



## BMA Plug Bulkhead Mount Slide-On Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45315

#### Configuration

- Slide-On BMA Plug Connector
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment
- Bulkhead
- 11 mm Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 2.12:1
- Gold Plated Beryllium Copper Contact
- 51.18 $\mu$  in. minimum contact plating
- Blind Mate Connector
- Low-Engagement Force

#### Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies
- Blind Mating
- Rack and Panel
- Phased Array Systems
- Base Stations
- RF Backplanes
- Test I/O

#### Description

Pasternack's PE45315 BMA plug slide-on bulkhead connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our BMA plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 2.12:1. 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. This BMA bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our BMA plug bulkhead connector PE45315 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			2.12:1	
Insertion Loss			0.1	dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
Insulation Resistance	5,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Plug Bulkhead Mount Slide-On Connector Crimp/Solder Attachment for RG178, RG196 PE45315](#)



**BMA Plug Bulkhead Mount Slide-On Connector**  
Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45315

**Mechanical Specifications**

**Size**

Length 0.96 in [24.38 mm]

Width/Dia. 0.43 in [10.92 mm]

Weight 0.015 lbs [6.8 g]

Mating Cycles 1,000 Cycles

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold 51.18μ in. minimum
Insulation	PTFE	
Outer Conductor	Passivated Stainless Steel	
Body	Passivated Stainless Steel	
Washer	Brass	Nickel
O-Ring	Silicone Rubber	

**Environmental Specifications**

**Temperature**

Operating Range -65 to +125 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Plug Bulkhead Mount Slide-On Connector Crimp/Solder Attachment for RG178, RG196 PE45315](#)



## BMA Plug Bulkhead Mount Slide-On Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45315

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

#### Plotted and Other Data

Notes:

BMA Plug Bulkhead Mount Slide-On 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.

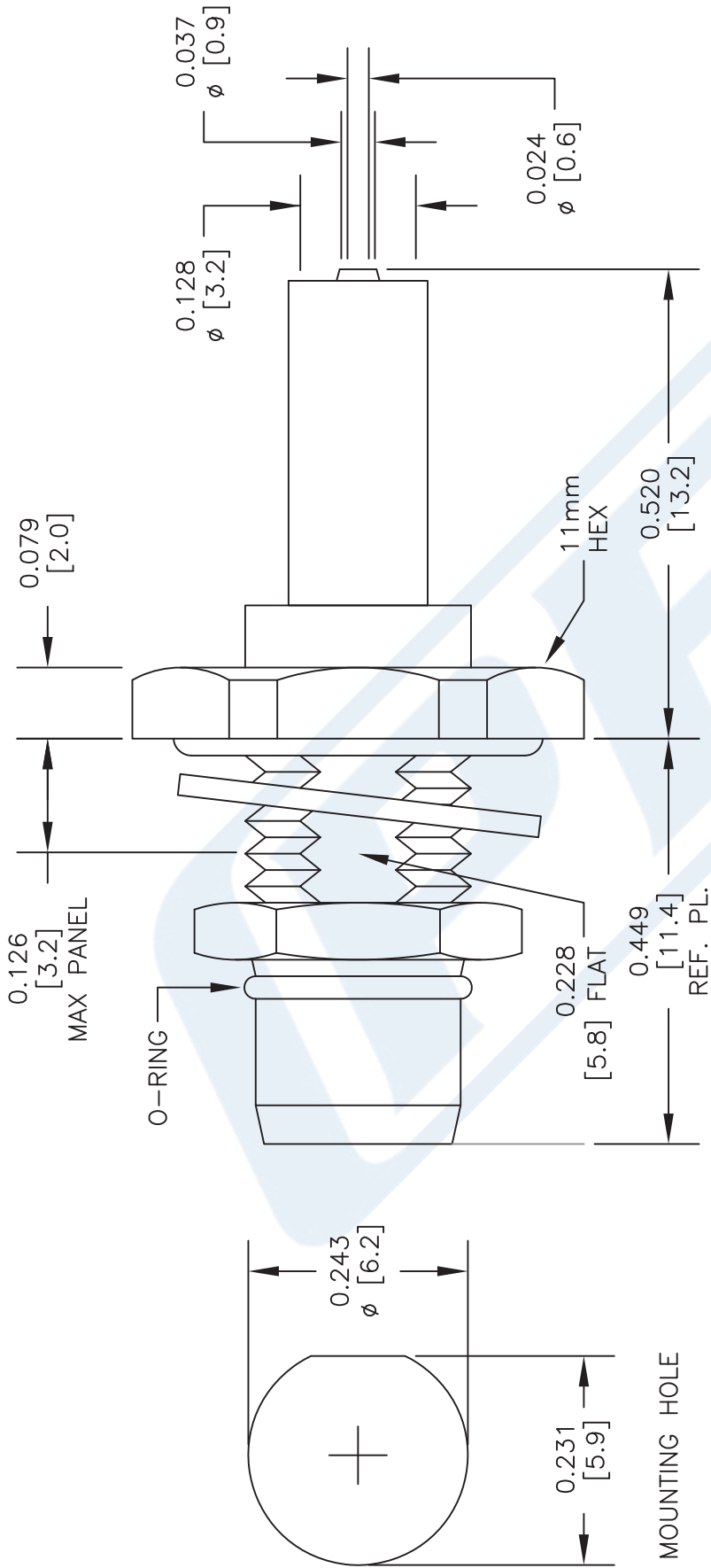
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BMA Plug Bulkhead Mount Slide-On Connector Crimp/Solder Attachment for RG178, RG196 PE45315](#)

URL: <https://www.pasternack.com/bma-plug-slide-on-rg178-rg196-connector-pe45315-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.

# PE45315 CAD Drawing

BMA Plug Bulkhead Mount Slide-On Connector Crimp/  
Solder Attachment for RG178, RG196



## STANDARD TOLERANCES

.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

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DWG TITLE

**PE45315**

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].

CAGE CODE 53919

CAD FILE 022117

SCALE N/A

SIZE A

2233

## BMA Plug Bulkhead Mount Slide-On Connector Crimp/ Solder Attachment for RG178, RG196



1. STRIP CABLE AS SHOWN, SLIDE HEAT SHRINK AND FERRULE (1) ONTO CABLE.
2. FLARE END OF CABLE BRAID & SLIDE METAL SPACER (2) & PTFE (3) SPACER OVER CABLE DIELECTRIC.
3. THE CONTACT (4) SHOULD BUTT AGAINST THE DIELECTRIC & PTFE SPACER. CRIMP CONTACT TO CABLE CENTER CONDUCTOR.
4. INSTALL CABLE ASSEMBLY INTO BODY SO THAT THE INNER FERRULE PORTION OF BODY SLIDES UNDER BRAID. PUSH CABLE ASSEMBLY FORWARD UNTIL CONTACT SNAPS INTO PLACE. SLIDE FERRULE OVER BRAID AND UP AGAINST CONNECTOR BODY & CRIMP.

FERRULE: .100" HEX CRIMP TOOL

STANDARD TOLERANCES	
.X	$\pm 0.2$
.XX	$\pm 0.1$
.XXX	$\pm 0.05$

**\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES**

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**DWG TITLE**

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CAGE CODE 53919

CAD FILE 022117

SCALE N/A

**SIZE A**

2233



## SMP Female Connector Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE44655

#### Configuration

- SMP Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Solder/Solder Attachment

#### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.25:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44655 SMP female connector with solder/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 3 GHz and offers excellent VSWR of 1.25:1. 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.

Our SMP female connector PE44655 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		3	GHz
VSWR			1.25:1	

#### Mechanical Specifications

<b>Size</b>	
Length	0.25 in [6.35 mm]
Width/Dia.	0.135 in [3.43 mm]
Weight	0.003 lbs [1.36 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Connector Solder Attachment for RG178, RG196 PE44655](#)





## SMP Female Connector Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE44655

#### Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	PTFE	
Body	Beryllium Copper	Gold MIL-G-45204

#### Environmental Specifications

##### Temperature

Operating Range -55 to +125 deg C

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

#### Plotted and Other Data

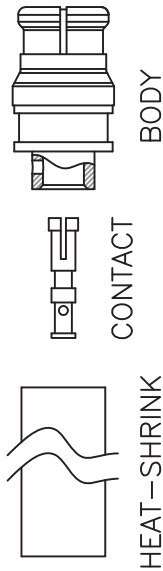
Notes:

SMP Female Connector 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% 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 Connector Solder Attachment for RG178, RG196 PE44655](#)

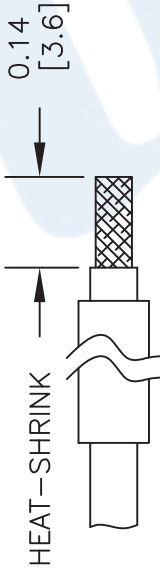
URL: <https://www.pasternack.com/smp-female-standard-rg178-rg196-connector-pe44655-p.aspx>

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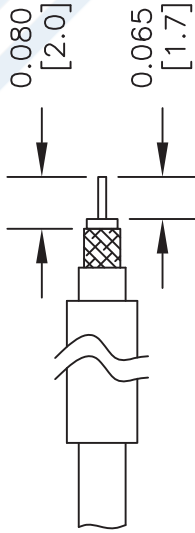


ASSEMBLY PROCEDURES

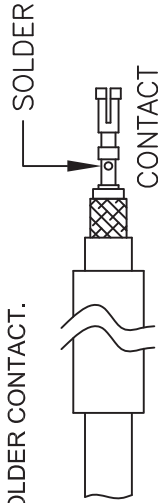
1. INSERT HEAT SHRINK TUBE ON CABLE, STRIP CABLE TO DIMENSION SHOWN. DIP END OF CABLE INTO FLUX AND THEN TIN BRAID.



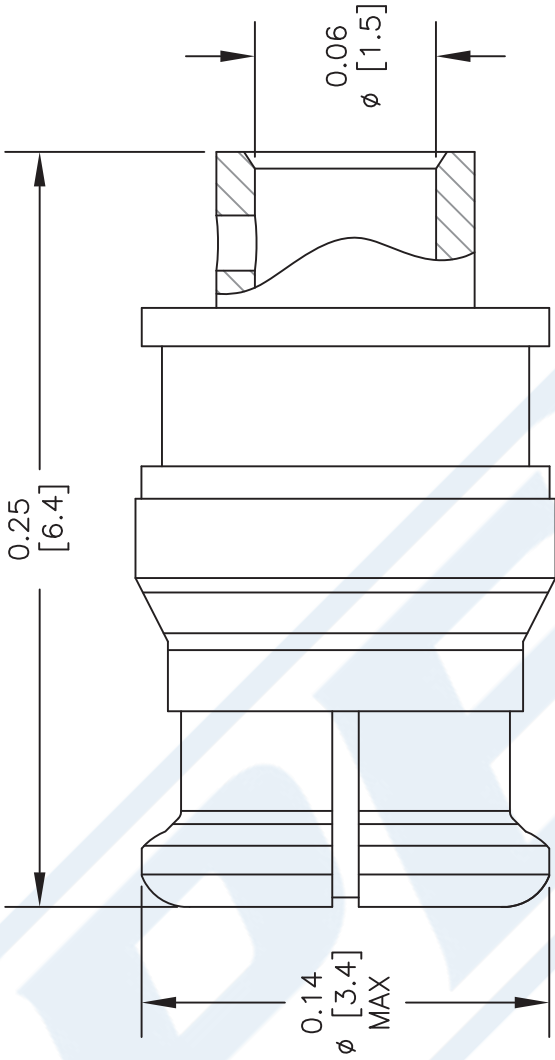
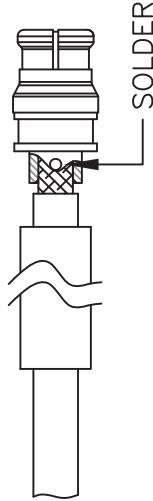
2. AFTER PRE TINNING TRIM TO DIMENSION SHOWN.



3. SOFT SOLDER CONTACT.



4. INSTALL CABLE INTO BODY AND SOLDER CABLE TO BODY AS SHOWN, SLIDE HEAT-SHRINK TUBE TOWARDS BODY SHOULDER AND SHRINK TO FIT.



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DWG TITLE  
**PE44655**

FSCM NO. 53919

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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.

CAD FILE 071113

SCALE N/A

SIZE A

2233



## 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.

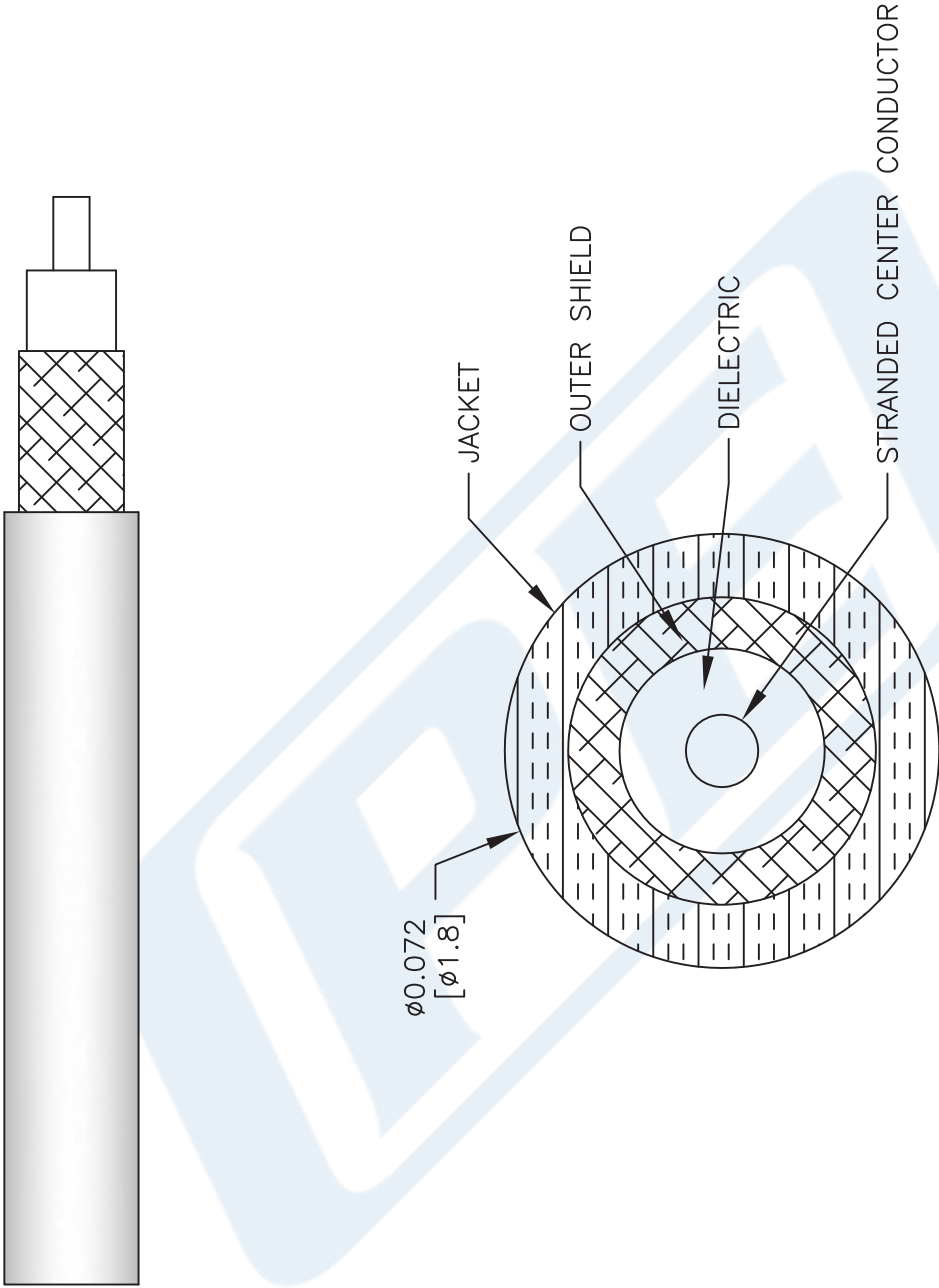
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

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



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

DWG TITLE  
**RG178B/U**

CAGE CODE 53919

CAD FILE 062117

SCALE N/A

SIZE A

2233

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