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THE PERFORMANCE LEADER IN  
**MICROWAVE CONNECTORS**



# VERTICAL LAUNCH COMPRESSION- MOUNT PCB CONNECTORS



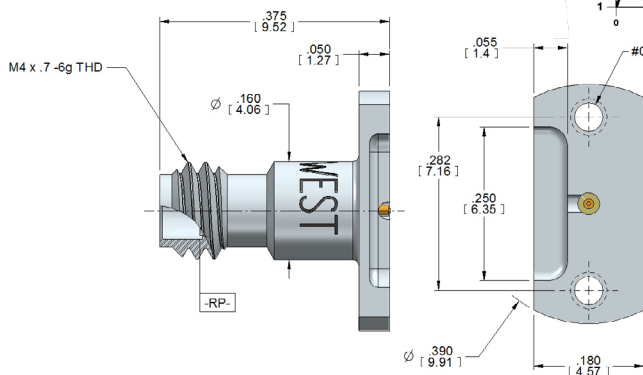
- Low VSWR
- Low Insertion Loss
- Low RF Leakage
- High Temperature
- Rugged & Durable
- Excellent Repeatability

## TOP PERFORMANCE SOLDERLESS CONNECTORS

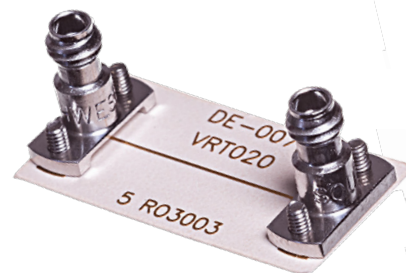
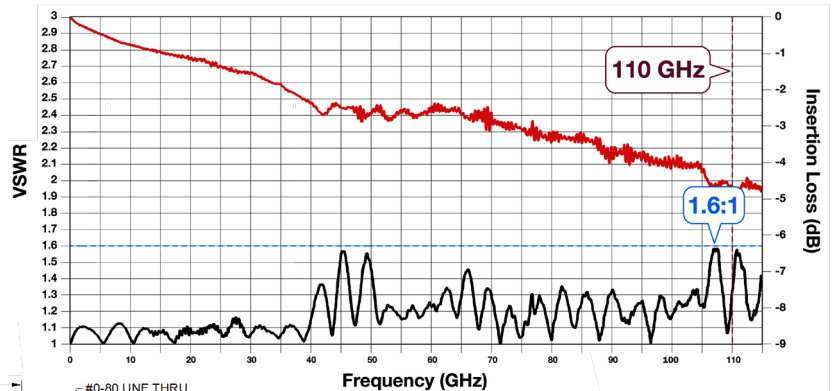
For microstrip or grounded coplanar waveguide (GCPW) designs, Southwest Microwave vertical launch connectors provide optimal signal integrity, are reusable and can be installed without soldering. Suitable for various board materials and thicknesses, the vertical launch connectors reduce footprint requirements without sacrificing performance, resulting in design and installation convenience.

1.0 mm (W) DC TO 110 GHz (24359-001J)

**VSWR of 1.16:1 max per connector** across 70 to 105 GHz and a **VSWR of 1.26:1 max across the complete 110 GHz** bandwidth. Data represent two 1.0 mm connectors mounted on 5 mil R03003 test-board.



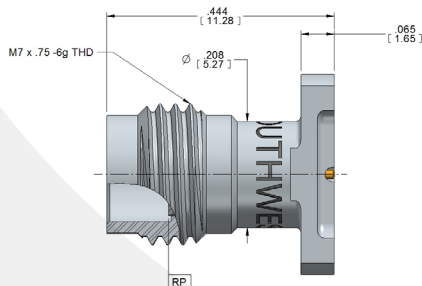
### 1.0 mm (110 GHz) TEST DATA



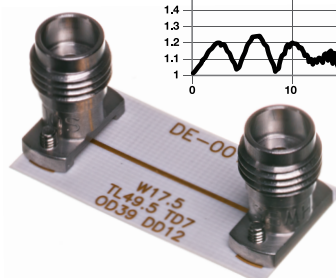
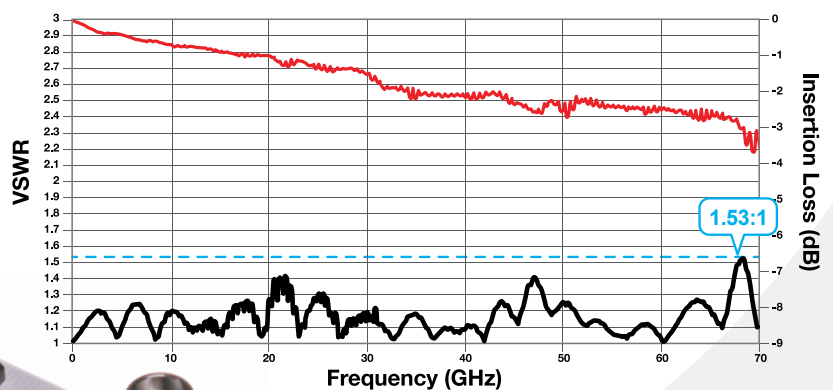
Same footprint across all vertical launch connectors

1.85 mm (V) DC TO 67 GHz (18359-001J)

**VSWR of 1.25:1 max per connector** across **67 GHz** bandwidth. Data represent two 1.85 mm connectors mounted on 8 mil R04003 test-board.

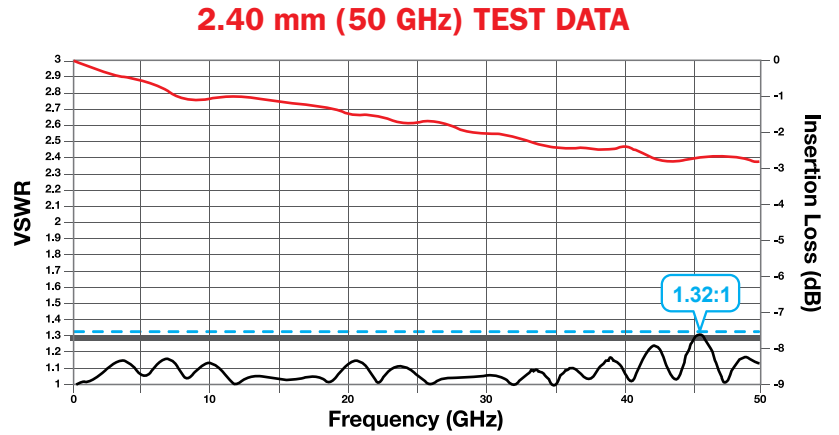
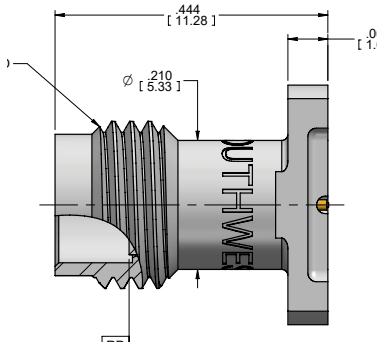


### 1.85 mm (67 GHz) TEST DATA



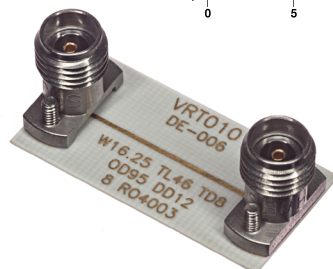
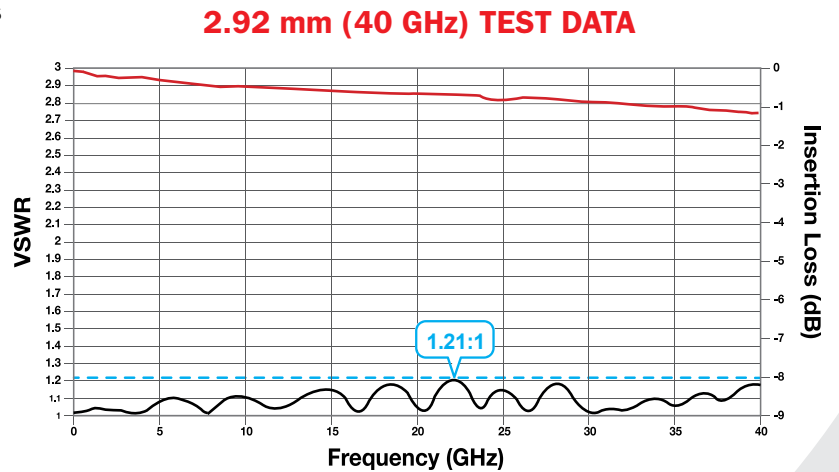
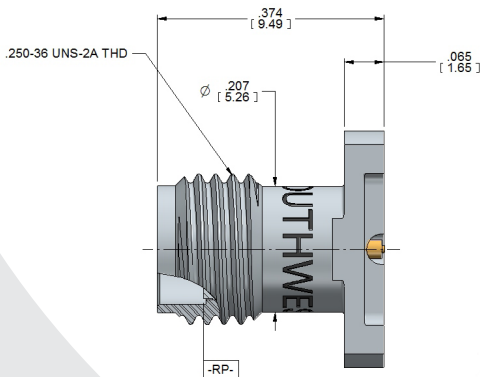
**VSWR of 1.18:1 max across 50 GHz**

bandwidth. Data represent two  
2.4 mm connectors mounted on  
8 mil RO4003 test board.



**VSWR of 1.095:1 max per connector across**

40 GHz. Data represent two 2.92 mm connectors  
mounted on 8 mil RO4003 test-board.





# THE PERFORMANCE LEADER IN MICROWAVE CONNECTORS

## DESIGN ASSISTANCE

- Printed circuit board layout and connector part number recommendation
- 3D models for mechanical layout
- HFSS models (version 18.0 or newer) for EM simulations upon request and availability

## SPECIFICATIONS

### ELECTRICAL

- 1.0 mm: Mode free through 110 GHz
- 1.85 mm: Mode free through 67 GHz
- 2.40 mm: Mode free through 50 GHz
- 2.92 mm: Mode free through 40 GHz
- Low VSWR
- Low RF leakage
- Low insertion loss

### ENVIRONMENTAL

- Temperature: -55 to +165 °C

### MATERIALS / CONSTRUCTION

- Connector Housing: CRES Alloy UNS S30300 per ASTM A582, Passivated per ASTM A967
- Contact: BeCu, UNS C17300 per ASTM B196, Au plated per MIL-G-45204 or ASTM B488
- Center Contact Capture: Ultem 1000 per ASTM D5205
- Connector Interface:
  - 1.00 mm – Per IEC-611696-31
  - 1.85 mm – Per IEEE-287
  - 2.40 mm – Per MIL-STD-348, Figs. 324-1 and 324-2
  - 2.92 mm – Per MIL-STD-348, Figs. 323-1 and 323-2