

# F4PDMV2-C



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

## Product Classification

|                     |                                  |
|---------------------|----------------------------------|
| <b>Brand</b>        | HELIAX®                          |
| <b>Product Type</b> | Wireless and radiating connector |

## General Specifications

|                       |                                      |
|-----------------------|--------------------------------------|
| <b>Interface</b>      | 7-16 DIN Male                        |
| <b>Body Style</b>     | Straight                             |
| <b>Mounting Angle</b> | Straight                             |
| <b>Ordering Note</b>  | CommScope® standard product (Global) |

## Electrical Specifications

|   |                      |
|---|----------------------|
| <b>Connector Impedance</b>                  | 50 ohm               |
| <b>Operating Frequency Band</b>             | 0 – 7500 MHz         |
| <b>Average Power at Frequency</b>           | 1.0 kW @ 900 MHz     |
| <b>Cable Impedance</b>                      | 50 ohm               |
| <b>3rd Order IMD, typical</b>               | -120 dBm @ 910 MHz   |
| <b>3rd Order IMD Test Method</b>            | Two +43 dBm carriers |
| <b>RF Operating Voltage, maximum (vrms)</b> | 884.00 V             |
| <b>dc Test Voltage</b>                      | 2500 V               |
| <b>Outer Contact Resistance, maximum</b>    | 1.50 mOhm            |
| <b>Inner Contact Resistance, maximum</b>    | 0.80 mOhm            |
| <b>Insulation Resistance, minimum</b>       | 5000 MOhm            |
| <b>Peak Power, maximum</b>                  | 15.60 kW             |
| <b>Insertion Loss, typical</b>              | 0.05 dB              |
| <b>Shielding Effectiveness</b>              | -110 dB              |

## Mechanical Specifications

|  |             |
|--|-------------|
| <b>Outer Contact Attachment Method</b> | Crush-flare |
| <b>Inner Contact Attachment Method</b> | Captivated  |
| <b>Outer Contact Plating</b>           | Trimetal    |
| <b>Inner Contact Plating</b>           | Silver      |

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|  |                           |
|--|---------------------------|
| <b>Attachment Durability</b>               | 25 cycles                 |
| <b>Interface Durability</b>                | 500 cycles                |
| <b>Interface Durability Method</b>         | IEC 61169-4:9.5           |
| <b>Connector Retention Tensile Force</b>   | 890 N   200 lbf           |
| <b>Connector Retention Torque</b>          | 5.42 N-m   48.00 in lb    |
| <b>Insertion Force</b>                     | 200.17 N   45.00 lbf      |
| <b>Insertion Force Method</b>              | IEC 61169-1:15.2.4        |
| <b>Pressurizable</b>                       | No                        |
| <b>Coupling Nut Proof Torque</b>           | 24.86 N-m   220.00 in lb  |
| <b>Coupling Nut Retention Force</b>        | 1000.85 N   225.00 lbf    |
| <b>Coupling Nut Retention Force Method</b> | MIL-C-39012C-3.25, 4.6.22 |

## Dimensions

|                     |                    |
|---------------------|--------------------|
| <b>Nominal Size</b> | 1/2 in             |
| <b>Diameter</b>     | 34.54 mm   1.36 in |
| <b>Length</b>       | 50.01 mm   1.97 in |
| <b>Weight</b>       | 136.08 g   0.30 lb |

## 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)                                |
| <b>Immersion Depth</b>                 | 1 m   |
| <b>Immersion Test Mating</b>           | Mated   |
| <b>Immersion Test Method</b>           | IEC 60529:2001, IP68  |
| <b>Water Jetting Test Mating</b>       | Mated   |
| <b>Water Jetting Test Method</b>       | IEC 60529:2001, IP66  |
| <b>Moisture Resistance Test Method</b> | MIL-STD-202F, Method 106F   |
| <b>Mechanical Shock Test Method</b>    | MIL-STD-202F, Method 213B, Test Condition C                         |
| <b>Thermal Shock Test Method</b>       | MIL-STD-202, Method 107, Test Condition A-1, Low Temperature -55 °C |
| <b>Vibration Test Method</b>           | MIL-STD-202F, Method 204D, Test Condition B                         |
| <b>Corrosion Test Method</b>           | MIL-STD-1344A, Method 1001.1, Test Condition A                      |

## Standard Conditions

|   |                |
|---|----------------|
| <b>Attenuation, Ambient Temperature</b>   | 20 °C   68 °F  |
| <b>Average Power, Ambient Temperature</b> | 40 °C   104 °F |

## Return Loss/VSWR

| <b>Frequency Band</b> | <b>VSWR</b> | <b>Return Loss (dB)</b> |
|-----------------------|-------------|-------------------------|
| 0–2200 MHz            | 1.03        | 36.00                   |

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|               |      |       |
|---------------|------|-------|
| 2200–2700 MHz | 1.05 | 33.00 |
| 2700–3000 MHz | 1.05 | 32.00 |

## Regulatory Compliance/Certifications

### Agency

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

### Classification

Compliant by Exemption

Designed, manufactured and/or distributed under this quality management system

Above Maximum Concentration Value (MCV)



## \* Footnotes

### Immersion Depth

Immersion at specified depth for 24 hours

### Insertion Loss, typical

$0.05\sqrt{f_{\text{freq}}}$  (GHz) (not applicable for elliptical waveguide)