



N Female Connector Clamp/Solder
Attachment For 1/2 inch Helical

TECHNICAL DATA SHEET

PE44555

N Female Connector Clamp/Solder Attachment For 1/2 inch Helical

Configuration

Connector	N Female
Connector Interface Type	1/2 inch Helical
Cable Attachment Method (Shield/Contact)	Clamp/Solder
Body Style	Straight

Electrical Specifications

Impedance, Ohms	50
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Mechanical Specifications

Size

Length, in [mm]	2.045 [51.94]
Width/Dia., in [mm]	0.845 [21.46]
Weight, lbs [g]	0.198 [89.81]

Connector

Type	N Female
Contact Material and Plating	Silver
Body Material and Plating	Brass, Tri-Metal
Dielectric Type	PTFE

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

RoHS Compliant	Yes
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Plotted and Other Data

Notes:	Values at 25 °C, sea level
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N Female Connector Clamp/Solder Attachment For 1/2 inch Helical from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Connector Clamp/Solder Attachment For 1/2 inch Helical PE44555](http://www.pasternack.com/n-female-standard-1-2-inch-helical-connector-pe44555-p.aspx)

URL: <http://www.pasternack.com/n-female-standard-1-2-inch-helical-connector-pe44555-p.aspx>

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ASSEMBLY PROCEDURES

STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE.

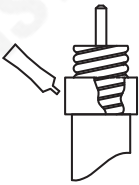
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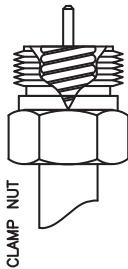
DEBURR

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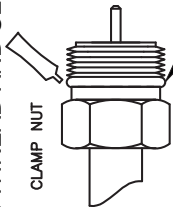
PUT THE SCREW GASKET ONTO CABLE, PAY ATTENTION TO THE CORRECT DIRECTION OF THE SCREW GASKET (ANGLE DIRECTION TOWARDS THE FRONT). WIPE THE GASKET WITH GREASE.



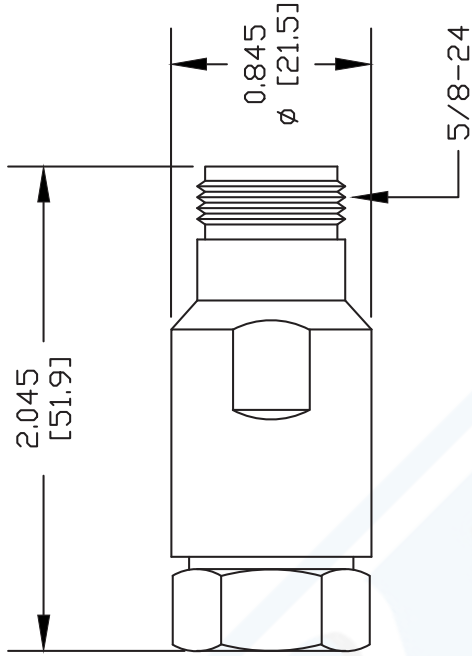
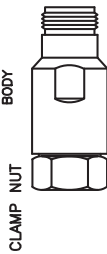
SCREW CLAMP NUT ONTO CABLE UNTIL EDGES OF NUT & OUTER CONDUCTOR ARE FLAT.



SLIDE O-RING OVER THREAD AND SEAT INTO PLACE. GREASE O-RING.



HOLD CLAMP NUT STEADY & SCREW BODY TIGHTLY ONTO CABLE.



Pasternack Enterprises, Inc.
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DWG TITLE

PE44555

FSCM NO. 53919

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].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE 090808

SCALE N/A

SIZE A

147



N Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC

TECHNICAL DATA SHEET

PE44729

N Male Connectors

These Pasternack Enterprises' high performance connectors are designed to fit on most commercially available 1/2" superflexible, spiral corrugated copper cables and aluminum cables. These connectors are perfect for applications requiring low PIM levels, with outstanding RF performance and are easy to install in the field.

Features of the new connectors include:

- Tri-metal coating resulting in a very durable surface with good corrosion protection while providing superior electrical conductivity and exceptional PIM performance
- PIM performance of ≤ -160 dBc. VSWR levels of ≤ 1.10 up to 3GHz
- Available in 7/16 DIN and Type N series with both male and female interfaces
- O Rings gaskets provide a reliable long term weather seal
- Designed to fit on most commercially available 1/2" corrugated copper and aluminum cables

Configuration

Connector	N Male
Connector Specification	IEC 60169-16
Connector Interface Type	1/2" Superflexible, PE-1/2SFHC
Cable Attachment Method (Shield/Contact)	Clamp/Non-Solder Contact
Connector Design	Low PIM
Body Style	Straight

Electrical Specifications

Frequency Range, GHz	DC to 3
Impedance, Ohms	50
Maximum VSWR	1.1:1
Maximum Insertion Loss, dB	0.1
Dielectric Withstanding Voltage, Vrms	2,500
Maximum Passive Intermodulation (2 x 20 Watts), dBc	-160

Mechanical Specifications

Temperature	
Operating Range, deg C	-40 to +85
Size	
Length, in [mm]	2.07 [52.58]
Width/Dia., in [mm]	0.85 [21.59]
Weight, lbs [g]	0.23 [104.33]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Low PIM Connector Clamp/Non-Solder Contact Attachment For 1/2" Superflexible, PE-1/2SFHC PE44729](#)

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N Male Low PIM Connector Clamp/Non-Solder Contact
Attachment For 1/2" Superflexible, PE-1/2SFHC

TECHNICAL DATA SHEET

PE44729

Connector

Type	N Male
Mating Cycles	500
Contact Material and Plating	Spring Copper, Silver
Contact Plating Specification	200 [5] μ in. [μ m] minimum
Outer Conductor Material and Plating	Brass, Tri-Metal
Outer Conductor Plating Specification	78 [2] μ in. [μ m] minimum
Coupling Nut Material and Plating	Brass, Nickel
Coupling Nut Plating Specification	200 [5] μ in. [μ m] minimum
Hex Size, mm	20
Torque, in-lbs [Nm]	15 [1.7]
Body Material and Plating	Brass, Tri-Metal
Body Plating Specification	78 [2] μ in. [μ m] minimum
Dielectric Type	TPX

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

RoHS Compliant	Yes
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Plotted and Other Data

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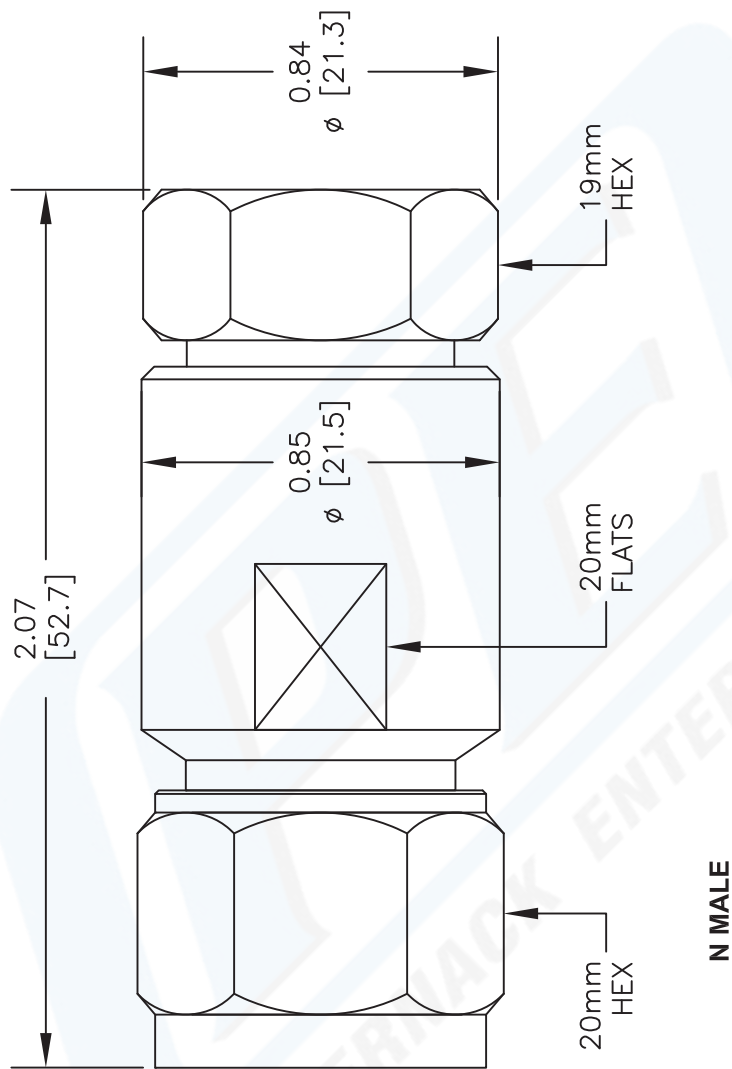
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PE44729 CAD Drawing

N Male Low PIM Connector Clamp/Non-Solder Contact
Attachment For 1/2" Superflexible, PE-1/2SFHC



DWG TITLE

PE44729

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COAXIAL & FIBER OPTICS



REV. -

FSCM NO. 53919

DATE 081412

SCALE N/A

SIZE A

2233



Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

TECHNICAL DATA SHEET

PE-1/2SFHC

1/2" 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	10.2
Cutoff Frequency, GHz	13
RF Shielding, dB	120
Capacitance, pF/ft [pF/m]	25.3 [83.01]
Inductance, uH/ft [uH/m]	0.059 [0.19]
DC Resistance Inner Conductor, Ohms/1000ft [Ohms/Km]	0.91 [2.99]
DC Resistance Outer Conductor, Ohms/1000ft [Ohms/Km]	1.08 [3.54]
Max Operating Voltage, Volts	1000
Dielectric Withstanding Voltage, Vrms	2500

Electrical Specifications by Frequency

Frequency 1

Frequency, MHz	100
Attenuation, dB/100 ft [dB/100m]	0.92 [3.02]
Power Handling, Watts	2600

Frequency 2

Frequency, MHz	450
Attenuation, dB/100 ft [dB/100m]	2.07 [6.79]
Power Handling, Watts	1200

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)

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Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

TECHNICAL DATA SHEET

PE-1/2SFHC

Frequency 3

Frequency, MHz	900
Attenuation, dB/100 ft [dB/100m]	3.02 [9.91]
Power Handling, Watts	810

Frequency 4

Frequency, MHz	1
Attenuation, dB/100 ft [dB/100m]	3.23 [10.60]
Power Handling, Watts	770

Frequency 5

Frequency, GHz	1.8
Attenuation, dB/100 ft [dB/100m]	4.45 [14.60]
Power Handling, Watts	550

Frequency 6

Frequency, GHz	1.9
Attenuation, dB/100 ft [dB/100m]	4.57 [14.99]
Power Handling, Watts	540

Frequency 7

Frequency, GHz	2.2
Attenuation, dB/100 ft [dB/100m]	4.97 [16.31]
Power Handling, Watts	490

Frequency 8

Frequency, GHz	2.5
Attenuation, dB/100 ft [dB/100m]	5.37 [17.62]
Power Handling, Watts	460

Frequency 9

Frequency, GHz	2.7
Attenuation, dB/100 ft [dB/100m]	5.61 [18.41]
Power Handling, Watts	440

Frequency 10

Frequency, GHz	3
Attenuation, dB/100 ft [dB/100m]	5.95 [19.52]
Power Handling, Watts	410

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Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket

TECHNICAL DATA SHEET

PE-1/2SFHC

Mechanical Specifications

Inner Conductor:	Number of Strands	1
	Material	Copper Clad Aluminum
Dielectric:	Diameter, in [mm]	0.139 [3.53]
	Type	Foam PE
Shield:	Diameter, in [mm]	0.362 [9.19]
	Number of	1
Jacket:	Material 1	Helically Corrugated Copper Tube
	Diameter, in [mm]	0.468 [11.89]
Jacket:	Material	PE
	Diameter, in [mm]	0.535 [13.59]
Jacket:	Color	Black
	Repeated Minimum Bend Radius, in [mm]	1.18 [29.97]
Jacket:	One Time Minimum Bend Radius, in [mm]	0.6 [15.24]
	Minimum Number of Bends	20
Jacket:	Tensile Strength, Lbs [Kg]	157 [71.21]
	Weight, Lbs/ft [Kg/m]	0.129 [0.19]
Jacket:	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

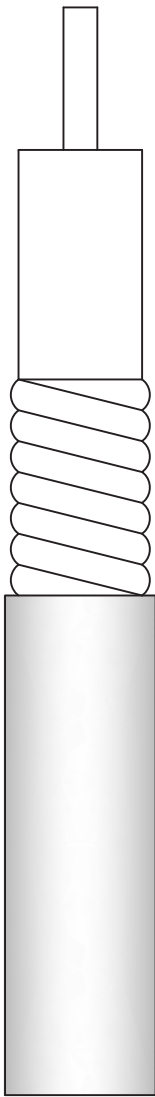
URL: <http://www.pasternack.com/50-ohm-low-loss-corrugated-1-2-superflexible-helical-coax-pe-1-2sfhc-p.aspx>

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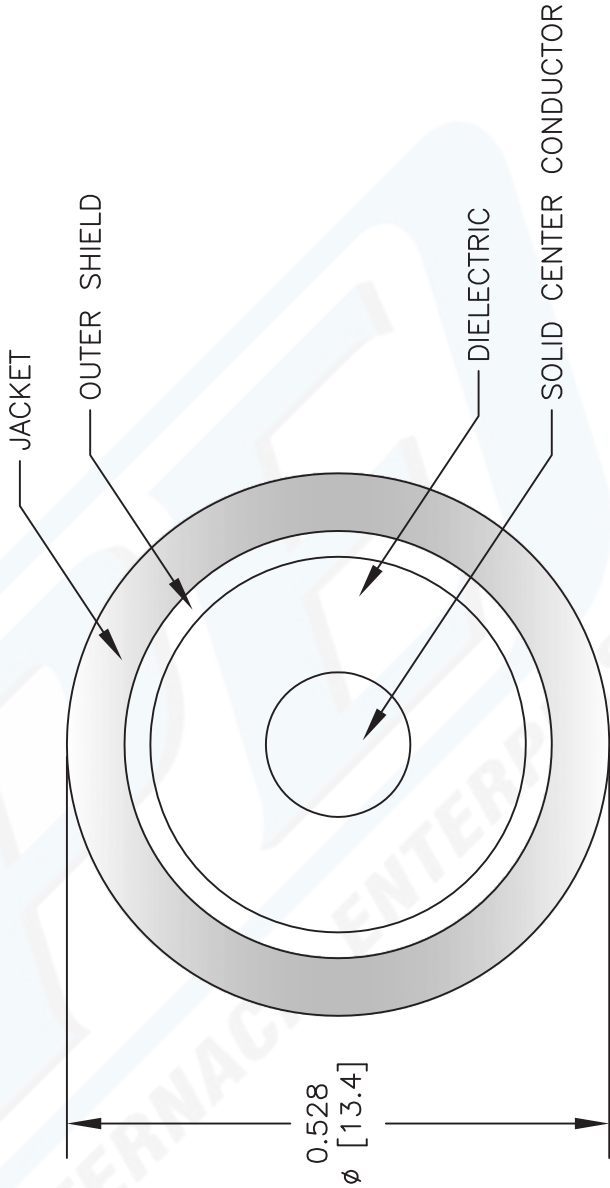
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PE-1/2SFHC CAD Drawing

Low Loss 1/2 Superflexible Helical Corrugated Coax Cable with Black PE Jacket



PE-1/2SFHC



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DWG TITLE
PE-1/2SFHC

FSCM NO. 53919

SIZE A

2233



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