

# 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  | CommScope® 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               |

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|                                      |              |
|--------------------------------------|--------------|
| 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                        |

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|                                    |   |
|------------------------------------|---|
| 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 <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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                  |