# F4RNA-PDMDM-1M



HELIAX® 1/2" Superflexible Fire retardant SureFlex® Jumper with interface types 7-16 DIN Male and 7-16 DIN Male, 1 m

#### **Product Classification**

**Product Type**Wireless transmission cable assembly

Product Brand HELIAX® | SureFlex®

Product Series RSJ4-50

General Specifications

Body Style, Connector AStraightBody Style, Connector BStraight

Interface, Connector A7-16 DIN MaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level

Dimensions

**Length** 1 m | 3.281 ft

Nominal Size 1/2 in

**Electrical Specifications** 

DTF, Connector A -32 dB

DTF, Connector B -32 dB

Jumper Assembly Sample Label



# F4RNA-PDMDM-1M



### **Environmental Specifications**

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

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

## 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



#### Included Products

FSJ4RK-50B - FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-s1a-d1-a1 (CPR testing is conducted annually

please reference the website for latest classification)

ANDREW® an Amphenol company



FSJ4RK-50B, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-sla-dl-al (CPR testing is conducted annually please reference the website for latest classification)

#### **Product Classification**

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

**Product Series** FSJ4-50B

Ordering Note ANDREW® standard product in Asia Pacific

General Specifications

**Product Number** 520094502/00 | SZ520094502/00

**Flexibility** Superflexible

Jacket Color Black

**Performance Note**Attenuation values typical, guaranteed within 5%

**Dimensions** 

 Diameter Over Dielectric
 8.89 mm | 0.35 in

 Diameter Over Jacket
 13.462 mm | 0.53 in

 Inner Conductor OD
 3.556 mm | 0.14 in

 Outer Conductor OD
 12.192 mm | 0.48 in

Nominal Size 1/2 in

**Electrical Specifications** 

Cable Impedance 50 ohm ±1 ohm

**Capacitance** 82.7 pF/m | 25.207 pF/ft

dc Resistance, Inner Conductor2.69 ohms/km | 0.82 ohms/kftdc Resistance, Outer Conductor5.12 ohms/km | 1.561 ohms/kft

dc Test Voltage 2500 V

**Inductance** 0.207  $\mu$ H/m | 0.063  $\mu$ H/ft

**Insulation Resistance** 100000 MOhms-km

Jacket Spark Test Voltage (rms) 4000 V

ANDREW® an Amphenol company

Operating Frequency Band 1 – 10200 MHz

 Peak Power
 22.5 kW

 Velocity
 81 %

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.201	20.8
800-960 MHz	1.201	20.8
1700-2200 MHz	1.201	20.8
2300-2700 MHz	1.201	20.8

### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.327	0.1	22.5
1.5	0.401	0.122	22.5
2.0	0.463	0.141	22.5
10.0	1.044	0.318	10.12
20.0	1.485	0.453	7.11
30.0	1.828	0.557	5.78
50.0	2.377	0.724	4.44
85.0	3.13	0.954	3.38
88.0	3.187	0.971	3.32
100.0	3.406	1.038	3.1
108.0	3.546	1.081	2.98
150.0	4.214	1.285	2.51
174.0	4.558	1.389	2.32
200.0	4.908	1.496	2.15
204.0	4.96	1.512	2.13
300.0	6.095	1.858	1.73
400.0	7.121	2.17	1.48
450.0	7.592	2.314	1.39
460.0	7.684	2.342	1.37
500.0	8.042	2.451	1.31
512.0	8.148	2.483	1.3
600.0	8.891	2.71	1.19



700.0	9.683	2.951	1.09
800.0	10.431	3.179	1.01
824.0	10.605	3.232	1
894.0	11.101	3.383	0.95
960.0	11.555	3.522	0.91
1000.0	11.824	3.604	0.89
1218.0	13.226	4.031	0.8
1250.0	13.423	4.091	0.79
1500.0	14.906	4.543	0.71
1700.0	16.027	4.885	0.66
1794.0	16.537	5.04	0.64
1800.0	16.57	5.05	0.64
2000.0	17.624	5.371	0.6
2100.0	18.137	5.528	0.58
2200.0	18.641	5.682	0.57
2300.0	19.138	5.833	0.55
2500.0	20.11	6.129	0.53
2700.0	21.056	6.418	0.5
3000.0	22.432	6.837	0.47
3400.0	24.198	7.375	0.44
3600.0	25.055	7.636	0.42
3700.0	25.478	7.765	0.41
3800.0	25.898	7.893	0.41
3900.0	26.314	8.02	0.4
4000.0	26.727	8.146	0.4
4100.0	27.136	8.271	0.39
4200.0	27.542	8.394	0.38
4300.0	27.946	8.517	0.38
4400.0	28.346	8.639	0.37
4500.0	28.744	8.761	0.37
4600.0	29.139	8.881	0.36
4700.0	29.531	9.001	0.36
4800.0	29.921	9.119	0.35
4900.0	30.308	9.238	0.35
5000.0	30.693	9.355	0.34

6000.0	34.427	10.493	0.31
8000.0	41.403	12.619	0.26
8800.0	44.054	13.427	0.24
10000.0	47.914	14.603	0.22

### Material Specifications

**Dielectric Material** Foam PE

**Jacket Material** Non-halogenated, fire retardant polyolefin

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends31.75 mm1.25 inMinimum Bend Radius, single Bend31.75 mm1.25 in

Number of Bends, minimum30Number of Bends, typical50

 Tensile Strength
 79 kg | 174.165 lb

 Bending Moment
 2.7 N-m | 23.897 in lb

 Flat Plate Crush Strength
 2 kg/mm | 111.995 lb/in

## **Environmental Specifications**

Installation temperature $-40 \, ^{\circ}\text{C}$  to  $+60 \, ^{\circ}\text{C}$  ( $-40 \, ^{\circ}\text{F}$  to  $+140 \, ^{\circ}\text{F}$ )Operating Temperature $-40 \, ^{\circ}\text{C}$  to  $+60 \, ^{\circ}\text{C}$  ( $-40 \, ^{\circ}\text{F}$  to  $+140 \, ^{\circ}\text{F}$ )Storage Temperature $-40 \, ^{\circ}\text{C}$  to  $+60 \, ^{\circ}\text{C}$  ( $-40 \, ^{\circ}\text{F}$  to  $+140 \, ^{\circ}\text{F}$ )

Attenuation, Ambient Temperature  $68 \,^{\circ}\text{F} \mid 20 \,^{\circ}\text{C}$ Average Power, Ambient Temperature  $104 \,^{\circ}\text{F} \mid 40 \,^{\circ}\text{C}$ Average Power, Inner Conductor Temperature  $212 \,^{\circ}\text{F} \mid 100 \,^{\circ}\text{C}$ 

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Fire Retardancy Test Method IEC 60332-1-2 | NFPA 130-2010 | UL 1666/CATVR/CMR

Smoke Index Test Method IEC 61034



**Toxicity Index Test Method** IEC 60754-1 | IEC 60754-2

Packaging and Weights

**Cable weight** 0.24 kg/m | 0.161 lb/ft

### Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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
UL/ETL Certification CATVR/CMR





