

# F4A-PDMDR-X

Base Product



HELIAX® 1/2" Superflexible SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male Right Angle, variable length

## Product Classification

|                |                                      |
|----------------|--------------------------------------|
| Product Type   | Wireless transmission cable assembly |
| Product Brand  | HELIAX®   SureFlex®                  |
| Product Series | FSJ4-50B                             |

## General Specifications

|                                    |  |
|------------------------------------|--|
| Attachment, Connector B            | Field attachment   |
| Body Style, Connector A            | Straight   |
| Body Style, Connector B            | Right angle  |
| Interface, Connector A             | 7-16 DIN Male  |
| Interface, Connector B             | 7-16 DIN Male  |
| Specification Sheet Revision Level | A  |
| Variable Length                    | For custom lengths, contact your local ANDREW representative |

## Dimensions

|              |            |
|--------------|------------|
| Length       | 0 m   0 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     | 1.11          | 26                        |
| 2.2–2.7 GHz    | 1.09          | 28                        |

## Jumper Assembly Sample Label

# F4A-PDMDR-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

- F4PDR-C
  - 7-16 DIN Male Right Angle for 1/2 in FSJ4-50B cable

# F4PDR-C



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

## Product Classification

|               |                                  |
|---------------|----------------------------------|
| Product Type  | Wireless and radiating connector |
| Product Brand | HELIAX®                          |

## General Specifications

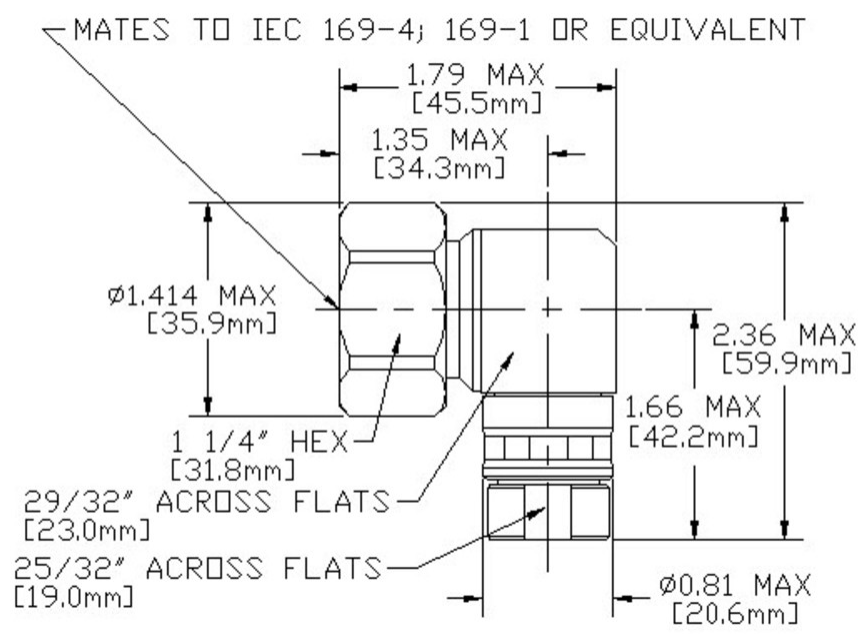
|                                 |               |
|---------------------------------|---------------|
| Body Style                      | Right angle   |
| Cable Family                    | FSJ4-50B      |
| Inner Contact Attachment Method | Captivated    |
| Inner Contact Plating           | Gold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

## Dimensions

|                    |                    |
|--------------------|--------------------|
| Width              | 31.75 mm   1.25 in |
| Length             | 60.96 mm   2.4 in  |
| Right Angle Length | 45.72 mm   1.8 in  |
| Diameter           | 40.39 mm   1.59 in |
| Nominal Size       | 1/2 in             |

## Outline Drawing

# F4PDR-C



## 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 – 5200 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) |
|----------------|------|------------------|
| 50–1000 MHz    | 1.04 | 34.16            |

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|               |      |       |
|---------------|------|-------|
| 1000–1900 MHz | 1.04 | 34.16 |
| 1900–2200 MHz | 1.07 | 29.42 |
| 2000–2700 MHz | 1.1  | 26.45 |
| 2700–3600 MHz | 1.13 | 24.29 |
| 3600–5000 MHz | 1.25 | 19.09 |

## 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              | IEC 60068-2-6   |
| Water Jetting Test Mating          | Mated   |
| Water Jetting Test Method          | IEC 60529:2001, IP66  |

# F4PDR-C

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## Packaging and Weights

**Weight, net** 207.36 g | 0.457 lb

## \* Footnotes

**Insertion Loss Coefficient, typical** 0.05√~freq (GHz) (not applicable for elliptical waveguide)

**Immersion Depth** Immersion at specified depth for 24 hours