



SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45496

Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.57:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling
- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics
- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

Description

Pasternack's PE45496 SSMC plug right angle connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.57:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45496 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		12.4	GHz
VSWR			1.57:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45496](#)



SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45496

Mechanical Specifications

Size

Length	0.421 in [10.69 mm]
Width/Dia.	0.156 in [3.96 mm]
Height	0.33 in [8.38 mm]

Mating Cycles	500 Cycles
Mating Torque	1.75 to 2 in-lbs [0.20 to 0.23 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	Teflon	
Body	Brass	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45204
Crimp Sleeve	Brass	Gold MIL-G-45204

Environmental Specifications

Temperature

Operating Range	-65 to +165 deg C
Shock	Method 213, Condition B, 75G @6ms @1/2 sine
Vibration	Method 204, Condition D (20G)
Salt Spray	Method 101, Condition B, 5% salt solution

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: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45496](#)



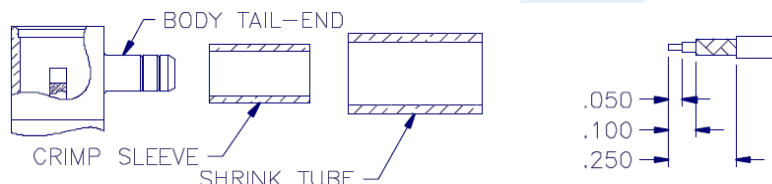
SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

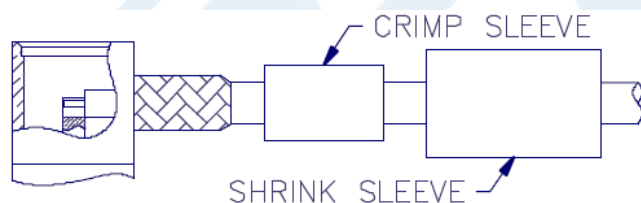
PE45496

Assembly Instruction

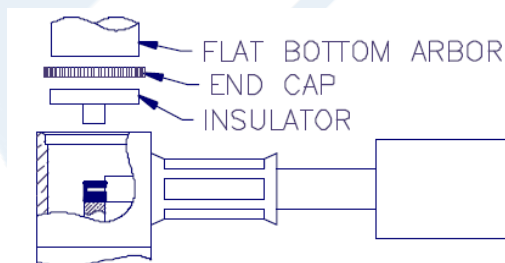
Assembly Instructions



1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45496](#)



SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45496

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 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.

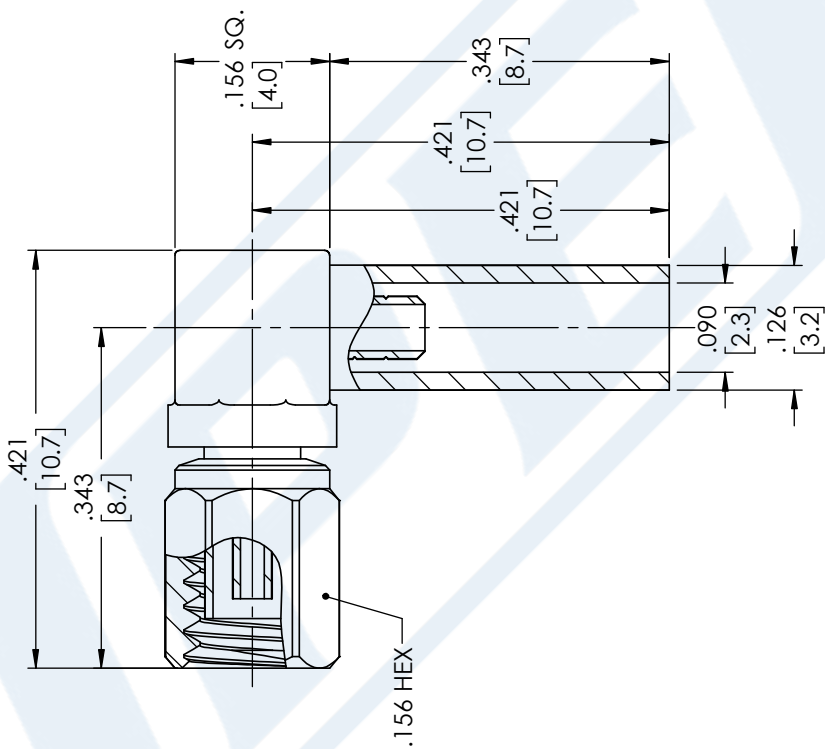
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45496](https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45496-p.aspx)

URL: <https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45496-p.aspx>

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PE45496 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196



STANDARD TOLERANCES

.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES



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DWG TITLE

PE45496

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 08/13/18

SCALE N/A

SIZE A

CN2245



SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

RF Connectors Technical Data Sheet

PE45290

Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG178, RG196

Features

- Max. Operating Frequency 8 GHz
- Excellent VSWR of 1.1:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-DTL-45204
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE45290 SMP female right angle connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMP female connector operates up to a maximum frequency of 8 GHz and offers excellent VSWR of 1.1:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated. Its right angle body geometry allows for easier connections in tight spaces. Pasternack 8 GHz SMP connectors are designed to offer a low cost alternative where the SMP form factor is desired but the standard SMP frequency range is not needed. The line of 8 GHz SMP connectors is fully compatible with industry standard SMP and GPO® connectors. These SMP connectors offer a low cost high performance blind-mate solution for lower frequency applications. The Male versions of the 8 GHz SMP is available in Full Detent, Limited Detent, and Smooth Bore versions.

Our SMP female right angle connector PE45290 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		8	GHz
VSWR			1.1:1	

Mechanical Specifications

Size

Length	0.34 in [8.64 mm]
Width/Dia.	0.15 in [3.81 mm]
Height	0.285 in [7.24 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

RF Connectors Technical Data Sheet

PE45290

Weight 0.005 lbs [2.27 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-DTL-45204
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold MIL-DTL-45204
Body	Brass	Gold MIL-DTL-45204

Environmental Specifications

Temperature

Operating Range

-55 to +155 deg C

Humidity

MIL-STD-202, Method 106 (except 7b omitted)

Shock

MIL-STD-202, Method 213, Condition I

Vibration

MIL-STD-202, Method 204, Condition D

Salt Spray

MIL-STD-202, Method 101, Condition B

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: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

RF Connectors Technical Data Sheet

PE45290

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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: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](https://www.pasternack.com/smp-female-rg178-rg196-connector-pe45290-p.aspx)

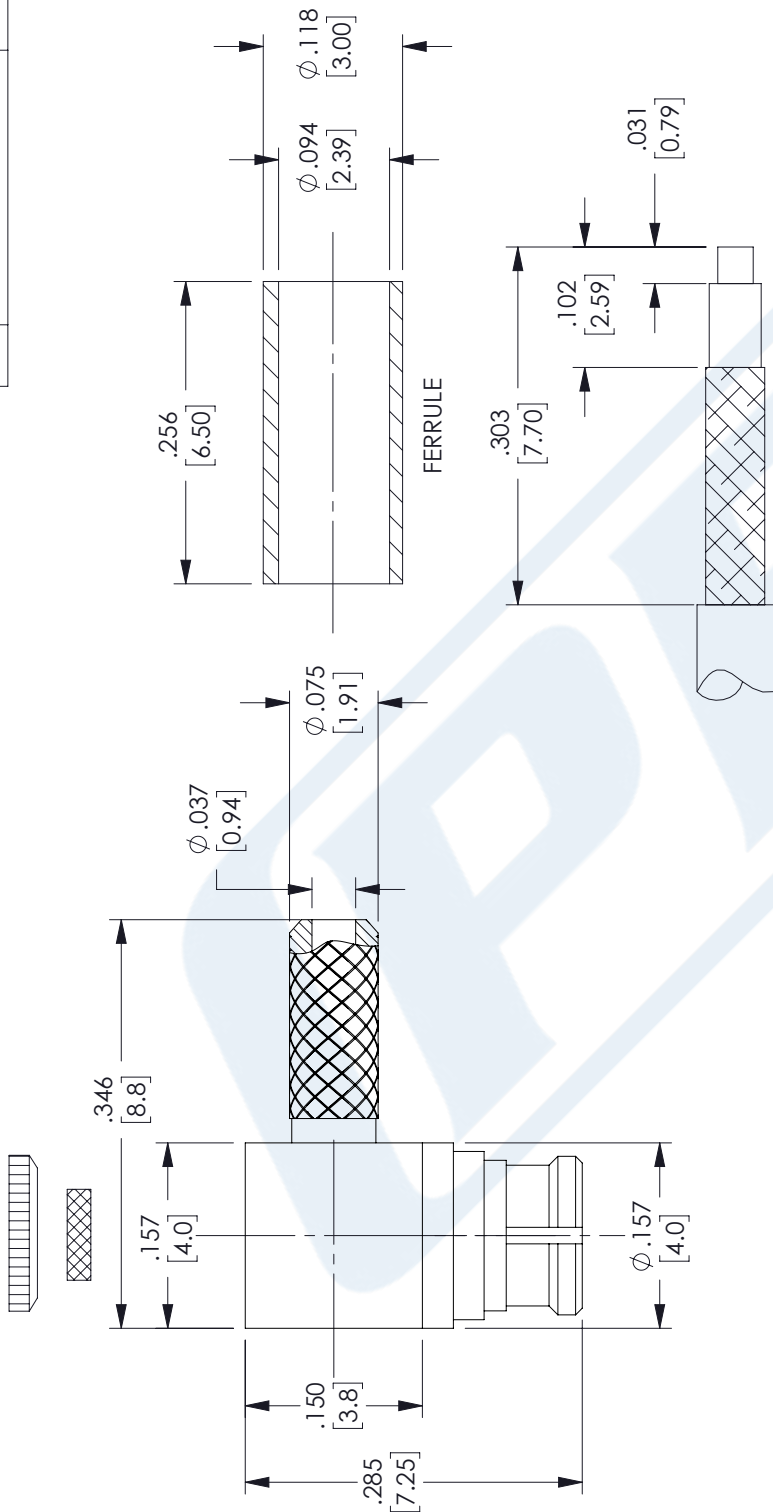
URL: <https://www.pasternack.com/smp-female-rg178-rg196-connector-pe45290-p.aspx>

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PE45290 CAD Drawing

SMP Female Right Angle Connector Crimp/Solder
Attachment for RG178, RG196, Up To 8 GHz

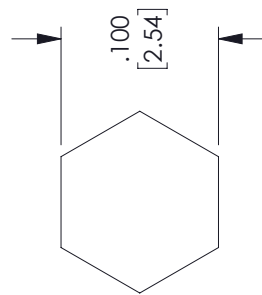
REVISIONS		
REV.	DESCRIPTION	DATE
B	PE45290 20220616	07/01/2022
		APPROVED
		AMARG



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & TIN CENTER CONDUCTOR.
SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR & SOLDER CENTER CONDUCTOR IN PLACE.
3. CRIMP FERRULE. INSERT PTFE & PRESS CAP DOWN.



CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL

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

TOLERANCES:
X = ± .2 [5.08] FRACTIONS
.XX = ± .02 [.51] ± 1/32
.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.



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SHEET 1 OF 1
SCALE N/A

REV B



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SIZE A 53919 WZhang ITEM NO. PE45290

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Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG178B/U

Configuration

- Flexible Cable
- 1 Shield(s)

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Velocity of Propagation		70		%
Operating Voltage (AC)			1,000	Vrms
Nominal Capacitance		29.4 [96.46]		pF/ft [pF/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	3		GHz
Attenuation, Typ	13.81	27.8	44.41	78.4		dB/100ft
	45.31	91.21	145.7	257.22		dB/100m

Mechanical Specifications

Diameter	0.072 in [1.83 mm]
Weight	0.005 lbs/ft [0.01 Kg/m]
Min. Bend Radius (Repeated)	0.4 in [10.16 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.012 in [0.3 mm]
Conductor Type	Stranded	
Dielectric	PTFE	0.034 in [0.86 mm]
First Shield	Silver Plated Copper Braid	0.051 in [1.3 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG178B/U

Jacket	FEP, Tan	0.072 in [1.83 mm]
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Environmental Specifications

Temperature

Operating Range -55 to +200 deg C

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

Plotted and Other Data

Notes:

Flexible RG178 Coax Cable Single Shielded with Tan FEP 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.

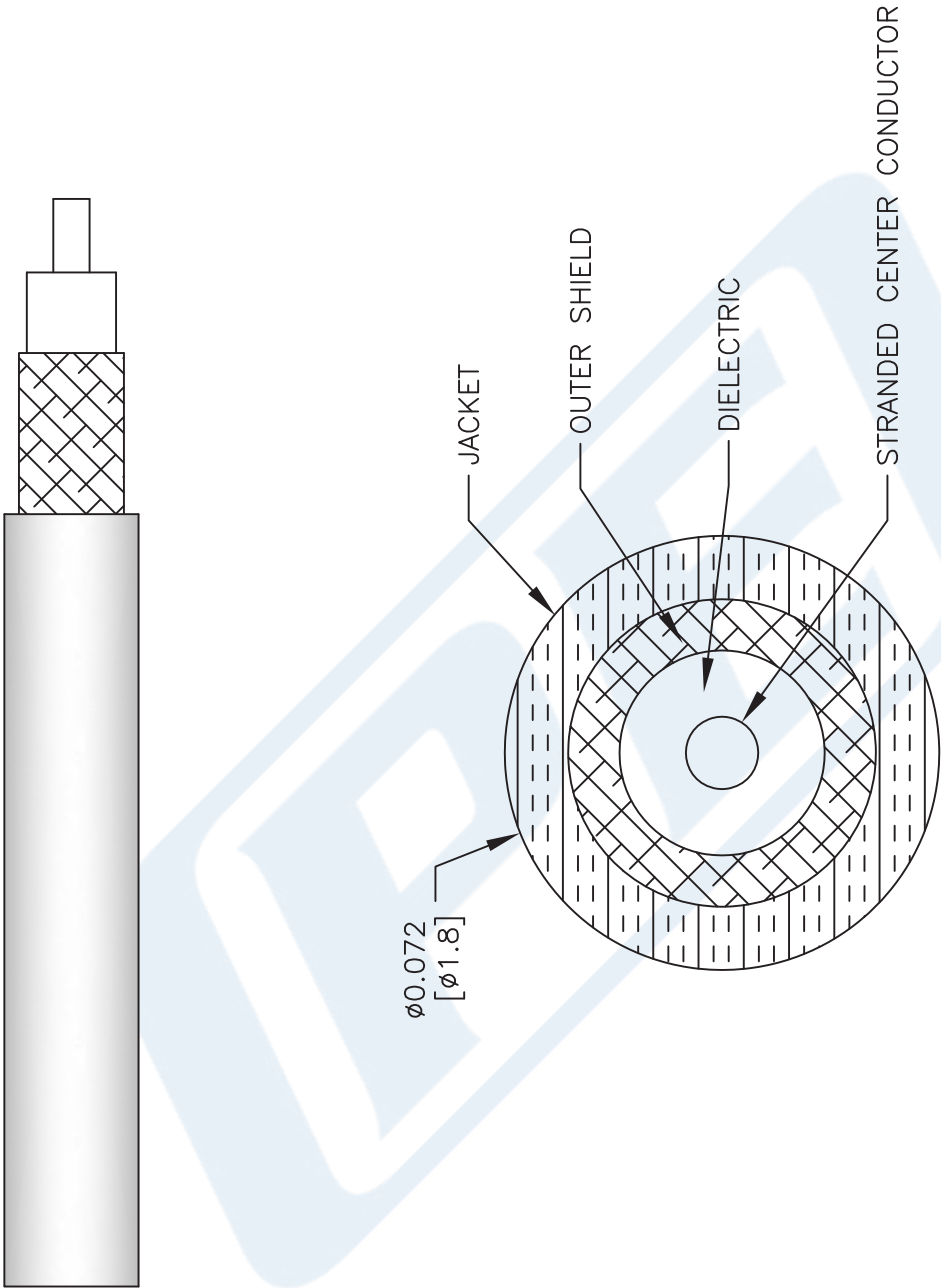
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

URL: <https://www.pasternack.com/flexible-0.075-rg178-50-ohm-coax-cable-fep-jacket-rg178b-u-p.aspx>

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RG178B/U CAD Drawing

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket



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DWG TITLE
RG178B/U

CAGE CODE 53919

2233

SIZE A

SCALE N/A

CAD FILE 062117

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