

# F4PDMV2-C



7-16 DIN 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           | Silver        |
| Interface                       | 7-16 DIN Male |
| Mounting Angle                  | Straight      |
| Outer Contact Attachment Method | Crush-flare   |
| Outer Contact Plating           | Trimetal      |
| Pressurizable                   | No            |

## Dimensions

|              |                     |
|--------------|---------------------|
| Length       | 1.97 in   50.038 mm |
| Diameter     | 1.36 in   34.544 mm |
| 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, typical          | 0.05 dB              |
| Attenuation, Ambient Temperature | 20 °C   68 °F        |

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|   |                  |
|---|------------------|
| <b>Average Power at Frequency</b>           | 1.0 kW @ 900 MHz |
| <b>Cable Impedance</b>                      | 50 ohm           |
| <b>Connector Impedance</b>                  | 50 ohm           |
| <b>dc Test Voltage</b>                      | 2500 V           |
| <b>Inner Contact Resistance, maximum</b>    | 0.8 mOhm         |
| <b>Insulation Resistance, minimum</b>       | 5000 MOhm        |
| <b>Operating Frequency Band</b>             | 0 – 7500 MHz     |
| <b>Outer Contact Resistance, maximum</b>    | 1.5 mOhm         |
| <b>Peak Power, maximum</b>                  | 15.6 kW          |
| <b>RF Operating Voltage, maximum (vrms)</b> | 884 V            |
| <b>Shielding Effectiveness</b>              | -110 dB          |

## VSWR/Return Loss

| <b>Frequency Band</b> | <b>VSWR</b> | <b>Return Loss (dB)</b> |
|-----------------------|-------------|-------------------------|
| <b>0–2200 MHz</b>     | 1.04        | 36                      |
| <b>2200–2700 MHz</b>  | 1.05        | 33                      |
| <b>2700–3000 MHz</b>  | 1.06        | 32                      |

## Mechanical Specifications

|  |   |
|--|---|
| <b>Attachment Durability</b>               | 25 cycles                                   |
| <b>Connector Retention Tensile Force</b>   | 200 lbf   889.644 N                         |
| <b>Connector Retention Torque</b>          | 48 in lb   5.423 N-m                        |
| <b>Coupling Nut Proof Torque</b>           | 220 in lb   24.857 N-m                      |
| <b>Coupling Nut Retention Force</b>        | 225 lbf   1,000.85 N                        |
| <b>Coupling Nut Retention Force Method</b> | MIL-C-39012C-3.25, 4.6.22                   |
| <b>Insertion Force</b>                     | 45 lbf   200.17 N                           |
| <b>Insertion Force Method</b>              | IEC 61169-1:15.2.4                          |
| <b>Interface Durability</b>                | 500 cycles                                  |
| <b>Interface Durability Method</b>         | IEC 61169-4:9.5                             |
| <b>Mechanical Shock Test Method</b>        | MIL-STD-202F, Method 213B, Test Condition C |

## Environmental Specifications

|                              |                                      |
|------------------------------|--------------------------------------|
| <b>Operating Temperature</b> | -55 °C to +85 °C (-67 °F to +185 °F) |
| <b>Storage Temperature</b>   | -55 °C to +85 °C (-67 °F to +185 °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  |



## \* Footnotes

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