Fairview Microwave
an INFINITE brand

FM-1/4SFHC-BULK DATA SHEET

1/4 Superflexible Helical Low Loss Corrugated Coax Cable Black PE Jacket

Our corrugated cables and Low PIM connector combinations result in cable assemblies with excellent Passive Intermodulation performance. Solid copper outer conductors provide the highest possible RF shielding. This Superflexible cable features excellent return loss performance. The highly foamed dielectric and optimized dimensions of these cables result in excellent low attenuation values. The Superflexible helically corrugated copper outer conductor allows for a small bending radius.

Configuration:

- Low Loss Corrugated Cable
- 1 Shield(s)

Features:

- Low Passive Intermodulation
- Solid copper outer conductor provides the highest possible RF shielding
- Superflexible helically corrugated copper outer conductor enables a small bending radius
- Excellent return loss performance
- Highly foamed dielectric provides low attenuation

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		20.4	GHz
Cutoff Frequency		25		GHz
Impedance		50		Ohms
Velocity of Propagation		82		%
Shielding Effectiveness	120			dB
DWV (DC)			900	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resist.			3.2	Ohms/1000ft
Outer Conductor DC Resist.			2.53	Ohms/1000ft
Nominal Capacitance		24.4 [80.05]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.03	0.15	0.45	0.9	1.5	GHz
Attenuation, Typ	0.94 3.08	2.14 7.02	3.75 12.3	5.46 17.91	7.26 23.82	dB/100ft dB/100m
Power In (CW), Max	2,090	924	520	360	278	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.8	2	2.2	2.5	3	GHz
Attenuation, Typ dB/100m	8.02 26.31	8.52 27.95	8.99 29.49	9.67 31.73	10.73 35.2	dB/100ft
Power In (CW), Max	250	238	230	210	190	Watts

Mechanical Specifications

Diameter	0.303 in [7.7 mm]
Weight	0.042 lbs/ft [0.06 kg/m]
Number of Bends, Min	20
Min. Bend Radius (Installation)	0.5 in [12.7 mm]

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Min. Bend Radius (Repeated)	1 in [25.4 mm]
Tensile Strength	79 lbs [35.83 kg]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum, 1 Strands	0.075 in [1.91 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.173 in [4.39 mm]
First Shield	Helically Corrugated Copper Tube	[ ]
Jacket	PE, Black	0.303 in [7.7 mm]

Environmental Specifications

Temperature

Operating Range	-55 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

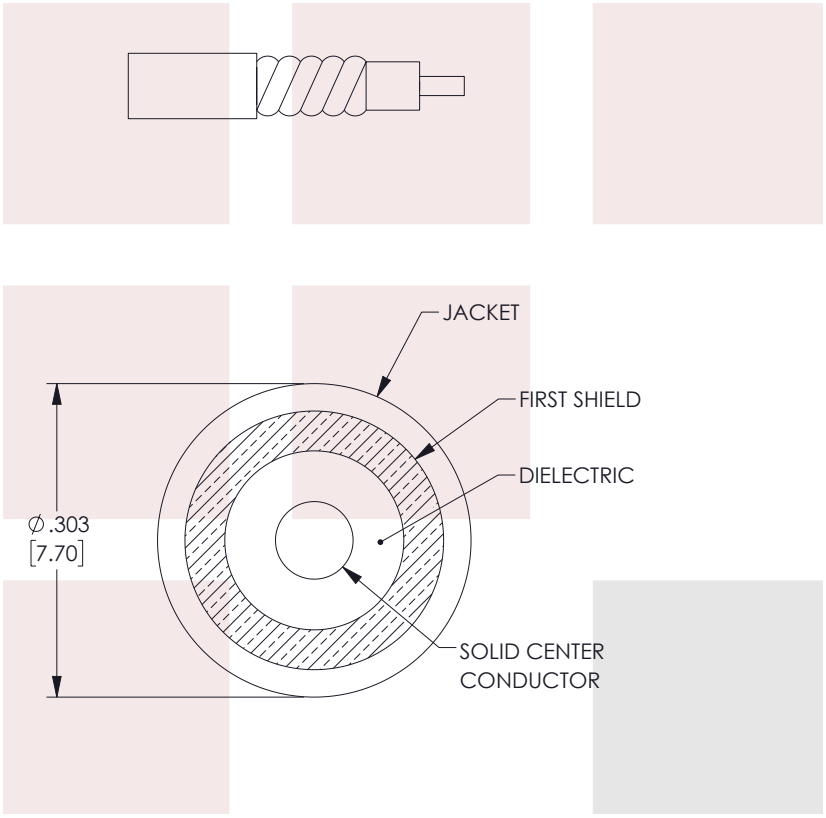
Notes:

1/4 Superflexible Helical Low Loss Corrugated Coax Cable Black PE Jacket from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: 1/4 Superflexible Helical Low Loss Corrugated Coax Cable Black PE Jacket FM-1/4SFHC-BULK

URL: https://www.fairviewmicrowave.com/fm-1-4-sfhc-low-loss-corrugated-coax-cable-pe-jacket-fm-1-4sfhc-bulk-p.aspx

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	03/24/2022	AGANWANI



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TITLE

1/4 Superflexible Helical Low Loss Corrugated Coax Cable Black PE Jacket

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ±.2 [5.08]
.XX = ±.02 [.51]
.XXX = ±.005 [.13]
FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION

SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	DZINN	FM-1/4SFHC-BULK	A

T-Rev.D