



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

Configuration

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

Features

- Max. Operating Frequency 34 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4981 3.5mm male connector with clamp/solder attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN and RG402 is part of our full line of RF components available for same-day shipping. Our 3.5mm male connector operates up to a maximum frequency of 34 GHz and offers excellent VSWR of 1.2:1.

Our 3.5mm male connector PE4981 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		34	GHz
VSWR			1.2:1	
Insertion Loss			0.233	dB
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
High Potential Voltage 5 to 7.5 MHz			1,000	Vrms
Corona Discharge @ 70000 ft			375	Vrms
Insulation Resistance	5,000			MOhms
RF Leakage	-90			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 12.4	12.4 to 26.5	26.5 to 34			GHz
VSWR, Max	1.1:1	1.14:1	1.2:1			

Electrical Specification Notes:
Insertion Loss is $0.04 \cdot \sqrt{F(\text{GHz})}$ dB

Mechanical Specifications

Size	
Length	0.86 in [21.84 mm]
Width/Dia.	0.32 in [8.13 mm]
Weight	0.012 lbs [5.44 g]
Mating Cycles	500 Cycles
Mating Torque	8 to 10 in-lbs [0.90 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 µin minimum
Insulation	PCTFE	
Body	Passivated Stainless Steel	SAE-AMS-2700
Coupling Nut	Passivated Stainless Steel	SAE-AMS-2700
Gasket	Silicone Rubber	

Environmental Specifications

Temperature	
Operating Range	-65 to +150 deg C
Humidity	MIL-STD-202, METHOD 106, (NO VIBRATION)
Shock	MIL-STD-202, METHOD 213, CONDITION I
Vibration	MIL-STD-202, METHOD 204, CONDITION D
Thermal Shock	MIL-STD-202, METHOD 107, CONDITION B

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

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: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)

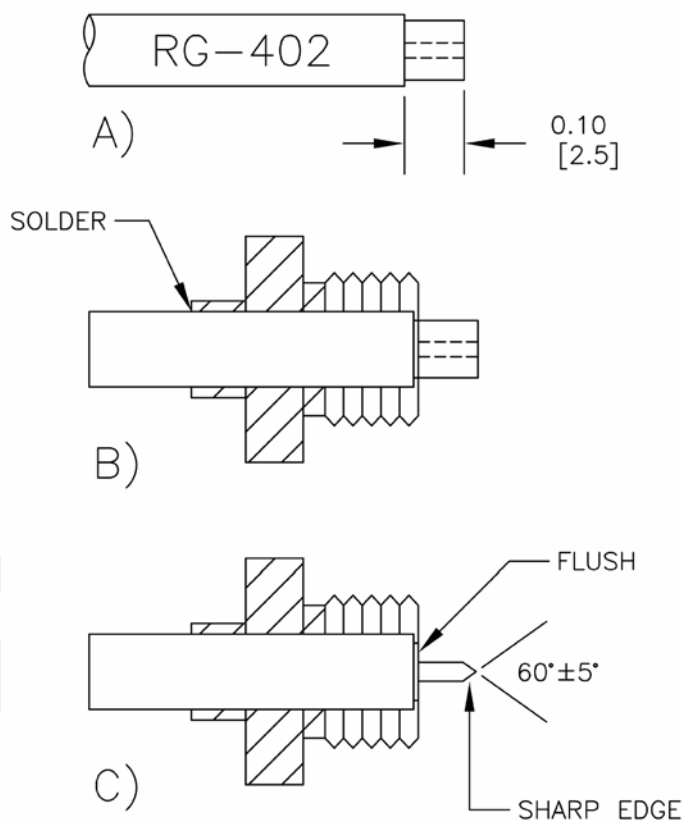


3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors
Technical Data Sheet

PE4981

Assembly Instruction



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK CENTER DIELECTRIC.
2. INSERT CABLE THROUGH CLAMP NUT AS SHOWN IN (B). SOLDER OUTER CONDUCTOR TO CLAMP NUT.
3. TRIM DIELECTRIC AND POINT CENTER CONDUCTOR AS SHOWN IN (C).
4. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR UNTIL SEATED AND TORQUE TO 25-30 IN-LBS.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 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: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE4981](https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-p.aspx)

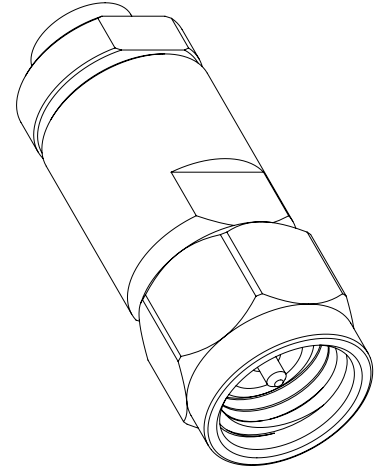
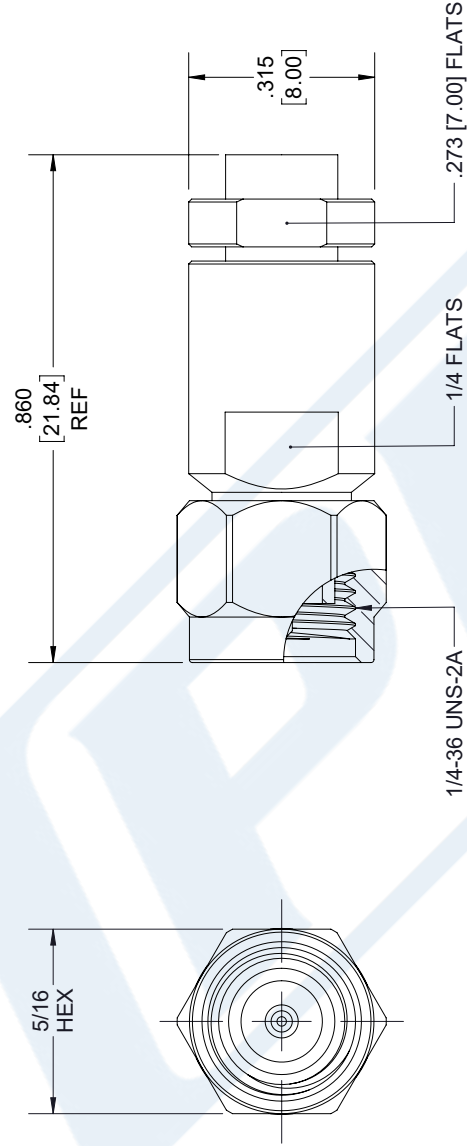
URL: <https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-p.aspx>

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.

PE4981 CAD Drawing

3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL,
PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.2	PCR PE4981 2019056	05/13/19	J.GARCIA



PE PASTERNAK an INFINITI® 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		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED. SHEET 1 OF 2 SCALE N/A	
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X±.2 [5.08] XX±.01 [.25] XXX±.005 [.13] FRACTIONS ±.132 ANGLES ± 1° ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. THIRD-ANGLE PROJECTION	SIZE A CAGE DRAWN BY K.Dang PART NUMBER PE4981 REV 1.2	THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.	



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

Configuration

- 3.5mm Male Connector
- 50 Ohms
- Straight Body Geometry
- PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 Interface Type
- Clamp/Solder Attachment
- 5/16 inch Hex

Features

- Max. Operating Frequency 34 GHz
- Excellent VSWR of 1.2:1
- Gold over Nickel Plated Beryllium Copper Contact
- 50 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4981 3.5mm male connector with clamp/solder attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN and RG402 is part of our full line of RF components available for same-day shipping. Our 3.5mm male connector operates up to a maximum frequency of 34 GHz and offers excellent VSWR of 1.2:1.

Our 3.5mm male connector PE4981 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		34	GHz
VSWR			1.2:1	
Insertion Loss			0.233	dB
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
High Potential Voltage 5 to 7.5 MHz			1,000	Vrms
Corona Discharge @ 70000 ft			375	Vrms
Insulation Resistance	5,000			MOhms
RF Leakage	-90			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 12.4	12.4 to 26.5	26.5 to 34			GHz
VSWR, Max	1.1:1	1.14:1	1.2:1			

Electrical Specification Notes:
Insertion Loss is $0.04 \cdot \sqrt{F(\text{GHz})}$ dB

Mechanical Specifications

Size	
Length	0.86 in [21.84 mm]
Width/Dia.	0.32 in [8.13 mm]
Weight	0.012 lbs [5.44 g]
Mating Cycles	500 Cycles
Mating Torque	8 to 10 in-lbs [0.90 to 1.13 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 50 μ in minimum
Insulation	PCTFE	
Body	Passivated Stainless Steel	SAE-AMS-2700
Coupling Nut	Passivated Stainless Steel	SAE-AMS-2700
Gasket	Silicone Rubber	

Environmental Specifications

Temperature	
Operating Range	-65 to +150 deg C
Humidity	MIL-STD-202, METHOD 106, (NO VIBRATION)
Shock	MIL-STD-202, METHOD 213, CONDITION I
Vibration	MIL-STD-202, METHOD 204, CONDITION D
Thermal Shock	MIL-STD-202, METHOD 107, CONDITION B

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

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: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)

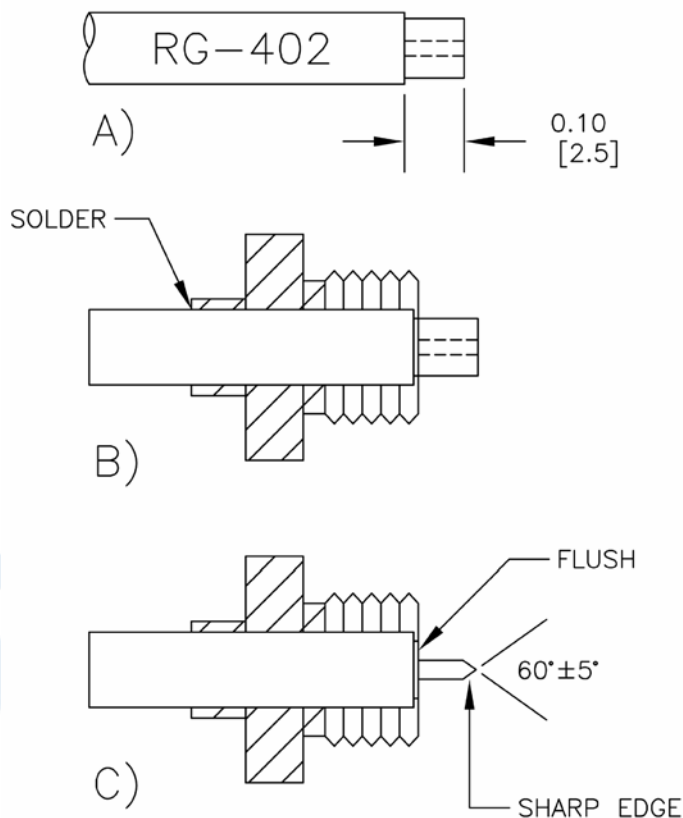
3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402



RF Connectors
Technical Data Sheet

PE4981

Assembly Instruction



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN IN (A). DO NOT NICK CENTER DIELECTRIC.
2. INSERT CABLE THROUGH CLAMP NUT AS SHOWN IN (B). SOLDER OUTER CONDUCTOR TO CLAMP NUT.
3. TRIM DIELECTRIC AND POINT CENTER CONDUCTOR AS SHOWN IN (C).
4. INSERT CABLE SUB-ASSEMBLY INTO CONNECTOR UNTIL SEATED AND TORQUE TO 25-30 IN-LBS.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR-402FLJ, PE-SR402TN, RG402 PE4981](#)



3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402

RF Connectors Technical Data Sheet

PE4981

3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 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.

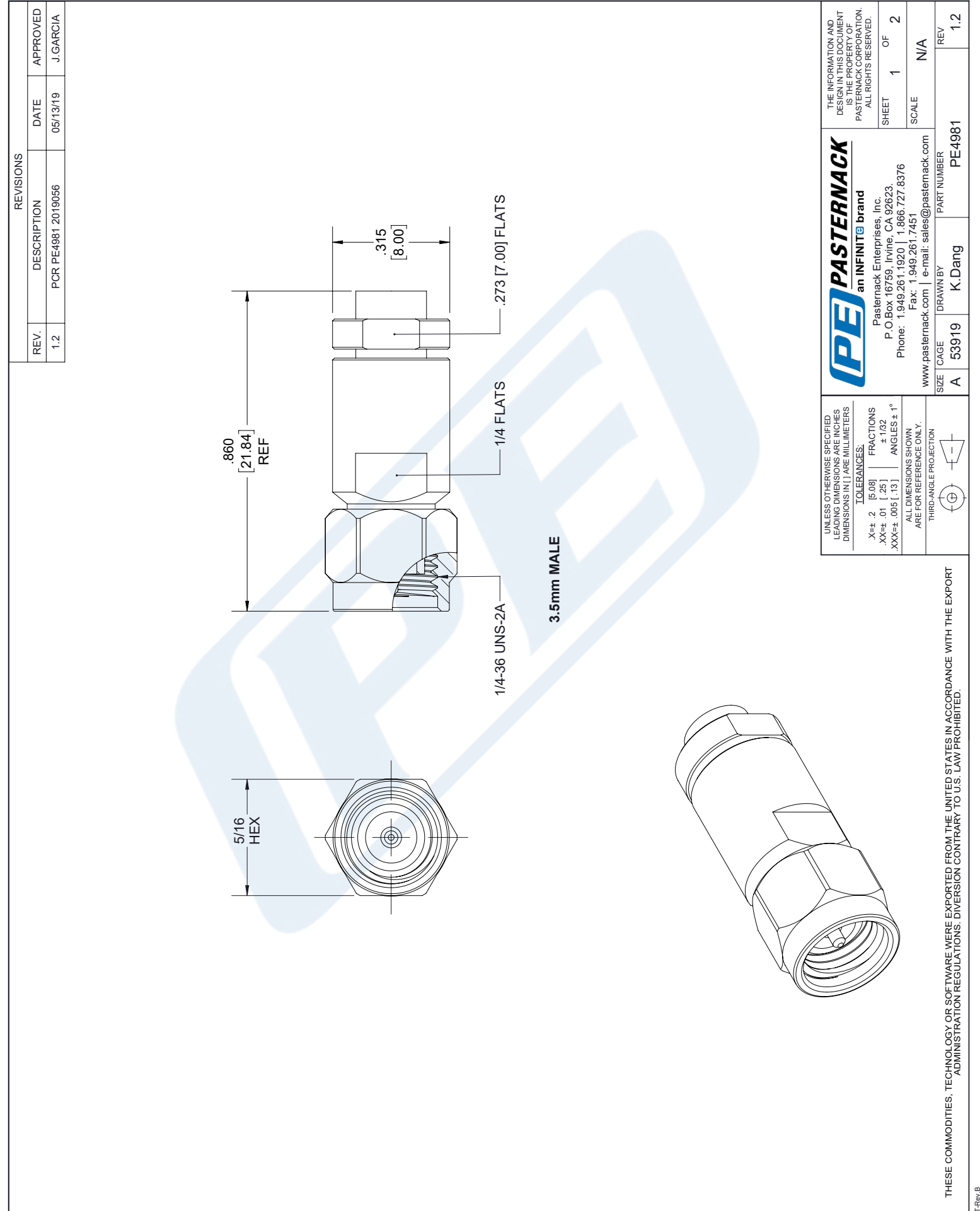
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL, PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402 PE4981](https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-p.aspx)

URL: <https://www.pasternack.com/3.5mm-male-pe-sr402al-pe-sr402fl-pe-sr402tn-rg402-connector-pe4981-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.

PE4981 CAD Drawing

3.5mm Male Connector Clamp/Solder Attachment for PE-SR402AL,
PE-SR402FL, PE-SR402FLJ, PE-SR402TN, RG402



REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
1.2	PCR PE4981 2019056	05/13/19	J.GARCIA

PE PASTERNAK an INFINITI 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		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.	
SHEET 1 OF 2		SCALE N/A	
SIZE A		DRAWN BY K.Dang	
CAGE 53919		PART NUMBER PE4981	
THIRD-ANGLE PROJECTION		REV 1.2	

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

Configuration

- Low Loss Semi-Rigid Cable
- 1 Shield(s)

Features

- Continuous Copper Outer Conductor
- Low Density Microporous Dielectric
- Phase Stability vs. Temperature
- Mechanical Stability vs. Temperature
- High Isolation
- Supplied in 5 foot maximum straight lengths

Applications

- Low Loss Cabling
- Phase Matched Microporous Cables
- High Isolation Interconnects
- Surface Mount Cabling
- Semi-Rigid Cable Assemblies

Description

Pasternack's PECX007 low loss semi-rigid coax with copper outer conductor and microporous dielectric is part of our full line of RF components available for same-day shipping. This low loss semi-rigid coaxial cable operates to a maximum frequency range of 34 GHz. The outer conductor is served by a continuous copper tube which provides extremely high levels of RF shielding and low attenuation. The low density microporous dielectric of this semi rigid coax reduces the dielectric losses and also provides more phase stability over temperature when compared to solid PTFE dielectric. An additional benefit of the microporous dielectric is its mechanical stability over temperature. Unlike solid PTFE, this low density PTFE material can handle soldering heat with minimal or no measurable extrusion on the ends of the cable. This minimizes stress on connectors and allows for more predictable termination on PCB, surface mount applications.

Our microporous dielectric low loss semi-rigid coax cable, PECX007 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave interconnects allows designers to configure and customize their signal connections however they like. Whether the need is to provide a high isolation, phase stable signal path or simply create a custom cable assembly configuration, Pasternack has the right cable 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		34	GHz
Impedance		50		Ohms
Velocity of Propagation		76.5		%

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX007](#)

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor,
Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	18	GHz
Attenuation, Typ	7.5	10.5	24	34	46	dB/100ft
	24.61	34.45	78.74	111.55	150.92	dB/100m
Input Power (CW), Max	820	580	240	170	130	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	20					GHz
Attenuation, Typ	52					dB/100ft
	170.6					dB/100m
Input Power (CW), Max	115					Watts

Mechanical Specifications

Min. Bend Radius (Installation) 0.5 in [12.7 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand ASTM B-298	0.04 in 1.02 mm
Conductor Type	Solid	
Dielectric	Microporous PTFE	0.118 in [3 mm]
Outer Conductor	Copper	0.141 in 3.58 mm

Environmental Specifications

Temperature

Operating Range -65 to +200 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX007](#)

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections

RF Cables Technical Data Sheet

PECX007

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

Plotted and Other Data

Notes:

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections 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.

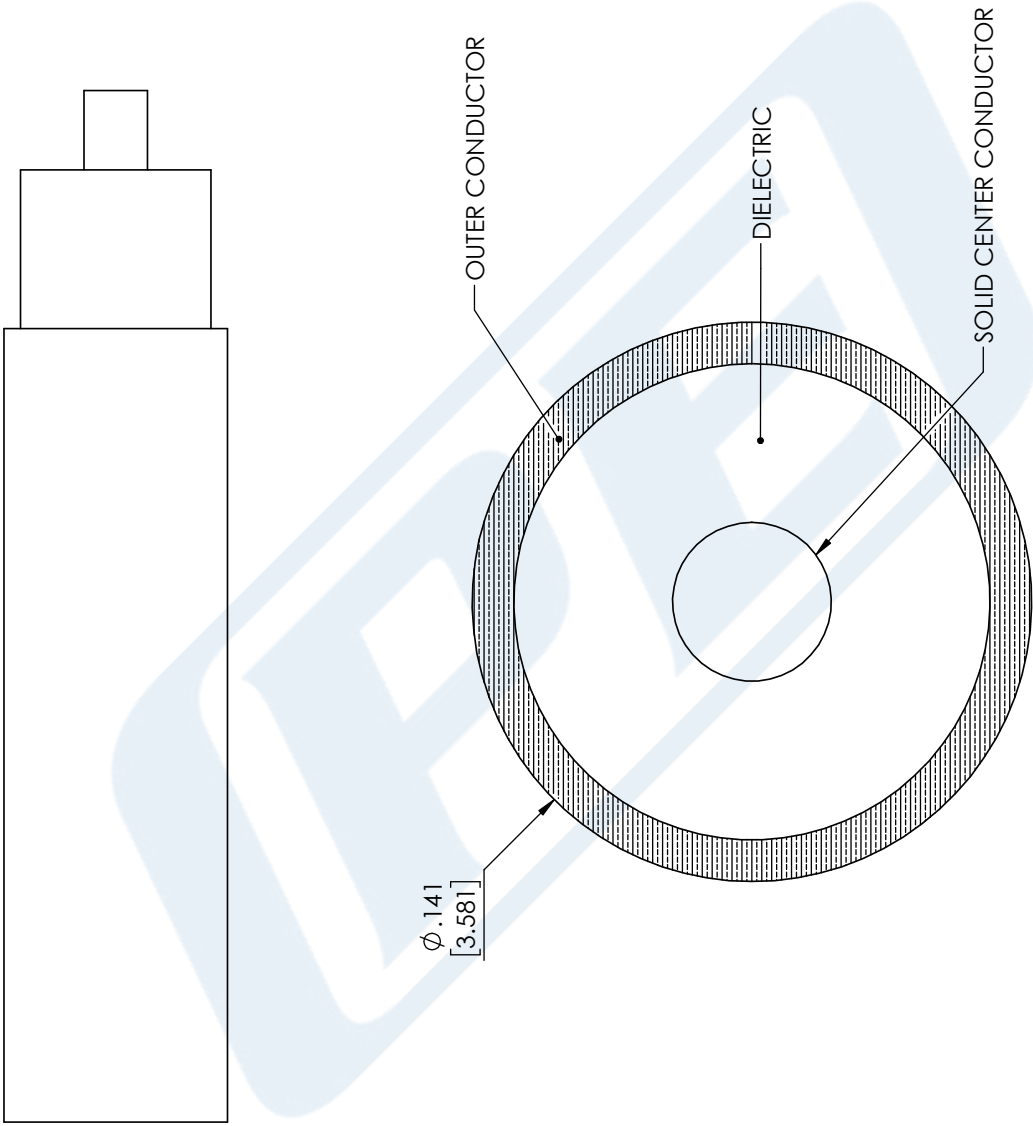
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor, Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections PECX007](#)

URL: <https://www.pasternack.com/low-loss-semirigid-141-coax-cable-copper-straight-pecx007-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.

PECX007 CAD Drawing

Low Loss .141 Semi-Rigid Coax Cable, Copper Outer Conductor,
Microporous PTFE 76.5 pct VoP Dielectric, Straight Sections



STANDARD TOLERANCES
.X ± 0.2
.XX ± 0.01
.XXX ± 0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES



PASTERNAK®
THE ENGINEER'S RF SOURCE

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

DWG TITLE	PECX007
CAGE CODE	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].	CAD FILE	06/14/18	SCALE	N/A	SIZE	A	CN2245
---	----------	----------	-------	-----	------	---	--------