



N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

RF Connectors Technical Data Sheet

PE44554

Configuration

- N Male Connector
- IEC 60169-16
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: 1/2 inch Helical, 1/2 inch Superflexible, PE-1/2 Helical, PE-1/2SFHC
- 3/4 inch Hex
- Low PIM Design

Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.1:1
- PIM levels lower than -160 dBc
- Silver Plated Brass Contact
- 5 µm minimum contact plating
- IP67 Rated

Applications

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications

Description

Pasternack's PE44554 type N Right Angle, N, Low PIM, Connector is part of our full line of RF components available for same-day shipping. Our type N male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.1:1. The type N male connector also has low passive intermodulation of -160 dBc. Its right angle body geometry allows for easier connections in tight spaces. The connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Our type N male right angle connector PE44554 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.1:1	
Insertion Loss			0.1	dB
Passive Intermodulation using 2x20W tones			-160	dBc
Impedance		50		Ohms
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Inner Conductor DC Resistance			0.8	mOhms
Outer Conductor DC Resistance			0.4	mOhms
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical PE44554](#)



N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

RF Connectors
Technical Data Sheet

PE44554

Mechanical Specifications

Size

Length	2.77 in [70.36 mm]
Width	0.75 in [19.05 mm]
Height	1.73 in [43.82 mm]
Weight	0.43 lbs [194.14 g]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 5 µm minimum
Insulation	PTFE	
Body	Brass	Tri-Metal 2 µm minimum
Coupling Nut	Brass	Nickel 5 µm minimum

Environmental Specifications

Temperature

Operating Range	-55 to +155 deg C
Ingress Protection (IP) Rating	IP67 Rated
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition B
Thermal Shock	MIL-STD-202, Method 107, Condition B

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical

RF Connectors Technical Data Sheet

PE44554

N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

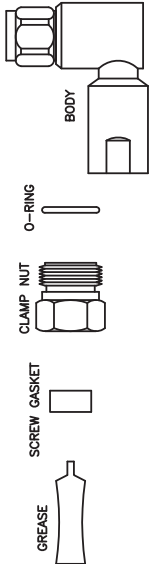
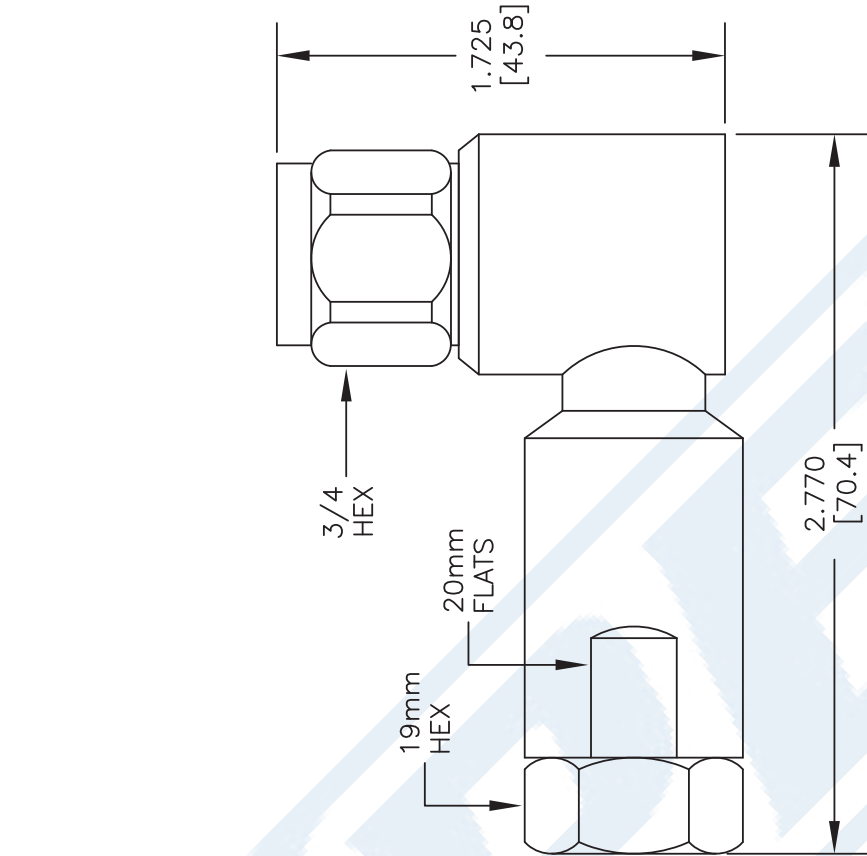
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical PE44554](https://www.pasternack.com/n-male-standard-1-2-inch-helical-connector-pe44554-p.aspx)

URL: <https://www.pasternack.com/n-male-standard-1-2-inch-helical-connector-pe44554-p.aspx>

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. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE44554 CAD Drawing

N Male Right Angle Low PIM Connector Clamp/Non-Solder Contact Attachment for 1/2 inch Helical



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE.
2. 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.
3. SCREW CLAMP NUT ONTO CABLE UNTIL EDGES OF NUT & OUTER CONDUCTOR ARE FLAT.
4. SLIDE O-RING OVER THREAD AND SEAT INTO PLACE. GREASE O-RING.
5. HOLD CLAMP NUT STEADY & SCREW BODY TIGHTLY ONTO CABLE.

DWG TITLE

PE44554

FSCM NO. 53919

CAD FILE 091813

SCALE N/A

SIZE A

2233

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.



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7/16 DIN Male Right Angle Connector Clamp/Non-Solder
Contact Attachment For 1/2 inch Helical, IP 68 Rated

TECHNICAL DATA SHEET

PE44979

Configuration

Connector	7/16 DIN Male
Connector Interface Type	1/2 inch Helical
Cable Attachment Method (Shield/Contact)	Clamp/Non-Solder Contact
Body Style	Right Angle

Electrical Specifications

Frequency Range, GHz	DC to 3
Impedance, Ohms	50
Maximum VSWR	1.15:1
Maximum Insertion Loss, dB	0.05
Maximum Operating Voltage, Volts	2,500
Maximum Passive Intermodulation (2 x 20 Watts), dBc	-160

Mechanical Specifications

Temperature

Operating Range, deg C	-55 to +155
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Size

Length, in [mm]	1.82 [46.23]
Width/Dia., in [mm]	1.25 [31.75]
Height, in [mm]	2.41 [61.21]

Connector

Type	7/16 DIN Male
Contact Material and Plating	Brass, Silver
Contact Plating Specification	5µ in. minimum
Coupling Nut Material and Plating	Brass, Nickel
Coupling Nut Plating Specification	5µ in. minimum
Hex Size, in.	1 1/4
Torque, ft-lbs [Nm]	18.439 [25]
Body Material and Plating	Brass, Tri-Metal
Body Plating Specification	2µ in. minimum
Dielectric Type	PTFE

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

RoHS Compliant	Yes
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [7/16 DIN Male Right Angle Connector Clamp/Non-Solder Contact Attachment For 1/2 inch Helical, IP 68 Rated PE44979](#)

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7/16 DIN Male Right Angle Connector Clamp/Non-Solder
Contact Attachment For 1/2 inch Helical, IP 68 Rated

TECHNICAL DATA SHEET

PE44979

Plotted and Other Data

Notes:

Values at 25 °C, sea level

7/16 DIN Male Right Angle Connector Clamp/Non-Solder Contact Attachment For 1/2 inch Helical, IP 68 Rated 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: [7/16 DIN Male Right Angle Connector Clamp/Non-Solder Contact Attachment For 1/2 inch Helical, IP 68 Rated PE44979](http://www.pasternack.com/7-16-male-standard-1-2-inch-helical-connector-pe44979-p.aspx)

URL: <http://www.pasternack.com/7-16-male-standard-1-2-inch-helical-connector-pe44979-p.aspx>

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PE44979 CAD Drawing

7/16 DIN Male Right Angle Connector Clamp/Non-Solder
Contact Attachment For 1/2 inch Helical, IP 68 Rated



ASSEMBLY PROCEDURES

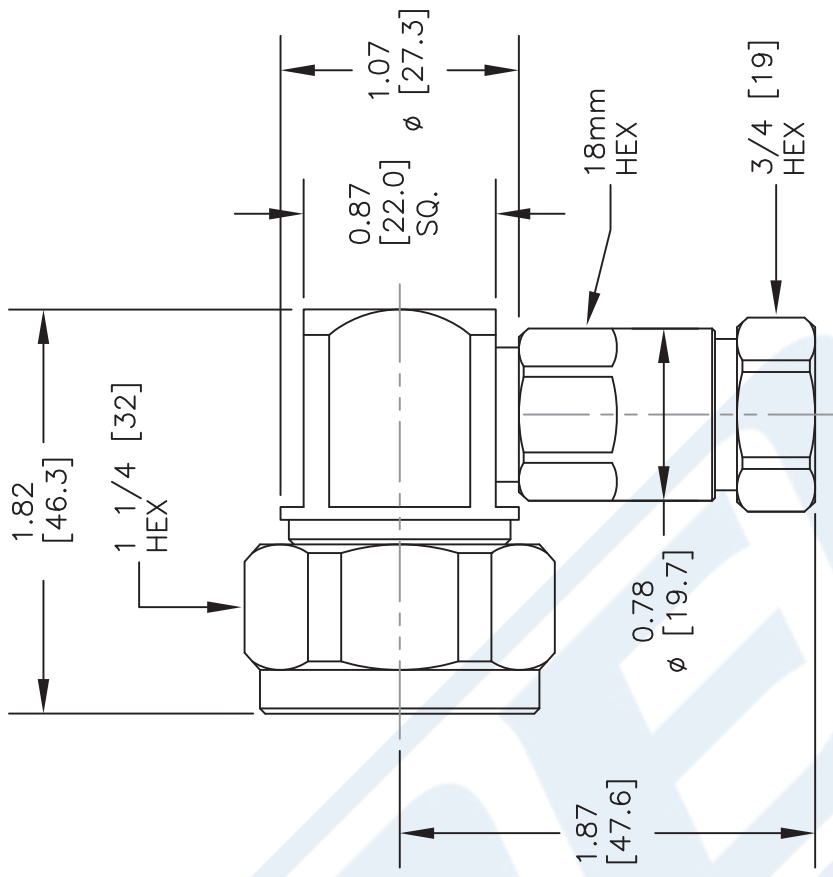
1. STRIP CABLE AS SHOWN, CHAMFER CENTER CONDUCTOR & DEBURR CABLE:

0.630 [16.0]
1 X 45°
DEBURR
0.394 [10.0]
2. 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.
3. SCREW CLAMP NUT ONTO CABLE UNTIL EDGES OF NUT & OUTER CONDUCTOR ARE FLAT.

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

O-RING
5. HOLD CLAMP NUT STEADY & SCREW BODY TIGHTLY ONTO CABLE.

CLAMP NUT
BODY



DWG TITLE

PE44979

- NOTES:
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 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

PE PASTERNAK®
THE ENGINEER'S RF SOURCE
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FSCM NO. 53919

CAD FILE 120513

SCALE N/A

SIZE A

2233



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

RF Cables Technical Data Sheet

PE-1/2SFHC

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

Description

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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10.2	GHz
Cutoff Frequency		13		GHz
Impedance		50		Ohms
Velocity of Propagation		82		%
Shielding Effectiveness	120			dB
Operating Voltage (AC)			1,000	Vrms
Dielectric Withstanding Voltage (AC)			2,500	Vrms
Inner Conductor DC Resistance			0.91	Ohms/1000ft
Outer Conductor DC Resistance			1.08	Ohms/1000ft
Nominal Capacitance		25.3 [83.01]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/m]

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 inch Superflexible Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)



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

RF Cables Technical Data Sheet

PE-1/2SFHC

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.45	0.9	1	1.8	GHz
Attenuation, Typ	1.01	2.22	3.22	3.41	4.72	dB/100ft
	3.31	7.28	10.56	11.19	15.49	dB/100m
Input Power (CW), Max	2,590	1,180	810	770	560	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	2	3	4	5	6	GHz
Attenuation, Typ	5.01	6.3	7.44	8.48	9.44	dB/100ft
	16.44	20.67	24.41	27.82	30.97	dB/100m
Input Power (CW), Max	530	420	350	31	280	Watts

Mechanical Specifications

Diameter	0.519 in [13.18 mm]
Weight	0.132 lbs/ft [0.2 Kg/m]
Number of Bends, Min	20
Min. Bend Radius (Installation)	0.6 in [15.24 mm]
Min. Bend Radius (Repeated)	1.18 in [29.97 mm]
Tensile Strength	79 lbs [35.83 kg]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Aluminum ¹	0.141 in 3.58 mm
Conductor Type	Solid	
Dielectric	PE (F)	0.378 in 9.6 mm
Outer Conductor	Helically Corrugated Copper Tube	0.468 in 11.89 mm
Jacket	PE, Black	0.519 in [13.18 mm]

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 inch Superflexible Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)



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

RF Cables Technical Data Sheet

PE-1/2SFHC

Environmental Specifications

Temperature

Operating Range

-55 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% 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: [Low Loss 1/2 inch Superflexible Corrugated Coax Cable with Black PE Jacket PE-1/2SFHC](#)

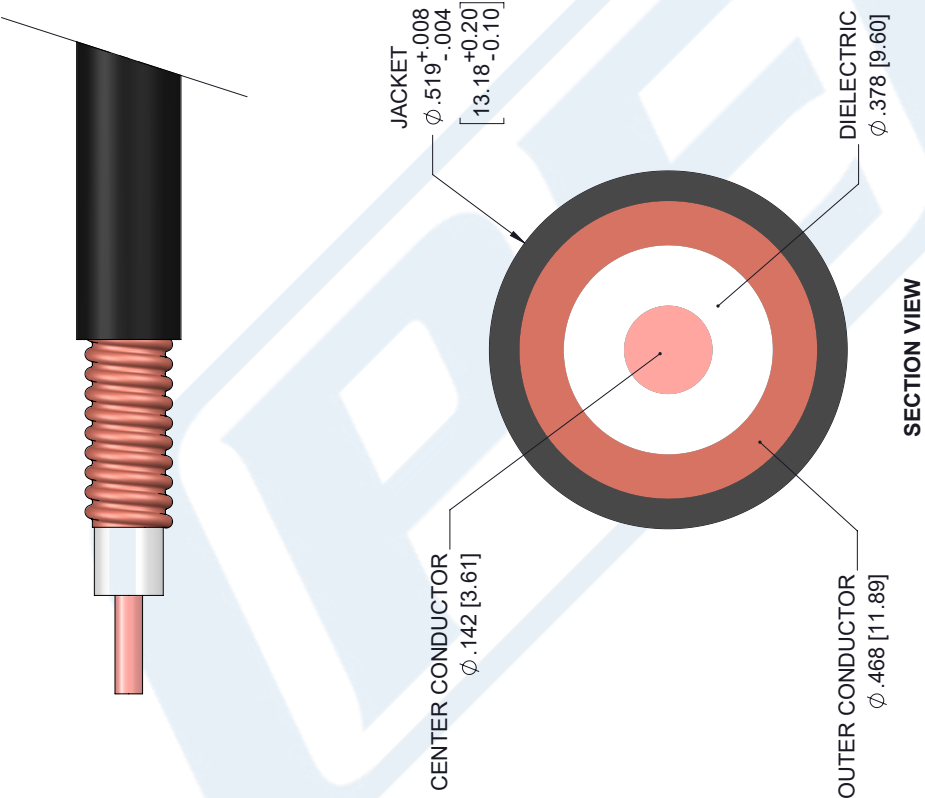
URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-2-superflexible-helical-coax-pe-1-2sfhc-p.aspx>

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PE-1/2SFHC CAD Drawing

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR PE-1/2SFHC 20190708	07/16/19	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
XX±.01 [.25]	
XXX±.005 [.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

 an INFINITO brand	
Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com	
SIZE	CAGE
A	53919
DRAWN BY	K.DANG
PART NUMBER	PE-1/2SFHC
REV	1.1

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SHEET	1 OF 1
SCALE	N/A

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