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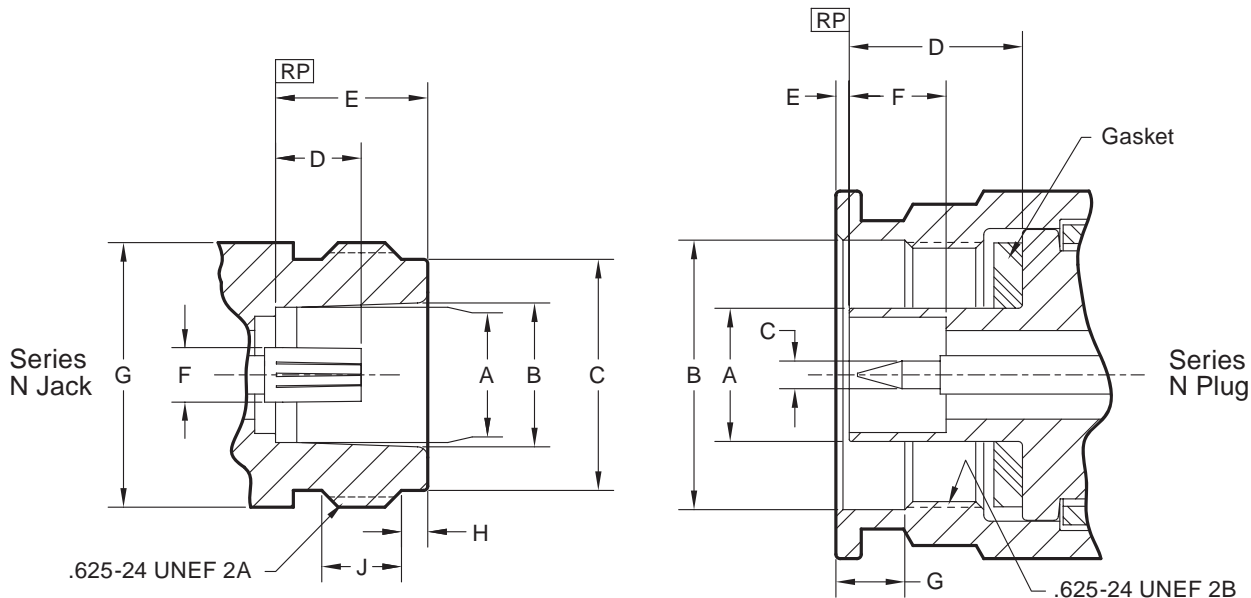
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Adapters: N Adapters can be found in the Adapter section.



N Series DC to 18.0 GHz

N Series Interface Standards



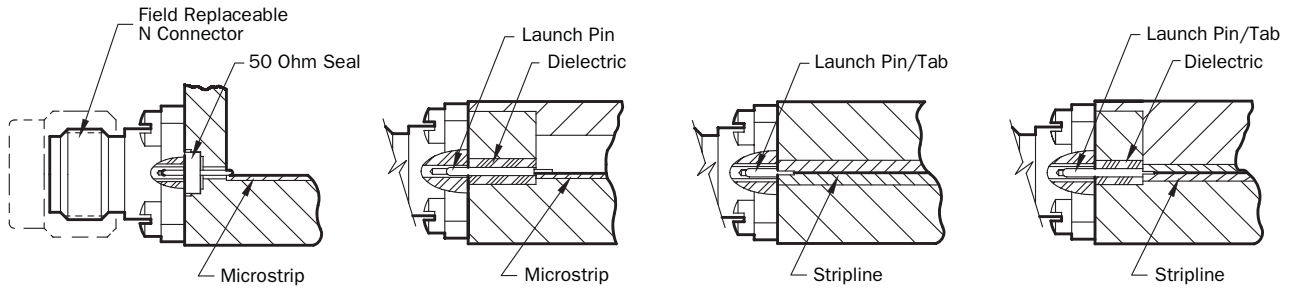
| N Jack (Socket Contact) | | | | |
|-------------------------|----------------------|----------|---------|---------|
| LTR | Inches (Millimeters) | | | |
| | Minimum | | Maximum | |
| A | .317 | (8.05) | .320 | (8.13) |
| B | .336 | (8.53) | .344 | (8.74) |
| C | .054 | (1.37) | .055 | (1.40) |
| D | .192 | (4.88) | .207 | (5.24) |
| E | .357 | (9.07) | .361 | (9.17) |
| F | .120 | (3.05) | .123 | (3.12) |
| G | .620 | (15.752) | .625 | (15.88) |
| H | .055 | (1.40) | .070 | (1.78) |
| J | .175 | (4.45) | .200 | (5.08) |
| | Inch | (mm) | Inch | (mm) |

| N Plug (Pin Contact) | | | | |
|----------------------|----------------------|---------|---------|---------|
| LTR | Inches (Millimeters) | | | |
| | Minimum | | Maximum | |
| A | .313 | (7.95) | .315 | (8.00) |
| B | .634 | (16.10) | .642 | (16.31) |
| C | .0635 | (1.613) | .0660 | (1.676) |
| D | .400 | (10.16) | .410 | (10.41) |
| E | .016 | (0.41) | .060 | (1.52) |
| F | .225 | (5.71) | .230 | (5.84) |
| G | .158 | (4.01) | .168 | (4.27) |
| | | | | |
| | | | | |
| | Inch | (mm) | Inch | (mm) |

Note: Interface I.A.W. MIL-PRF-39012 and MIL-STD-348, Figures 304-1 and 304-2.

Specifications

Applications



Available Accessories:

- 50 Ohm Seal
- Launch Pin & Dielectric
- Launch Pin/Tab
- Launch Pin/Tab & Dielectric

See Launch Accessories Section.

Electrical:

- Mode Free Through 18.0 GHz
- Low VSWR: DC to 18.0 GHz.....1.15:1 max
- Low RF Leakage \leq -100 dB
- Low Insertion Loss

Materials / Construction:

- Housing: Steel, CRES Alloy UNS S30300 Per ASTM A582, Passivated Per ASTM A967
- Contact: Beryllium Copper (BeCu), UNS C17300 Per ASTM B196, Gold Plated Per MIL-G-45204 or ASTM B488
- Dielectric: Virgin PTFE Fluorocarbon Per ASTM D1710
- Center Contact Capture: High Temperature Ultem 1000 Per ASTM D5205
- Connector Interface: Per MIL-STD-348, Figs. 304-1 and 304-2
- Raised Metal Grounding Ring for 360° Metal-to-metal Contact

Environmental:

- Temperature: -55° C to +165° C



N Series DC to 18.0 GHz

| | | |
|--|-------------------|---------------|
| <p>N JACK (FEMALE) 4 HOLE .500" SQUARE</p> | *ACCEPTS PIN DIA. | Connector No. |
| | .036 | 312-14SF |
| | .020 | 312-15SF |
| | .018 | 312-16SF |
| | .015 | 312-17SF |
| <p>N JACK (FEMALE) 4 HOLE .687" SQUARE</p> | *ACCEPTS PIN DIA. | Connector No. |
| | .036 | 312-04SF |
| | .020 | 312-05SF |
| | .018 | 312-06SF |
| | .015 | 312-07SF |
| <p>N JACK (FEMALE) 4 HOLE 1.0" SQUARE</p> | *ACCEPTS PIN DIA. | Connector No. |
| | .036 | 312-00SF |
| | .020 | 312-01SF |
| | .018 | 312-02SF |
| | .015 | 312-03SF |
| <p>N PLUG (MALE) 4 HOLE 1.0" SQUARE</p> | *ACCEPTS PIN DIA. | Connector No. |
| | .036 | 311-03SF |
| | .020 | 311-04SF |
| | .018 | 311-05SF |
| | .015 | 311-09SF |
| <p>N JACK (FEMALE) THREAD-IN WAVEGUIDE</p> | Probe Size | Connector No. |
| | .050D x 740L | 320-14SF |

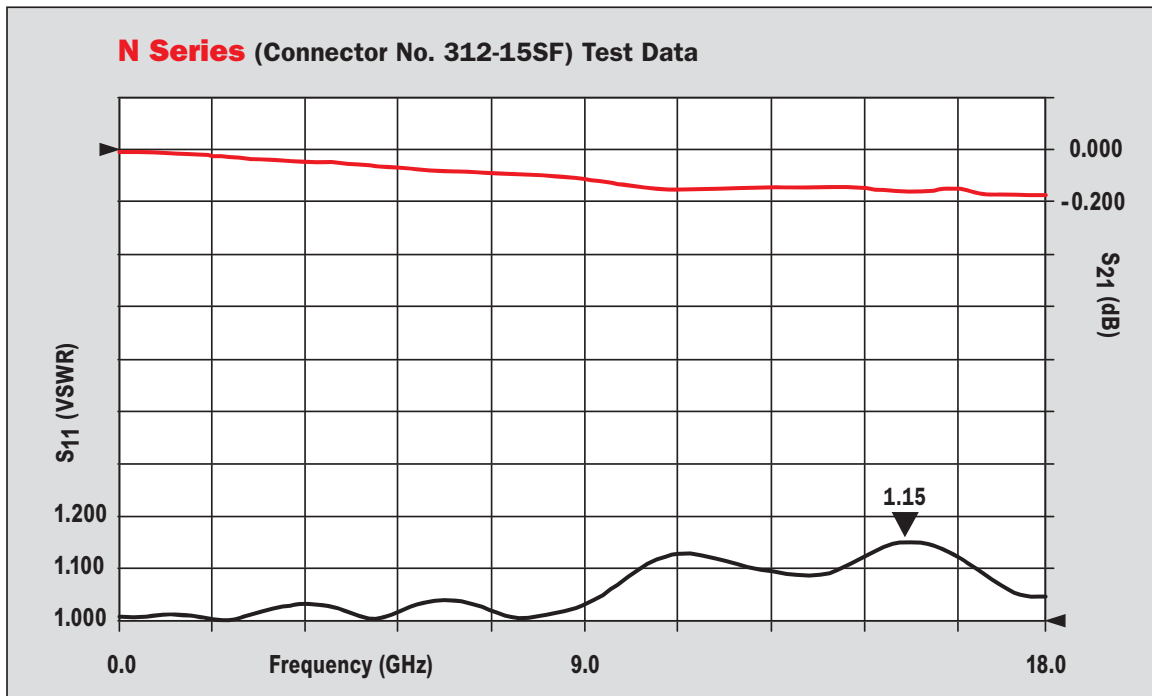
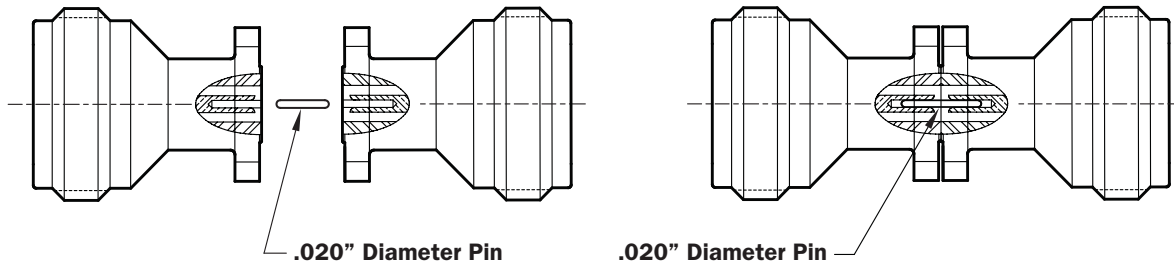
Typical Test Data

Back-to-Back Connector Testing

Back-to-back testing shows data for two connectors. Any internal mismatches within the connector will phase together when tested through 18.0 GHz. Taking the square root of the peak VSWR will provide the value for a single connector.



Connector No. 312-15SF with .020" Test Pin



$$\sqrt{1.15} = 1.07 \text{ Maximum for each connector}$$