectors.

## FLANGE JACK (FEMALE): 4 HOLE .350 SQUARE

ACCEPTS PIN DIA. CONNECTOR NO.

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



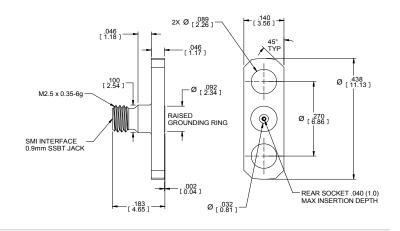
## FLANGE JACK (FEMALE): 2 HOLE .438 X .140

ACCEPTS PIN DIA.

CONNECTOR NO.

.009 53029-003J

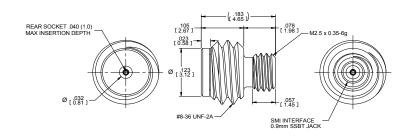
53029-005J



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

ACCEPTS PIN DIA. CONNECTOR NO.

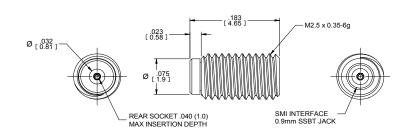
.012 53022-002J .009 53022-008J



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

ACCEPTS PIN DIA. CONNECTOR NO.

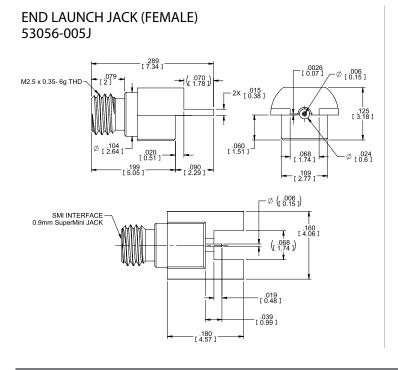
.012 53022-007J .009 53022-006J



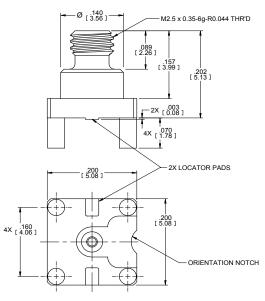
# THE PERFORMANCE LEADER IN MICROWAVE CONNECTORS



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



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



## CABLE ASSE<u>MBLI</u>ES

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