



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

TECHNICAL DATA SHEET

PE-1/4SFHC

1/4" Superflexible Low Loss Foam Dielectric Copper Corrugated Coaxial Cable features

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.

- 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

Configuration

Cable Design	Low Loss
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Shield Materials	Helically Corrugated Copper Tube
Jacket Material, Color	PE, Black

Electrical Specifications

Impedance, Ohms	50
Velocity of Propagation, %	82
Max Operating Frequency, GHz	20.4
Cutoff Frequency, GHz	25
RF Shielding, dB	120
Capacitance, pF/ft [pF/m]	24.4 [80.05]
Inductance, uH/ft [uH/m]	0.059 [0.19]
DC Resistance Inner Conductor, Ohms/1000ft [Ohms/Km]	3.2 [10.50]
DC Resistance Outer Conductor, Ohms/1000ft [Ohms/Km]	2.53 [8.30]
Dielectric Withstanding Voltage, Vdc	900
Jacket Spark, Vrms	2000

Electrical Specifications by Frequency

Frequency 1

Frequency, MHz	30
Attenuation, dB/100 ft [dB/100m]	0.94 [3.08]
Power Handling, Watts	2090

Frequency 2

Frequency, MHz	150
Attenuation, dB/100 ft [dB/100m]	2.14 [7.02]
Power Handling, Watts	924

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal.



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Frequency 3

Frequency, MHz	450
Attenuation, dB/100 ft [dB/100m]	3.75 [12.30]
Power Handling, Watts	520

Frequency 4

Frequency, MHz	900
Attenuation, dB/100 ft [dB/100m]	5.46 [17.91]
Power Handling, Watts	360

Frequency 5

Frequency, GHz	1.5
Attenuation, dB/100 ft [dB/100m]	7.26 [23.82]
Power Handling, Watts	278

Frequency 6

Frequency, GHz	1.8
Attenuation, dB/100 ft [dB/100m]	8.02 [26.31]
Power Handling, Watts	250

Frequency 7

Frequency, GHz	2
Attenuation, dB/100 ft [dB/100m]	8.52 [27.95]
Power Handling, Watts	238

Frequency 8

Frequency, GHz	2.2
Attenuation, dB/100 ft [dB/100m]	8.99 [29.49]
Power Handling, Watts	230

Frequency 9

Frequency, GHz	2.5
Attenuation, dB/100 ft [dB/100m]	9.67 [31.73]
Power Handling, Watts	210

Frequency 10

Frequency, GHz	3
Attenuation, dB/100 ft [dB/100m]	10.73 [35.20]
Power Handling, Watts	190

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Mechanical Specifications

Inner Conductor:	Number of Strands	1
	Material	Copper Clad Aluminum
	Diameter, in [mm]	0.075 [1.91]
Dielectric:	Type	Foam PE
	Diameter, in [mm]	0.173 [4.39]
Shield:	Number of	1
	Material 1	Helically Corrugated Copper Tube
	Diameter, in [mm]	0.256 [6.50]
Jacket:	Material	PE
	Diameter, in [mm]	0.303 [7.70]
	Color	Black
	Repeated Minimum Bend Radius, in [mm]	1 [25.40]
	One Time Minimum Bend Radius, in [mm]	0.5 [12.70]
	Minimum Number of Bends	20
	Tensile Strength, Lbs [Kg]	79 [35.83]
	Weight, Lbs/ft [Kg/m]	0.048 [0.07]
	Temperature Operating Range, deg C	-55 to +85

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	Yes
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Other Data

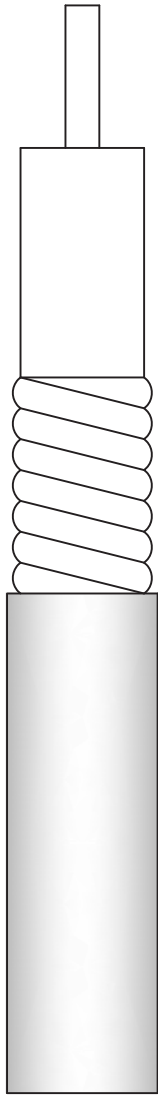
URL: <http://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

Low Loss 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. We maintain 99% availability of the industry's broadest selection of RF, microwave and fiber optic products.

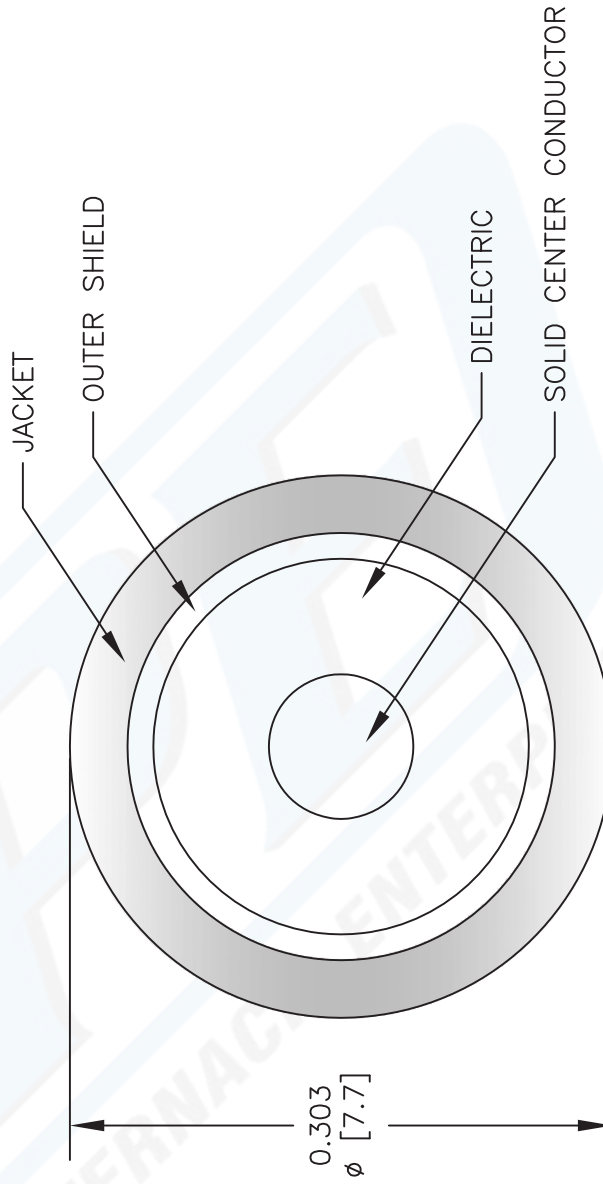
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PE-1/4SFHC CAD Drawing

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DWG TITLE

PE-1/4SFHC

NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

FSCM NO. 53919

CAD FILE 092112

SCALE N/A

SIZE A

2233



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