

# F4PNMV2-HC

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Type N Male for 1/2 in FSJ4-50B cable



## Product Classification

|               |                                      |
|---------------|--------------------------------------|
| Product Type  | Wireless and radiating connector     |
| Product Brand | HELIAX®                              |
| Ordering Note | CommScope® standard product (Global) |

## General Specifications

|                                 |             |
|---------------------------------|-------------|
| Body Style                      | Straight    |
| Cable Family                    | FSJ4-50B    |
| Inner Contact Attachment Method | Captivated  |
| Inner Contact Plating           | Gold        |
| Interface                       | N Male      |
| Mounting Angle                  | Straight    |
| Outer Contact Attachment Method | Crush-flare |
| Outer Contact Plating           | Trimetal    |
| Pressurizable                   | No          |

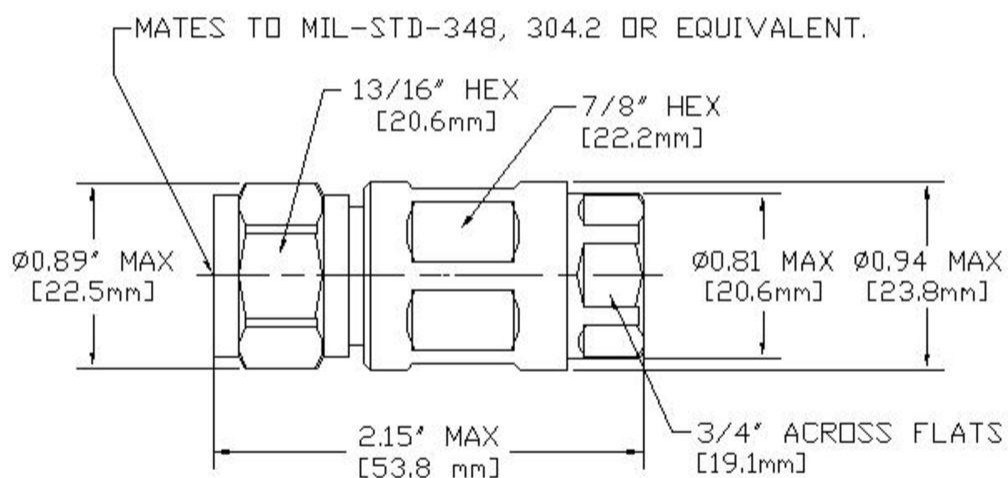
## Dimensions

|              |                    |
|--------------|--------------------|
| Length       | 54.1 mm   2.13 in  |
| Diameter     | 24.13 mm   0.95 in |
| Nominal Size | 1/2 in             |

## Outline Drawing

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## Electrical Specifications

|                                   |                      |
|-----------------------------------|----------------------|
| 3rd Order IMD at Frequency        | -120 dBm @ 910 MHz   |
| 3rd Order IMD Test Method         | Two +43 dBm carriers |
| Insertion Loss, typical           | 0.05 dB              |
| Average Power at Frequency        | 0.6 kW @ 900 MHz     |
| Cable Impedance                   | 50 ohm               |
| Connector Impedance               | 50 ohm               |
| dc Test Voltage                   | 2000 V               |
| Inner Contact Resistance, maximum | 2 mOhm               |
| Insulation Resistance, minimum    | 5000 MOhm            |
| Operating Frequency Band          | 0 – 12000 MHz        |
| Outer Contact Resistance, maximum | 0.3 mOhm             |

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|                                      |         |
|--------------------------------------|---------|
| Peak Power, maximum                  | 10 kW   |
| RF Operating Voltage, maximum (vrms) | 707 V   |
| Shielding Effectiveness              | -110 dB |

## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|----------------|------|------------------|
| 0–1000 MHz     | 1.04 | 36               |
| 1010–2000 MHz  | 1.04 | 35               |
| 2010–3000 MHz  | 1.09 | 28               |

## Mechanical Specifications

|                                     |   |
|-------------------------------------|---|
| Attachment Durability               | 25 cycles                                   |
| Connector Retention Tensile Force   | 889.64 N   200 lbf                          |
| Connector Retention Torque          | 5.42 N-m   47.998 in lb                     |
| Coupling Nut Proof Torque           | 4.52 N-m   39.997 in lb                     |
| Coupling Nut Retention Force        | 444.82 N   100 lbf                          |
| Coupling Nut Retention Force Method | MIL-C-39012C-3.25, 4.6.22                   |
| Insertion Force                     | 66.72 N   15 lbf                            |
| Insertion Force Method              | MIL-C-39012C-3.12, 4.6.9                    |
| Interface Durability                | 500 cycles                                  |
| Interface Durability Method         | IEC 61169-16:9.5                            |
| Mechanical Shock Test Method        | MIL-STD-202F, Method 213B, Test Condition C |

## Environmental Specifications

|                                    |   |
|------------------------------------|---|
| Operating Temperature              | -55 °C to +85 °C (-67 °F to +185 °F)                                  |
| Storage Temperature                | -55 °C to +85 °C (-67 °F to +185 °F)                                  |
| Attenuation, Ambient Temperature   | 20 °C   68 °F   |
| Average Power, Ambient Temperature | 40 °C   104 °F  |
| Corrosion Test Method              | MIL-STD-1344A, Method 1001.1, Test Condition A                        |
| Immersion Depth                    | 1 m   |
| Immersion Test Mating              | Mated   |
| Immersion Test Method              | IEC 60529:2001, IP68  |
| Moisture Resistance Test Method    | MIL-STD-202F, Method 106F   |
| Thermal Shock Test Method          | MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C |

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|                           |   |
|---------------------------|---|
| Vibration Test Method     | MIL-STD-202F, Method 204D, Test Condition B |
| Water Jetting Test Mating | Mated                                       |
| Water Jetting Test Method | IEC 60529:2001, IP66                        |

## Packaging and Weights

Weight, net 90.72 g | 0.2 lb

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CHINA-ROHS    | Below maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant  |



## \* Footnotes

|                         |  |
|-------------------------|--|
| Immersion Depth         | Immersion at specified depth for 24 hours                  |
| Insertion Loss, typical | 0.05# freq (GHz) (not applicable for elliptical waveguide) |