



## SMP Female Right Angle Connector Crimp/Crimp 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
- RG178, RG196 Interface Type
- Crimp/Crimp Attachment

#### 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/crimp 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.

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. 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.

#### 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/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



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

RF Connectors Technical Data Sheet

PE45290

Weight 0.0033 lbs [1.5 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

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/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



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

### RF Connectors Technical Data Sheet

PE45290

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

#### Plotted and Other Data

Notes:

SMP Female Right Angle Connector Crimp/Crimp Attachment for RG178, RG196, Up To 8 GHz from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

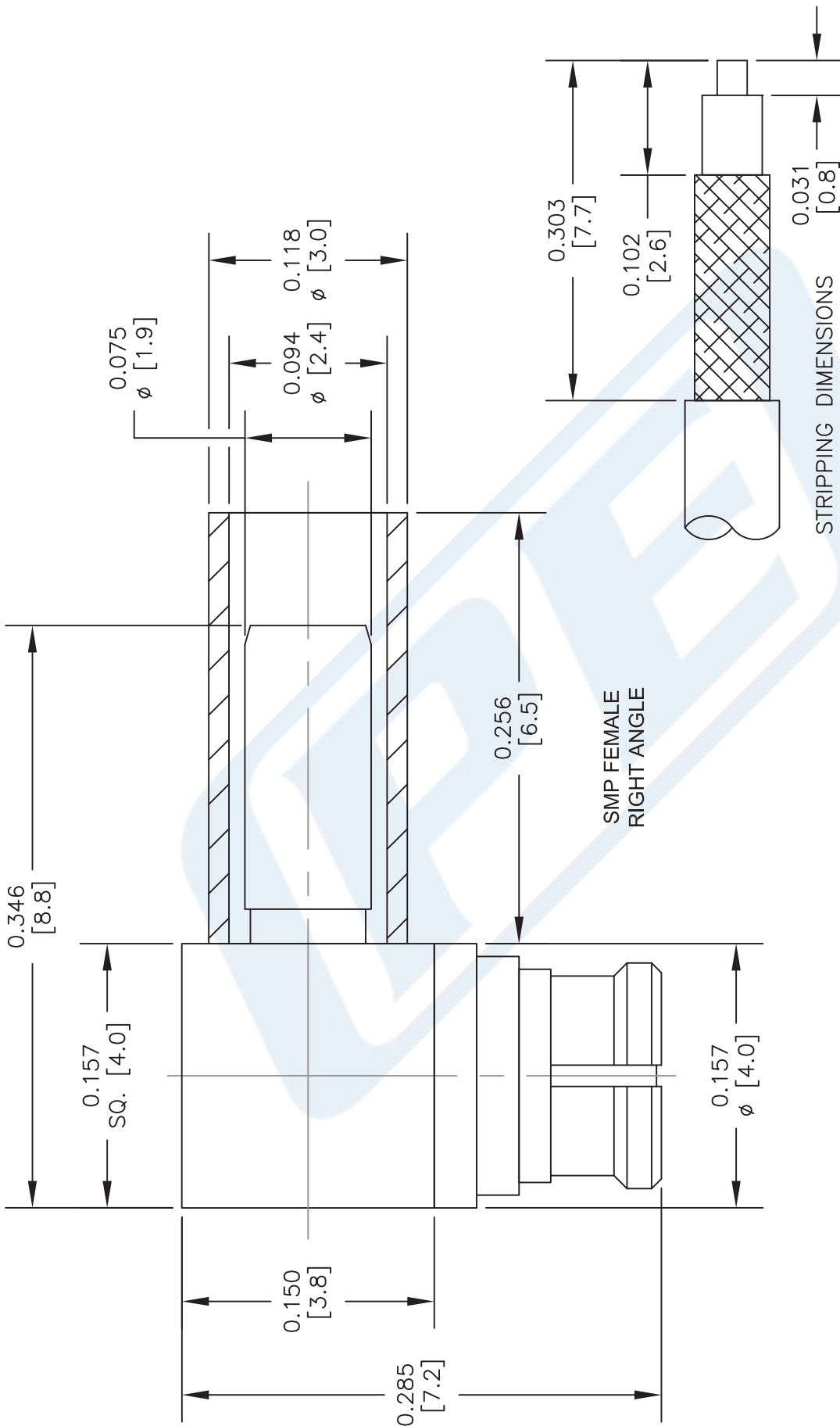
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)

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

# PE45290 CAD Drawing

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



## STANDARD TOLERANCES

.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

## CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL

## ASSEMBLY PROCEDURES

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

DWG TITLE

**PE45290**

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.

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

CAGE CODE 53919

CAD FILE 092216

SCALE N/A

SIZE A

2233



## N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole

### RF Connectors Technical Data Sheet

PE4647

#### Configuration

- N Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 6 GHz
- Gold Plated Brass Contact
- Contact plating according to ASTM-B488

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4647 type N male connector with crimp/solder attachment for RG178 and RG196 (.480 inch D hole) 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 6 GHz.

Our type N male connector PE4647 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
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,000	Vrms

#### Mechanical Specifications

##### Size

Length	1.275 in [32.39 mm]
Width/Dia.	0.8 in [20.32 mm]
Weight	0.071 lbs [32.21 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole PE4647](#)



## N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole

### RF Connectors Technical Data Sheet

PE4647

#### Material Specifications

Description	Material	Plating
Contact	Brass	Gold ASTM-B488
Insulation	PTFE	
Body	Brass	Nickel ASTM-B689
Coupling Nut	Brass	Nickel ASTM-B689

#### Environmental Specifications

##### Temperature

Operating Range

-65 to +165 deg C

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

#### Plotted and Other Data

Notes:

N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave 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: [N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole PE4647](#)

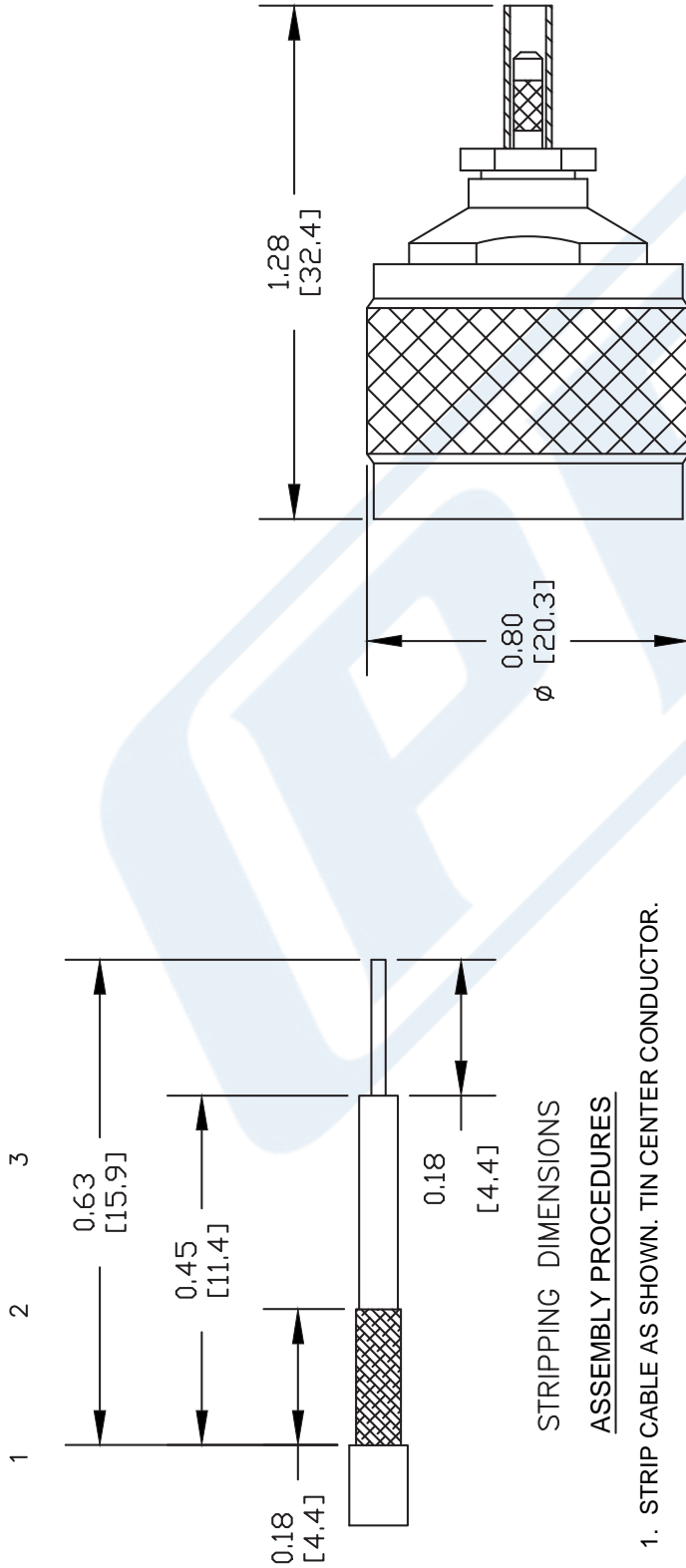
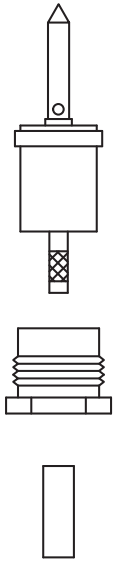
URL: <https://www.pasternack.com/n-male-standard-rg178-rg196-connector-pe4647-p.aspx>

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.



# PE4647 CAD Drawing

N Male Connector Crimp/Solder Attachment for RG178, RG196, .480 inch D Hole



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE (1) & CLAMP NUT (2) ONTO THE CABLE.
3. SLIDE CENTER PIN ASSEMBLY (3) BETWEEN BRAID & DIELECTRIC. SOLDER CENTER CONDUCTOR THROUGH HOLE IN CONTACT.
4. SLIDE ASSEMBLY INTO BODY AND TIGHTEN. SLIDE FERRULE (1) OVER BRAID & CRIMP.

## CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL



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

DWG TITLE

**PE4647**

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.

REV. A

FSCM NO. 53919

CAD FILE 072009

SCALE N/A

SIZE A

147

## Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket

### RF Cables Technical Data Sheet

RG196A/U

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Nominal Capacitance		32 [104.99]		pF/ft [pF/m]

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	400					MHz
Attenuation, Typ	33					dB/100ft
	108.27					dB/100m

#### Mechanical Specifications

Diameter	0.08 in [2.03 mm]
Weight	0.005 lbs/ft [0.01 Kg/m]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.011 in [0.28 mm]
Conductor Type	Stranded	
Dielectric	PTFE	0.035 in [0.89 mm]
First Shield	Silver Plated Copper Braid 92.3% coverage	0.054 in [1.37 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)



## Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket

### RF Cables Technical Data Sheet

RG196A/U

Jacket	PTFE, White	0.08 in [2.03 mm]
--------	-------------	-------------------

#### Environmental Specifications

##### Temperature

Operating Range -55 to +200 deg C

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

#### Plotted and Other Data

##### Notes:

Flexible RG196 Coax Cable Single Shielded with White PTFE 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.

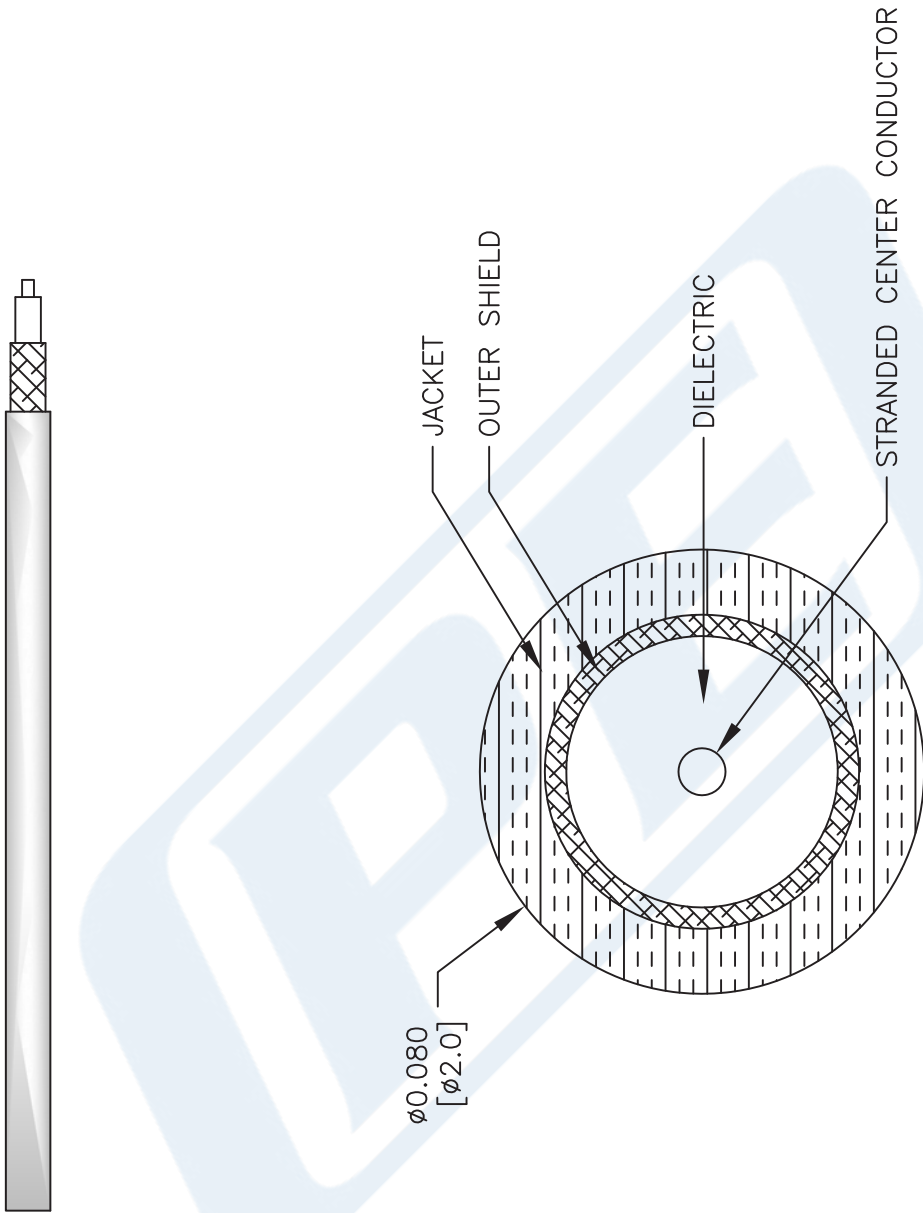
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)

URL: <https://www.pasternack.com/flexible-0.080-rg196-50-ohm-coax-cable-ptfe-jacket-rg196a-u-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.

RG196A/U CAD Drawing

Flexible RG196 Coax Cable Single Shielded with White PTFE 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  
**RG196A/U**

FSCM NO. 53919

CAD FILE 111716

SCALE N/A

SIZE A

41742

**PE 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](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)