



SMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors Technical Data Sheet

PE45680

Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry

- Connector Interface Types: PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250
- Low PIM Design

Features

- Max. Operating Frequency 6 GHz
- PIM levels lower than -155 dBc

- Silver Plated Beryllium Copper Contact

Applications

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

Description

Pasternack's PE45680 SMA female connector with solder/solder attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250 and SPF-250 is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 6 GHz. The SMA female connector also has low passive intermodulation of -155 dBc.

Our SMA female connector PE45680 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		6	GHz
Passive Intermodulation			-155	dBc
Dielectric Withstanding Voltage (AC)			750	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 6				GHz
VSWR, Max	1.15:1	1.25:1				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45680](#)



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PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

RF Connectors
Technical Data Sheet

PE45680

Mechanical Specifications

Size

Length	0.8 in [20.32 mm]
Width/Dia.	0.35 in [8.89 mm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal
Body	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range	-40 to +155 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

SMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 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.

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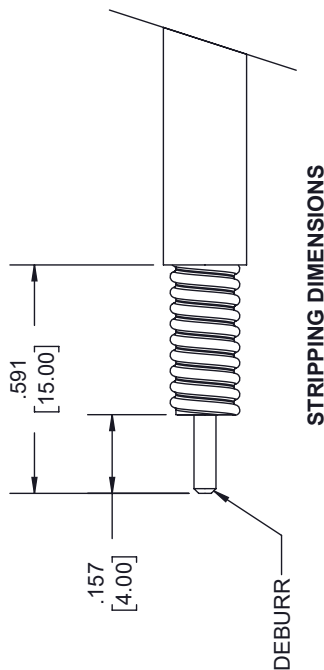
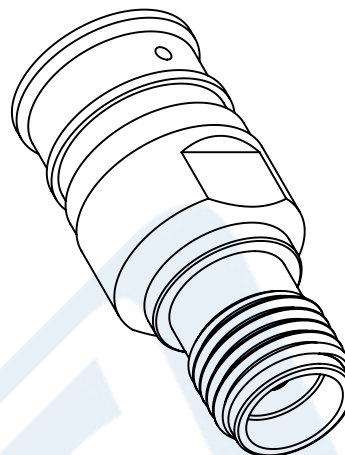
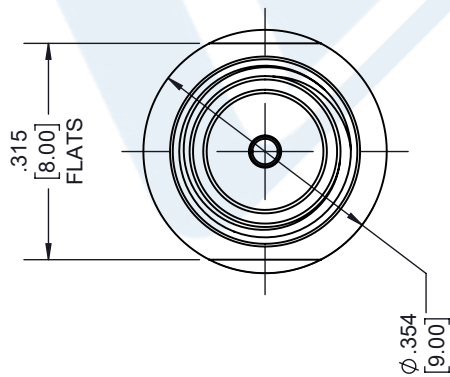
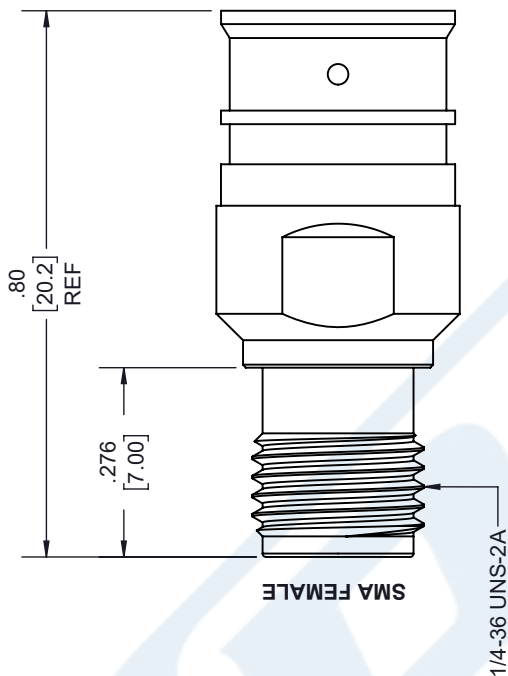
URL: <https://www.pasternack.com/sma-female-pe-1-4sfhc-spp-250-llpl-connector-pe45680-p.aspx>

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PE45680 CAD Drawing

SMA Female Low PIM Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/13/2021	S. ELLIS



NOTES:

- CABLE ATTACHMENT:
• OUTER: SOLDER.
• INNER: SOLDER.

UNLESS OTHERWISE SPECIFIED
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DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

X = ± .2 [5.08] FRACTIONS
.XX = ± .02 [.51] ANGLES ± 1°
.XXX = ± .005 [.13]
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% / -0

ALL DIMENSIONS SHOWN
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SHEET 1 OF 1

SCALE N/A

REV A



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ITEM NO. PE45680
CAGE CODE 53919
DRAWN BY K.DANG



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RF Connectors
Technical Data Sheet

PE45680

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Size

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Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver
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Outer Conductor	Brass	Tri-Metal
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Environmental Specifications

Temperature

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

Plotted and Other Data

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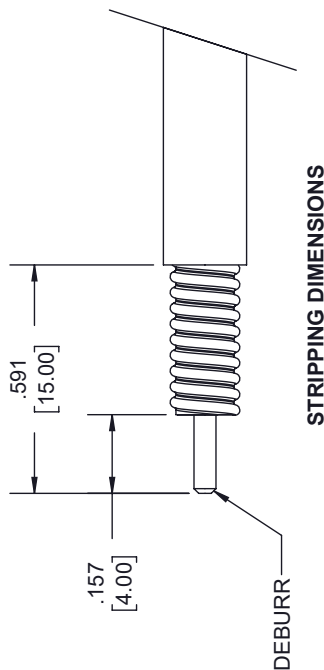
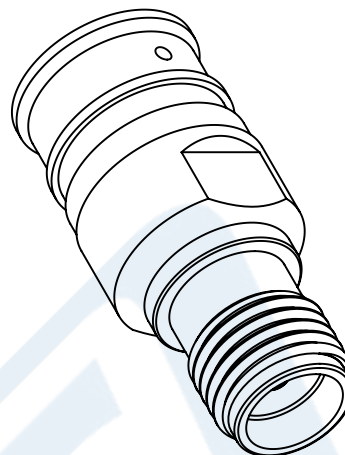
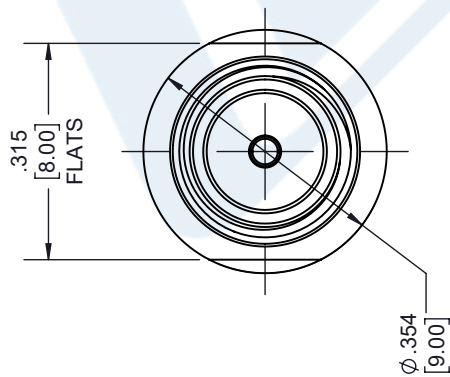
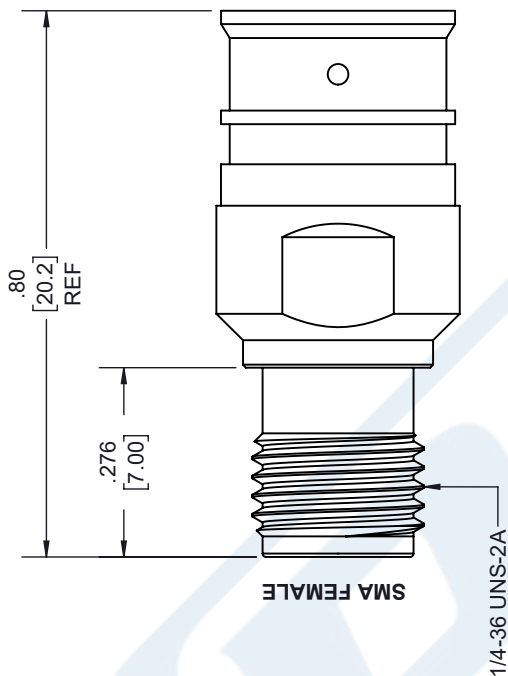
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PE45680 CAD Drawing

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SHEET 1 OF 1

SCALE N/A

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ITEM NO. PE45680

DRAWN BY K.DANG

CAGE CODE 53919

SIZE A

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

RF Cables Technical Data Sheet

PE-1/4SFHC

Configuration

- Low Loss Corrugated Cable
- 1 Shield(s)

Features

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

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		20.4	GHz
Cutoff Frequency		25		GHz
Impedance		50		Ohms
Velocity of Propagation		82		%
Shielding Effectiveness	120			dB
Dielectric Withstanding Voltage (DC)			900	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resistance			3.2	Ohms/1000ft
Outer Conductor DC Resistance			2.53	Ohms/1000ft
Nominal Capacitance		24.4 [80.05]		pF/ft [pF/m]
Nominal Inductance		0.059 [0.19]		uH/ft [uH/m]

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

RF Cables Technical Data Sheet

PE-1/4SFHC

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	2.14	3.75	5.46	7.26	dB/100ft
	3.08	7.02	12.3	17.91	23.82	dB/100m
Input Power (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	8.02	8.52	8.99	9.67	10.73	dB/100ft
	26.31	27.95	29.49	31.73	35.2	dB/100m
Input Power (CW), Max	250	238	230	210	190	Watts

Mechanical Specifications

Diameter	0.303 in [7.7 mm]
Weight	0.048 lbs/ft [0.07 kg/m]
Number of Bends, Min	20
Min. Bend Radius (Installation)	0.5 in [12.7 mm]
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 Strand	0.074 in [1.88 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.187 in [4.75 mm]
First Shield	Helically Corrugated Copper Tube	0.25 in [6.35 mm]
Jacket	PE, Black	0.303 in [7.7 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 1/4 Superflexible Helical Corrugated Coax Cable with Black PE Jacket PE-1/4SFHC](#)



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

RF Cables Technical Data Sheet

PE-1/4SFHC

Environmental Specifications

Temperature

Operating Range

-55 to +85 deg C

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

Plotted and Other Data

Notes:

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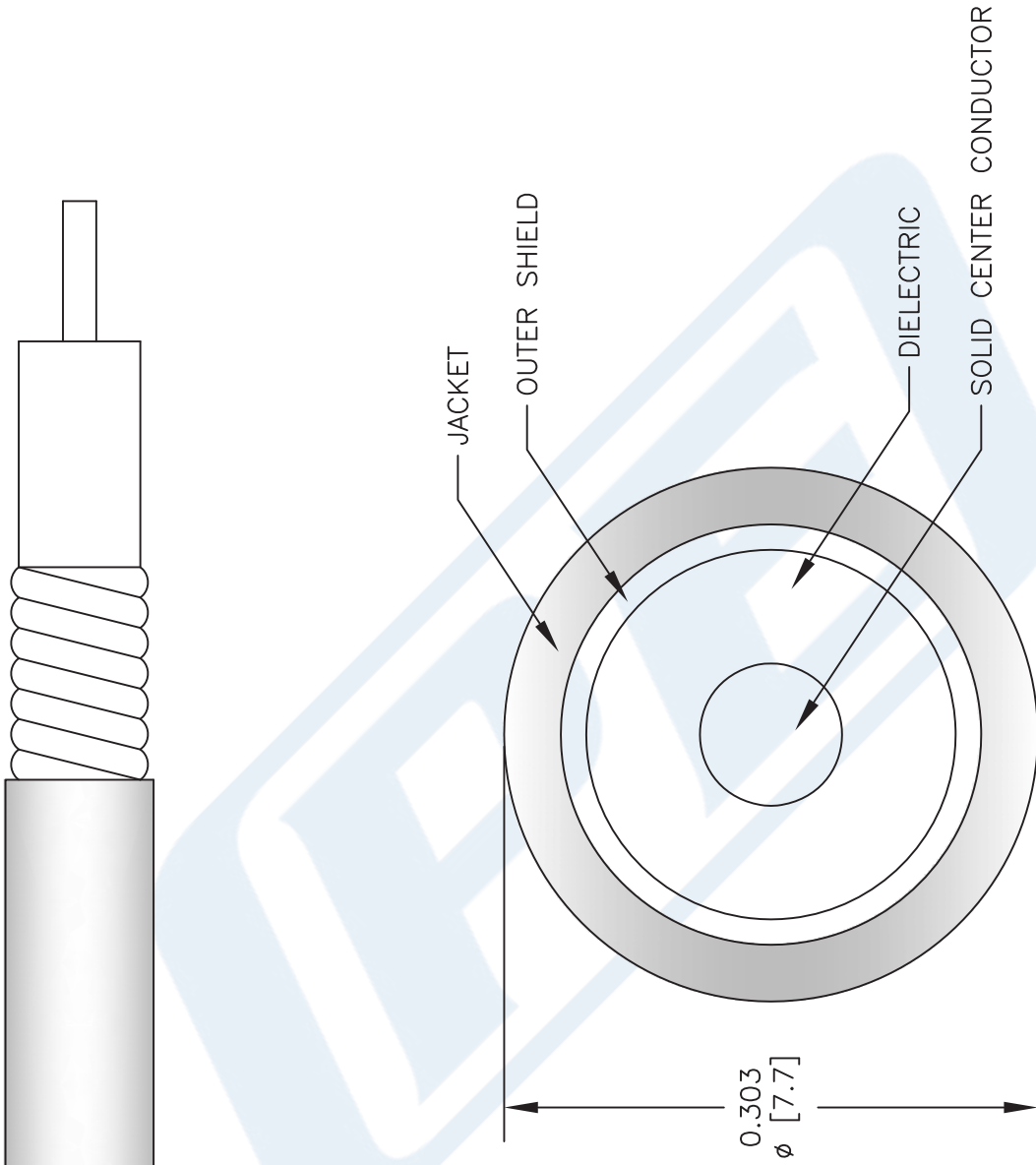
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URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

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PE-1/4SFHC CAD Drawing

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



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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
PE-1/4SFHC

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 092112

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