### F1A-HMHR-35-TMB



WARNING: DO NOT MATE WITH 4.1-9.5 DIN

#### **Product Classification**

Product Type SureFlex® standard

Product Brand HELIAX® | SureFlex®

**Product Series** FSJ1-50A

General Specifications

Body Style, Connector AStraightBody Style, Connector BRight angleInterface, Connector A4.3-10 MaleInterface, Connector B4.3-10 Male

Specification Sheet Revision Level A

**Dimensions** 

**Length** 10.668 m | 35 ft

Nominal Size 1/4 in

**Electrical Specifications** 

**3rd Order IMD** -117 dBm

**3rd Order IMD Test Method** Two +43 dBm carriers

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698-2700 MHz	1.152	23.02
3400-3800 MHz	1.288	18
3800-6000 MHz	1.288	18

### Jumper Assembly Sample Label



### F1A-HMHR-35-TMB



#### **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

FSJ1-50A

FSJ1-50A, HELIAX® Superflexible Low Density Foam Coaxial Cable, corrugated copper, 1/4 in, black PE jacket





# FSJ1-50A, HELIAX® Superflexible Low Density Foam Coaxial Cable, corrugated copper, 1/4 in, black PE jacket

#### **Product Classification**

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

 Product Series
 FSJ1-50A | MLOC

General Specifications

**Product Number** 887009902/00 | SZ887009902/00

**Flexibility** Superflexible

Jacket Color Black

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

**Dimensions** 

 Diameter Over Dielectric
 4.826 mm | 0.19 in

 Diameter Over Jacket
 7.366 mm | 0.29 in

 Inner Conductor OD
 1.905 mm | 0.075 in

 Outer Conductor OD
 6.35 mm | 0.25 in

Nominal Size 1/4 in

**Electrical Specifications** 

Cable Impedance50 ohm ±1 ohm

Capacitance79.4 pF/m | 24.201 pF/ftdc Resistance, Inner Conductor9.843 ohms/km | 3 ohms/kft

**dc Resistance, Outer Conductor** 7.216 ohms/km | 2.199 ohms/kft

dc Test Voltage 1600 V

% Inductance 0.2  $\mu$ H/m | 0.061  $\mu$ H/ft

**Insulation Resistance** 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

**Operating Frequency Band** 1 – 18000 MHz



 $\begin{array}{lll} \textbf{Peak Power} & 6.4 \ \text{kW} \\ \textbf{Velocity} & 82 \ \% \\ \end{array}$ 

#### VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-960 MHz	1.201	20.8
1700-2200 MHz	1.201	20.8
2200-2700 MHz	1.433	15

#### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.577	0.176	6.4
1.5	0.707	0.215	6.4
2.0	0.816	0.249	6.4
10.0	1.833	0.559	3.99
20.0	2.6	0.792	2.81
30.0	3.192	0.973	2.29
50.0	4.136	1.261	1.77
85.0	5.419	1.652	1.35
88.0	5.516	1.681	1.33
100.0	5.889	1.795	1.24
108.0	6.125	1.867	1.19
150.0	7.25	2.21	1.01
174.0	7.825	2.385	0.93
200.0	8.408	2.563	0.87
204.0	8.495	2.589	0.86
300.0	10.373	3.162	0.71
400.0	12.051	3.673	0.61
450.0	12.817	3.906	0.57
460.0	12.965	3.952	0.56
500.0	13.545	4.128	0.54
512.0	13.715	4.18	0.53
600.0	14.909	4.544	0.49
700.0	16.175	4.93	0.45
800.0	17.362	5.292	0.42



824.0	17.637	5.376	0.41
894.0	18.42	5.614	0.4
960.0	19.134	5.832	0.38
1000.0	19.556	5.96	0.37
1218.0	21.738	6.626	0.34
1250.0	22.044	6.719	0.33
1500.0	24.326	7.414	0.3
1700.0	26.038	7.936	0.28
1794.0	26.813	8.172	0.27
1800.0	26.862	8.187	0.27
2000.0	28.455	8.673	0.26
2100.0	29.227	8.908	0.25
2200.0	29.984	9.139	0.24
2300.0	30.727	9.365	0.24
2500.0	32.174	9.806	0.23
2700.0	33.576	10.233	0.22
3000.0	35.602	10.851	0.21
3400.0	38.183	11.638	0.19
3600.0	39.428	12.017	0.19
3700.0	40.041	12.204	0.18
3800.0	40.647	12.389	0.18
3900.0	41.247	12.571	0.18
4000.0	41.841	12.753	0.17
4100.0	42.429	12.932	0.17
4200.0	43.012	13.11	0.17
4300.0	43.59	13.286	0.17
4400.0	44.163	13.46	0.17
4500.0	44.73	13.633	0.16
4600.0	45.293	13.805	0.16
4700.0	45.852	13.975	0.16
4800.0	46.405	14.144	0.16
4900.0	46.955	14.311	0.16
5000.0	47.5	14.477	0.15
6000.0	52.747	16.077	0.14
8000.0	62.37	19.01	0.12

8800.0	65.974	20.108	0.11
10000.0	71.173	21.693	0.1
12000.0	79.393	24.198	0.09
14000.0	87.172	26.569	0.08
15800.0	93.872	28.611	0.08
16000.0	94.601	28.833	0.08
18000.0	101.745	31.01	0.07

#### Material Specifications

**Dielectric Material** Foam PE

Jacket Material PE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

#### Mechanical Specifications

Minimum Bend Radius, multiple Bends25.4 mm | 1 inMinimum Bend Radius, single Bend25.4 mm | 1 in

Number of Bends, minimum 15 Number of Bends, typical 20

 Tensile Strength
 68 kg | 149.914 lb

 Bending Moment
 0.7 N-m | 6.196 in lb

Flat Plate Crush Strength 1.8 kg/mm | 100.795 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 $-55 \, ^{\circ}\text{C}$  to  $+85 \, ^{\circ}\text{C}$  ( $-67 \, ^{\circ}\text{F}$  to  $+185 \, ^{\circ}\text{F}$ )Storage Temperature $-70 \, ^{\circ}\text{C}$  to  $+85 \, ^{\circ}\text{C}$  ( $-94 \, ^{\circ}\text{F}$  to  $+185 \, ^{\circ}\text{F}$ )

Attenuation, Ambient Temperature68 °F | 20 °CAverage Power, Ambient Temperature104 °F | 40 °CAverage Power, Inner Conductor Temperature212 °F | 100 °C

Packaging and Weights

**Cable weight** 0.07 kg/m | 0.047 lb/ft



### 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
UL/ETL Certification Compliant





