# F4A-PDMDM-2M-X

FSJ4-50B SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 2 m

## Product Classification

| | |
|---|---|
| **Product Type** | SureFlex® standard |
| **Product Brand** | HELIAX® \| SureFlex® |
| **Product Series** | FSJ4-50B |

## General Specifications

| | |
|---|---|
| **Attachment, Connector B** | Field attachment |
| **Body Style, Connector A** | Straight |
| **Body Style, Connector B** | Straight |
| **Interface, Connector A** | 7-16 DIN Male |
| **Interface, Connector B** | 7-16 DIN Male |
| **Specification Sheet Revision Level** | A |

## Dimensions

| | |
|---|---|
| **Length** | 2 m \| 6.562 ft |
| **Nominal Size** | 1/2 in |

## Electrical Specifications

| | |
|---|---|
| **DTF, Connector A** | -32 dB |

## VSWR/Return Loss

| Frequency Band | VSWR, typical | Return Loss, typical (dB) |
|---|---|---|
| **0–3000 MHz** | 1.106 | 25.96 |
| **2.2–2.7 GHz** | 1.083 | 27.99 |

## Jumper Assembly Sample Label

# F4A-PDMDM-2M-X


## Environmental Specifications

| | |
|---|---|
| **Immersion Test Method** | Meets IEC 60529:2001, IP68 in mated condition |

## Regulatory Compliance/Certifications

| Agency | Classification |
|---|---|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## Included Products

| | |
|---|---|
| F4HM-D | – 4.3-10 Male for 1/2 in FSJ4-50B cable |
| F4HMP-D | – 4.3-10 Male Push Pull for 1/2 in FSJ4-50B cable |
| F4PDMV2-C | – 7-16 DIN Male for 1/2 in FSJ4-50B cable |

# F4HM-D

4.3-10 Male for 1/2 in FSJ4-50B cable

## Product Classification

| | |
|---|---|
| **Product Type** | Wireless and radiating connector |
| **Product Brand** | HELIAX® |
| **Product Series** | FSJ4-50B \| FSJ4RK-50B |
| **Ordering Note** | ANDREW® standard product (Global) |

## General Specifications

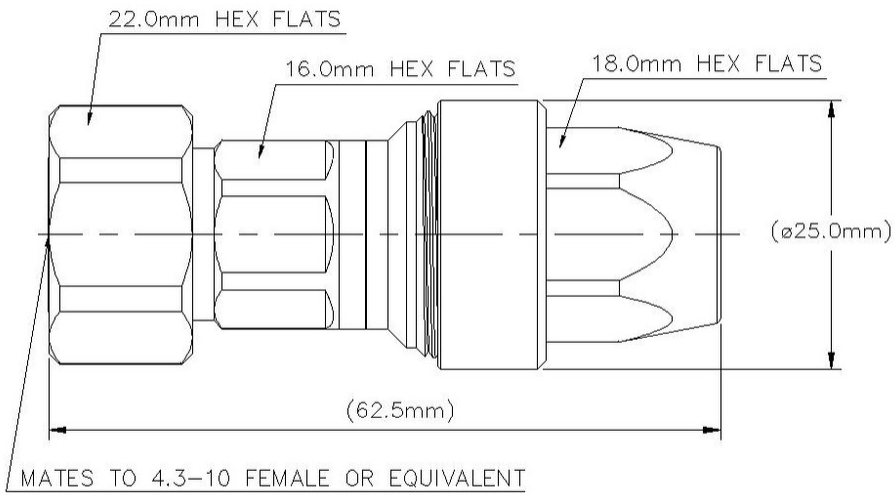
| | |
|---|---|
| **Body Style** | Straight |
| **Cable Family** | FSJ4-50B |
| **Inner Contact Attachment Method** | Captivated |
| **Inner Contact Plating** | Silver |
| **Interface** | 4.3-10 Male |
| **Mounting Angle** | Straight |
| **Outer Contact Attachment Method** | Crush-flare |
| **Outer Contact Plating** | Trimetal |

## Dimensions

| | |
|---|---|
| **Length** | 62.48 mm \| 2.46 in |
| **Diameter** | 24.89 mm \| 0.98 in |
| **Nominal Size** | 1/2 in |

# F4HM-D

## Outline Drawing




## Electrical Specifications

| | |
|---|---|
| **3rd Order IMD at Frequency** | -116 dBm @ 910 MHz |
| **3rd Order IMD Dynamic Test Method** | Two +43 dBm carriers |
| **3rd Order IMD Dynamic, typical** | -116 dB |
| **Insertion Loss Coefficient, typical** | 0.05 |
| **Average Power at Frequency** | 600.0 W @ 900 MHz |
| **Cable Impedance** | 50 ohm |
| **Connector Impedance** | 50 ohm |
| **dc Test Voltage** | 2500 V |
| **Inner Contact Resistance, maximum** | 0.8 mOhm |
| **Insulation Resistance, minimum** | 5000 MOhm |
| **Operating Frequency Band** | 0 – 7500 MHz |
| **Outer Contact Resistance, maximum** | 1.5 mOhm |
| **Peak Power, maximum** | 22.5 kW |
| **RF Operating Voltage, maximum (vrms)** | 884 V |

| | |
|---|---|
| **Shielding Effectiveness** | -110 dB |

## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|---|---|---|
| **45–1000 MHz** | 1.02 | 40.09 |
| **1000–2700 MHz** | 1.03 | 36.61 |
| **2700–3800 MHz** | 1.065 | 30.04 |
| **3800–6000 MHz** | 1.15 | 23.13 |

## 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** | 10 N-m \| 88.507 in lb |
| **Coupling Nut Retention Force** | 449.27 N \| 101 lbf |
| **Interface Durability** | 100 cycles |
| **Interface Durability Method** | IEC 61169-4:9.5 |
| **Mechanical Shock Test Method** | IEC 60068-2-27 |

## 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** | IEC 60068-2-11 |
| **Immersion Depth** | 1 m |
| **Immersion Test Mating** | Mated |
| **Immersion Test Method** | IEC 60529:2001, IP68 |
| **Moisture Resistance Test Method** | IEC 60068-2-3 |
| **Thermal Shock Test Method** | IEC 60068-2-14 |
| **Vibration Test Method** | IEC 60068-2-6 |
| **Water Jetting Test Mating** | Mated |
| **Water Jetting Test Method** | IEC 60529:2001, IP66 |

## Packaging and Weights

| | |
|---|---|
| **Weight, net** | 100 g \| 0.22 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 www.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

## * Footnotes

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

# F4HMP-D

4.3-10 Male Push Pull for 1/2 in FSJ4-50B cable

## Product Classification

| | |
|---|---|
| **Product Type** | Wireless and radiating connector |
| **Product Brand** | HELIAX® |
| **Product Series** | FSJ4-50B \| FSJ4RK-50B |
| **Ordering Note** | ANDREW® standard product (Global) |

## General Specifications

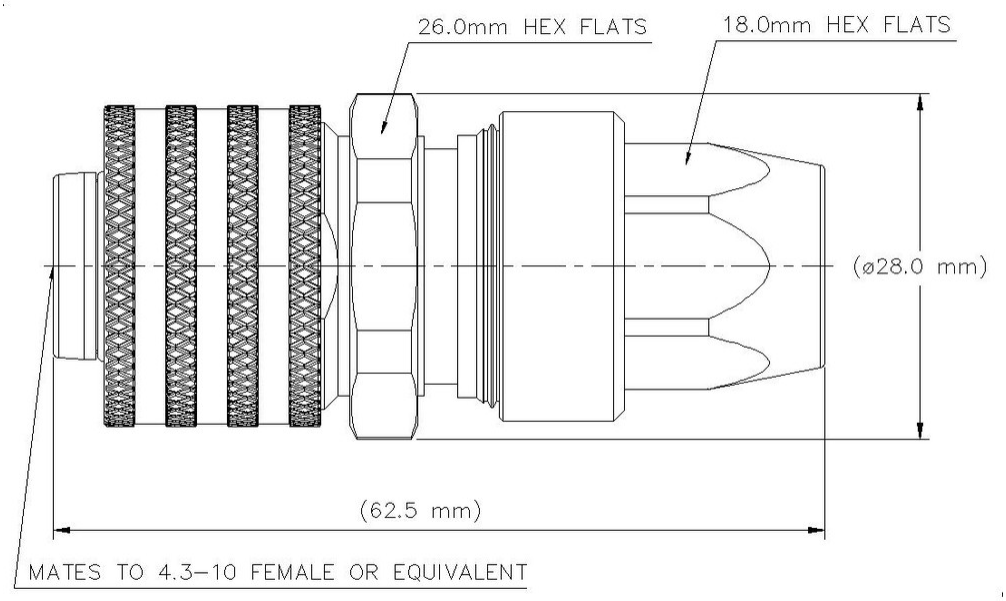
| | |
|---|---|
| **Body Style** | Straight |
| **Cable Family** | FSJ4-50B |
| **Inner Contact Attachment Method** | Captivated |
| **Inner Contact Plating** | Silver |
| **Interface** | 4.3-10 Male |
| **Mounting Angle** | Straight |
| **Outer Contact Attachment Method** | Crush-flare |
| **Outer Contact Plating** | Trimetal |

## Dimensions

| | |
|---|---|
| **Length** | 62.48 mm \| 2.46 in |
| **Diameter** | 27.94 mm \| 1.1 in |
| **Nominal Size** | 1/2 in |

# F4HMP-D

## Outline Drawing




## Electrical Specifications

| | |
|---|---|
| **3rd Order IMD at Frequency** | -116 dBm @ 910 MHz |
| **3rd Order IMD Dynamic Test Method** | Two +43 dBm carriers |
| **3rd Order IMD Dynamic, typical** | -116 dB |
| **Insertion Loss Coefficient, typical** | 0.05 |
| **Average Power at Frequency** | 600.0 W @ 900 MHz |
| **Cable Impedance** | 50 ohm |
| **Connector Impedance** | 50 ohm |
| **dc Test Voltage** | 2500 V |
| **Inner Contact Resistance, maximum** | 0.8 mOhm |
| **Insulation Resistance, minimum** | 5000 MOhm |
| **Operating Frequency Band** | 0 – 7500 MHz |
| **Outer Contact Resistance, maximum** | 1.5 mOhm |
| **Peak Power, maximum** | 22.5 kW |
| **RF Operating Voltage, maximum (vrms)** | 884 V |
| **Shielding Effectiveness** | -110 dB |

## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|---|---|---|
| **45–1000 MHz** | 1.02 | 40.09 |
| **1000–2700 MHz** | 1.03 | 36.61 |
| **2700–3800 MHz** | 1.065 | 30.04 |
| **3800–6000 MHz** | 1.15 | 23.13 |

## Mechanical Specifications

| | |
|---|---|
| **Attachment Durability** | 5 cycles |
| **Connector Retention Tensile Force** | 889.64 N \| 200 lbf |
| **Connector Retention Torque** | 5.42 N-m \| 47.998 in lb |
| **Interface Durability** | 25 cycles |
| **Interface Durability Method** | IEC 61169-4:9.5 |
| **Mechanical Shock Test Method** | IEC 60068-2-27 |

## 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** | IEC 60068-2-11 |
| **Immersion Depth** | 1 m |
| **Immersion Test Mating** | Mated |
| **Immersion Test Method** | IEC 60529:2001, IP68 |
| **Moisture Resistance Test Method** | IEC 60068-2-3 |
| **Thermal Shock Test Method** | IEC 60068-2-14 |
| **Vibration Test Method** | IEC 60068-2-6 |
| **Water Jetting Test Mating** | Mated |
| **Water Jetting Test Method** | IEC 60529:2001, IP66 |

## Packaging and Weights

| | |
|---|---|
| **Weight, net** | 123.37 g \| 0.272 lb |

## Regulatory Compliance/Certifications

| Agency | Classification |
|---|---|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## * Footnotes

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

# F4PDMV2-C

7-16 DIN Male for 1/2 in FSJ4-50B cable

## Product Classification

| | |
|---|---|
| **Product Type** | Wireless and radiating connector |
| **Product Brand** | HELIAX® |
| **Product Series** | FSJ4-50B \| FSJ4RK-50B |
| **Ordering Note** | ANDREW® standard product (Global) |

## General Specifications

| | |
|---|---|
| **Body Style** | Straight |
| **Cable Family** | FSJ4-50B |
| **Inner Contact Attachment Method** | Captivated |
| **Inner Contact Plating** | Silver |
| **Interface** | 7-16 DIN Male |
| **Mounting Angle** | Straight |
| **Outer Contact Attachment Method** | Crush-flare |
| **Outer Contact Plating** | Trimetal |
| **Pressurizable** | No |

## Dimensions

| | |
|---|---|
| **Length** | 50.04 mm \| 1.97 in |
| **Diameter** | 34.54 mm \| 1.36 in |
| **Nominal Size** | 1/2 in |

## Electrical Specifications

| | |
|---|---|
| **3rd Order IMD at Frequency** | -120 dBm @ 910 MHz |
| **3rd Order IMD Test Method** | Two +43 dBm carriers |
| **Insertion Loss Coefficient, typical** | 0.05 |
| **Average Power at Frequency** | 1.0 kW @ 900 MHz |
| **Cable Impedance** | 50 ohm |

| | |
|---|---|
| **Connector Impedance** | 50 ohm |
| **dc Test Voltage** | 2500 V |
| **Inner Contact Resistance, maximum** | 0.8 mOhm |
| **Insulation Resistance, minimum** | 5000 MOhm |
| **Operating Frequency Band** | 0 – 7500 MHz |
| **Outer Contact Resistance, maximum** | 1.5 mOhm |
| **Peak Power, maximum** | 15.6 kW |
| **RF Operating Voltage, maximum (vrms)** | 884 V |
| **Shielding Effectiveness** | -110 dB |

## VSWR/Return Loss

| Frequency Band | VSWR | Return Loss (dB) |
|---|---|---|
| **0–2200 MHz** | 1.032 | 36.06 |
| **2200–2700 MHz** | 1.046 | 32.96 |
| **2700–3000 MHz** | 1.052 | 31.92 |

## 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** | 24.86 N-m \| 220.003 in lb |
| **Coupling Nut Retention Force** | 1,000.85 N \| 225 lbf |
| **Coupling Nut Retention Force Method** | MIL-C-39012C-3.25, 4.6.22 |
| **Insertion Force** | 200.17 N \| 45 lbf |
| **Insertion Force Method** | IEC 61169-1:15.2.4 |
| **Interface Durability** | 500 cycles |
| **Interface Durability Method** | IEC 61169-4:9.5 |
| **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-202, Method 107, Test Condition A-1, Low Temperature -55 °C |
| **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** | 136.08 g \| 0.3 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 www.andrew.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

## * Footnotes

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