



# QMA Male Right Angle Low PIM Snap-On Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

## RF Connectors Technical Data Sheet

**PE45683**

### Configuration

- Snap-On QMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: PE-1/4SFHC, SPP-250-LL-PL, SPO-250, SPF-250
- Low PIM Design

### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1
- PIM levels lower than -155 dBc
- Silver Plated Brass Contact

### Applications

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

### Description

Pasternack's PE45683 QMA male snap-on right angle 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 QMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1. The QMA male connector also has low passive intermodulation of -155 dBc. Its right angle body geometry allows for easier connections in tight spaces.

Our QMA male right angle connector PE45683 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
VSWR			1.35:1	
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	1.25:1	1.35:1				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QMA Male Right Angle Low PIM Snap-On Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45683](#)



QMA Male Right Angle Low PIM Snap-On Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250

**RF Connectors**  
**Technical Data Sheet**

**PE45683**

**Mechanical Specifications**

<b>Size</b>	
Length	0.84 in [21.34 mm]
Width/Dia.	0.41 in [10.41 mm]
Height	0.41 in [10.41 mm]
Weight	0.02 lbs [9.07 g]

**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +155 deg C

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QMA Male Right Angle Low PIM Snap-On Connector Solder Attachment for PE-1/4SFHC, SPP-250-LLPL, SPO-250, SPF-250 PE45683](#)



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### RF Connectors Technical Data Sheet

**PE45683**

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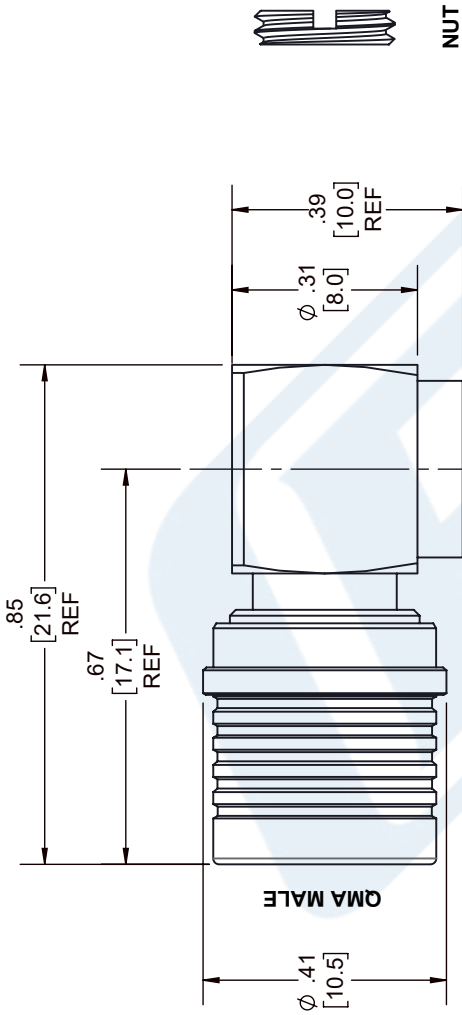
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# PE45683 CAD Drawing

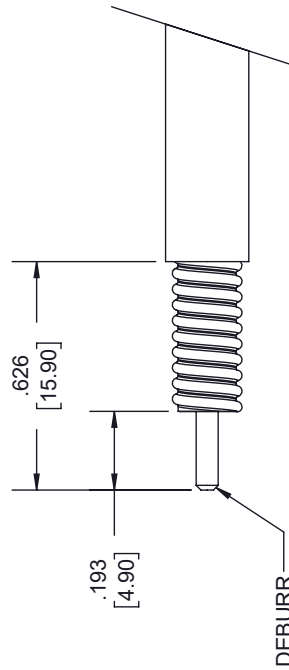
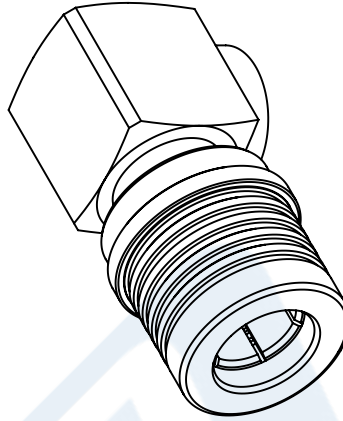
QMA Male Right Angle Low PIM Snap-On Connector Solder Attachment  
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/18/2021	S. ELLIS



INSULATOR

NUT



### STRIPPING DIMENSIONS

#### NOTES:

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

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

#### TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ± 1/32  
.XX = ±.02 [.51] ±.005 [.13] ANGLES ± 1°  
.XXX = ±.005 [.13] 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% / -0  
ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

REV A



Pasternack Enterprises, Inc.  
P. O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

ITEM NO. PE45683  
DRAWN BY K.DANG  
CAGE CODE 53919

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**RF Connectors**  
**Technical Data Sheet**

**PE45683**

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- 50 Ohms
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**Features**

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
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Passive Intermodulation			-155	dBc
Dielectric Withstanding Voltage (AC)			750	Vrms

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**Mechanical Specifications**

<b>Size</b>	
Length	0.84 in [21.34 mm]
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**Material Specifications**

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Body	Brass	Tri-Metal
Coupling Nut	Brass	Tri-Metal

**Environmental Specifications**

<b>Temperature</b>	
Operating Range	-40 to +155 deg C

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

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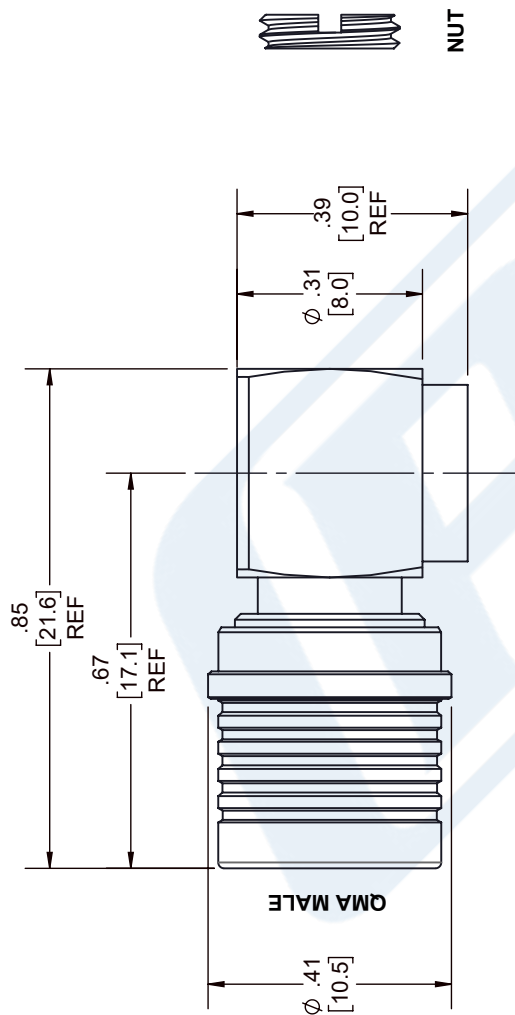
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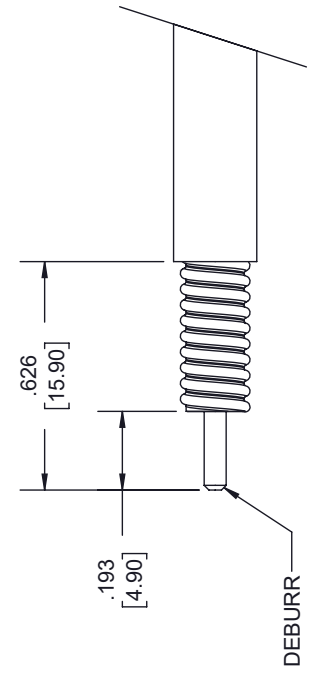
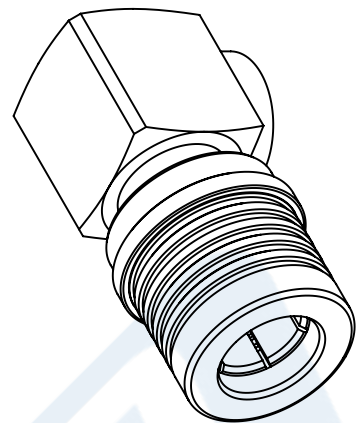
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INSULATOR

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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an INFINITE 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  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

ITEM NO. PE45683

DRAWN BY K.DANG

SIZE A

CAGE CODE 53919

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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]

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

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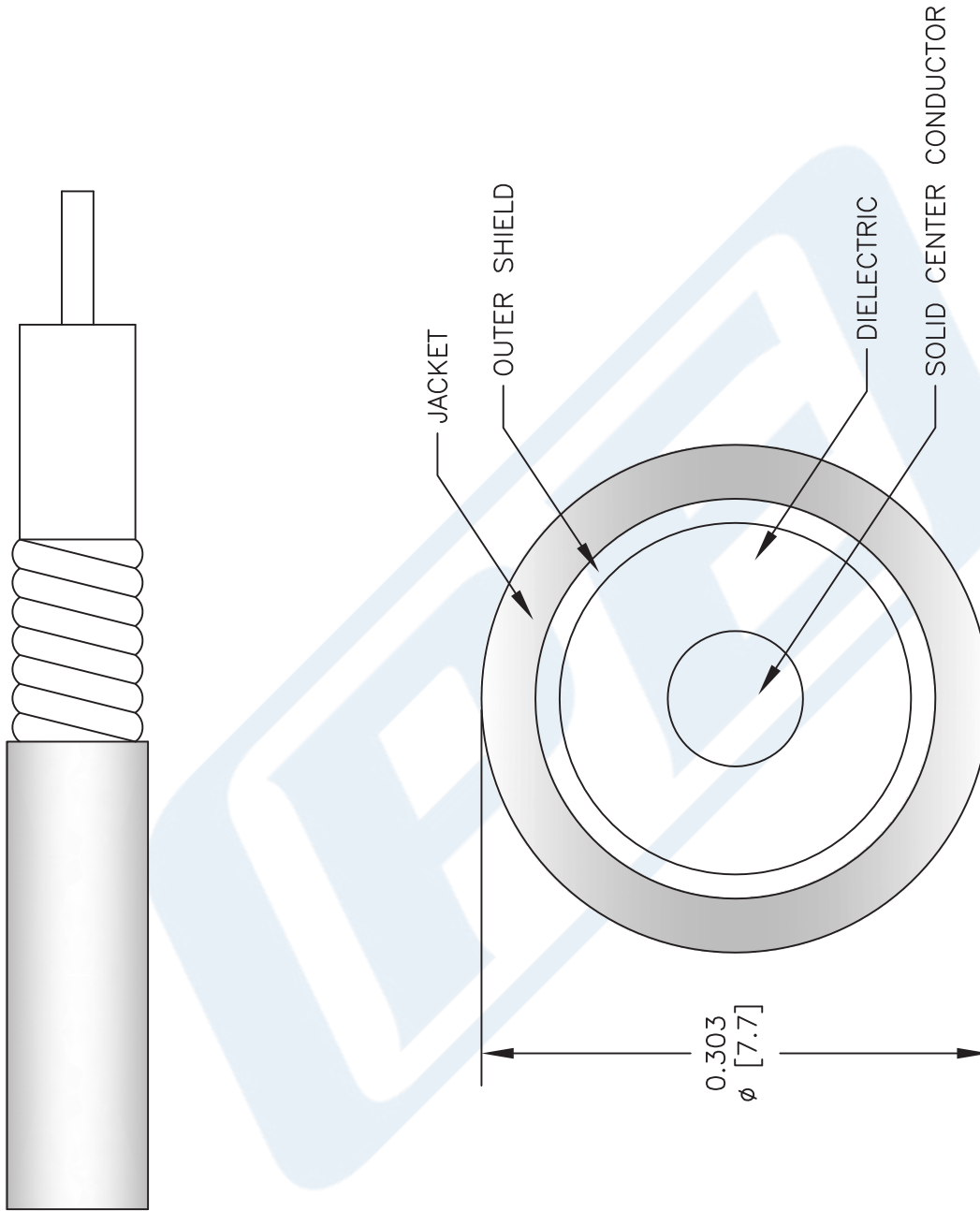
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URL: <https://www.pasternack.com/50-ohm-low-loss-corrugated-1-4-superflexible-helical-coax-pe-1-4sfhc-p.aspx>

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# PE-1/4SFHC CAD Drawing

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



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].

DWG TITLE  
**PE-1/4SFHC**

FSCM NO. 53919

CAD FILE 092112

SCALE N/A

SIZE A

2233

**PE PASTERNAK®**  
 Pasternack Enterprises, Inc.  
 P.O. Box 16759 | Irvine | CA | 92623  
**Phone:** (949) 261-1920 | **Fax:** (949) 261-7451  
**Website:** www.pasternack.com | **E-Mail:** sales@pasternack.com