



QN Female Bulkhead Mount Connector Crimp/ Solder Attachment for RG55, RG141, RG142, RG223, RG400, .500 inch Diameter, IP68

RF Connectors Technical Data Sheet

PE44605

Configuration

- QN Female Connector
- 50 Ohms
- Straight Body Geometry
- RG55, RG141, RG142, RG223, RG400 Interface

- Type
- Crimp/Solder Attachment
 - Bulkhead

Features

- Max. Operating Frequency 11 GHz
- Gold over Nickel Plated Spring Bronze Contact
- 0.15 μ m minimum contact plating
- IP68 0.3 bar (interface only)

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE44605 QN female bulkhead connector with crimp/solder attachment for RG55, RG141, RG142, RG223 and RG400 (.500 inch diameter) is part of our full line of RF components available for same-day shipping. Our QN female connector operates up to a maximum frequency of 11 GHz. This QN 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. The connector has an IP68 rating to protect against dust and prolonged moisture protection under immersion conditions.

Our QN female bulkhead connector PE44605 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		11	GHz
Operating Voltage (AC)			1,000	Vrms
Test Voltage (AC)			2,500	Vrms
Inner Conductor DC Resistance			1.5	mOhms
Outer Conductor DC Resistance			1.5	mOhms
Insulation Resistance	5,000			MOhms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2.5	2.5 to 6				GHz
VSWR, Max	1.12:1	1.23:1				

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QN Female Bulkhead Mount Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400, .500 inch Diameter, IP68 PE44605](#)



QN Female Bulkhead Mount Connector Crimp/
Solder Attachment for RG55, RG141, RG142,
RG223, RG400, .500 inch Diameter, IP68

RF Connectors Technical Data Sheet

PE44605

Electrical Specification Notes:
RF leakage: 90 dB (up to 3 GHz) min.
Insertion loss = $0.05 \times \sqrt{f(\text{GHz})}$ dB max.

Mechanical Specifications

Size

Length	1.665 in [42.29 mm]
Width/Dia.	0.67 in [17.02 mm]
Weight	0.096 lbs [43.54 g]
Mating Cycles	100 Cycles

Material Specifications

Description	Material	Plating
Contact	Spring Bronze	Gold over Nickel 0.15 μm minimum
Insulation	PTFE	
Body	Brass	Tri-Metal

Environmental Specifications

Temperature

Operating Range	-40 to +125 deg C
Ingress Protection (IP) Rating	IP68 0.3 bar (interface only)
Humidity	MIL-STD-202, Method 106
Shock	MIL-STD-202, Method 213, Condition I
Vibration	MIL-STD-202, Method 204, Condition A
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B

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**QN Female Bulkhead Mount Connector Crimp/
Solder Attachment for RG55, RG141, RG142,
RG223, RG400, .500 inch Diameter, IP68**

RF Connectors Technical Data Sheet

PE44605

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

Plotted and Other Data

Notes:

QN Female Bulkhead Mount Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400, .500 inch Diameter, IP68 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.

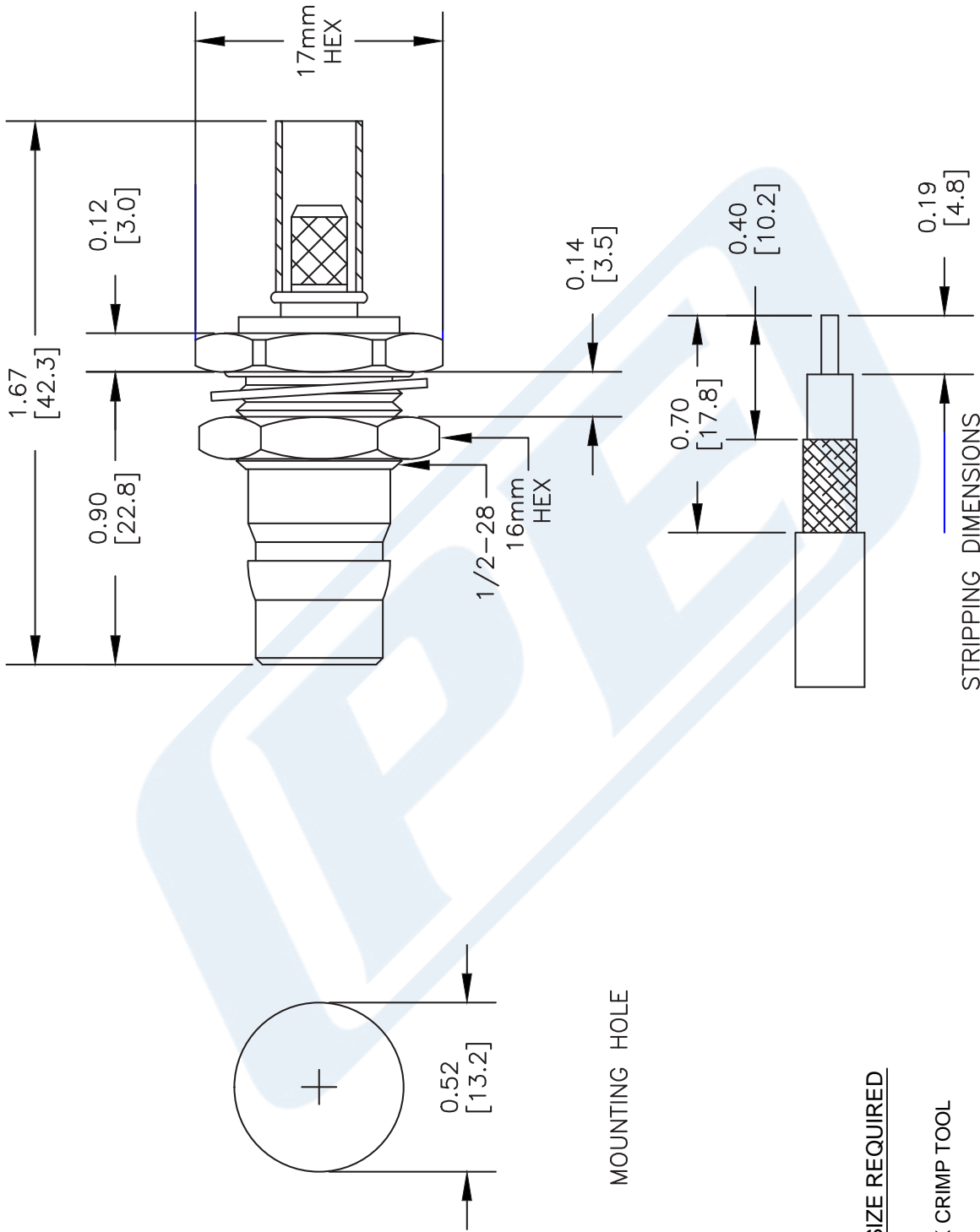
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QN Female Bulkhead Mount Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400, .500 inch Diameter, IP68 PE44605](#)

URL: <https://www.pasternack.com/qn-female-standard-rg55-rg142-rg223-rg400-connector-pe44605-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.

PE44605 CAD Drawing

QN Female Bulkhead Mount Connector Crimp/Solder Attachment for
RG55, RG141, RG142, RG223, RG400, .500 inch Diameter, IP68



MOUNTING HOLE

CRIMP SIZE REQUIRED

CONTACT: SOLDER
FERRULE: .213" HEX CRIMP TOOL

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.

DWG TITLE
PE44605

FSCM NO. 53919

CAD FILE 061208
SCALE N/A
SIZE A
XXXX

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QN Male Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400

RF Connectors Technical Data Sheet

PE44978

Configuration

- QN Male Connector
- 50 Ohms
- Straight Body Geometry
- RG55, RG141, RG142, RG223, RG400 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.2:1
- Silver Plated Brass Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44978 QN male connector with crimp/solder attachment for RG55, RG141, RG142, RG223 and RG400 is part of our full line of RF components available for same-day shipping. Our QN male connector operates up to a maximum frequency of 6 GHz and offers excellent VSWR of 1.2:1.

Our QN male connector PE44978 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			1.2:1	
Insertion Loss			0.12	dB
Operating Voltage (AC)			850	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion loss = $0.048 \times \sqrt{f(\text{GHz})}$ dB max.

Mechanical Specifications

Size	
Length	1.38 in [35.05 mm]
Width/Dia.	0.75 in [19.05 mm]
Weight	0.038 lbs [17.24 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QN Male Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400 PE44978](#)



QN Male Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400

RF Connectors Technical Data Sheet

PE44978

Mating Cycles

100 Cycles

Material Specifications

Description	Material	Plating
Contact	Brass	Silver
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Nickel
Body	Brass	Silver

Environmental Specifications

Temperature

Operating Range

-55 to +125 deg C

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

Plotted and Other Data

Notes:

QN Male Connector Crimp/Solder Attachment for RG55, RG141, RG142, RG223, RG400 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.

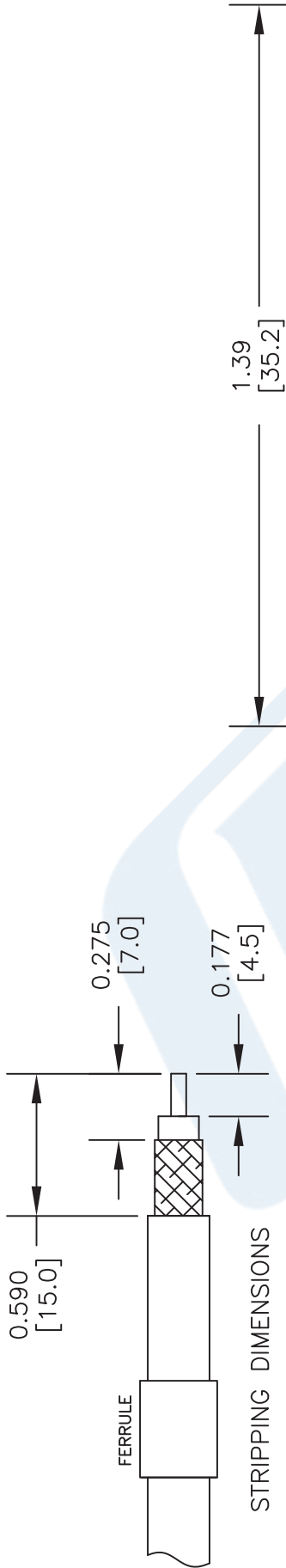
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URL: <https://www.pasternack.com/qn-male-standard-rg55-rg142-rg223-rg400-connector-pe44978-p.aspx>

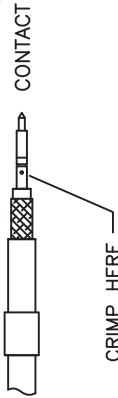
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ASSEMBLY PROCEDURES

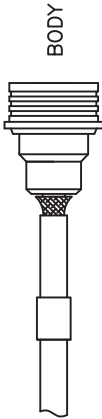
1. STRIP CABLE AS SHOWN. SLIDE FERRULE OVER CABLE.



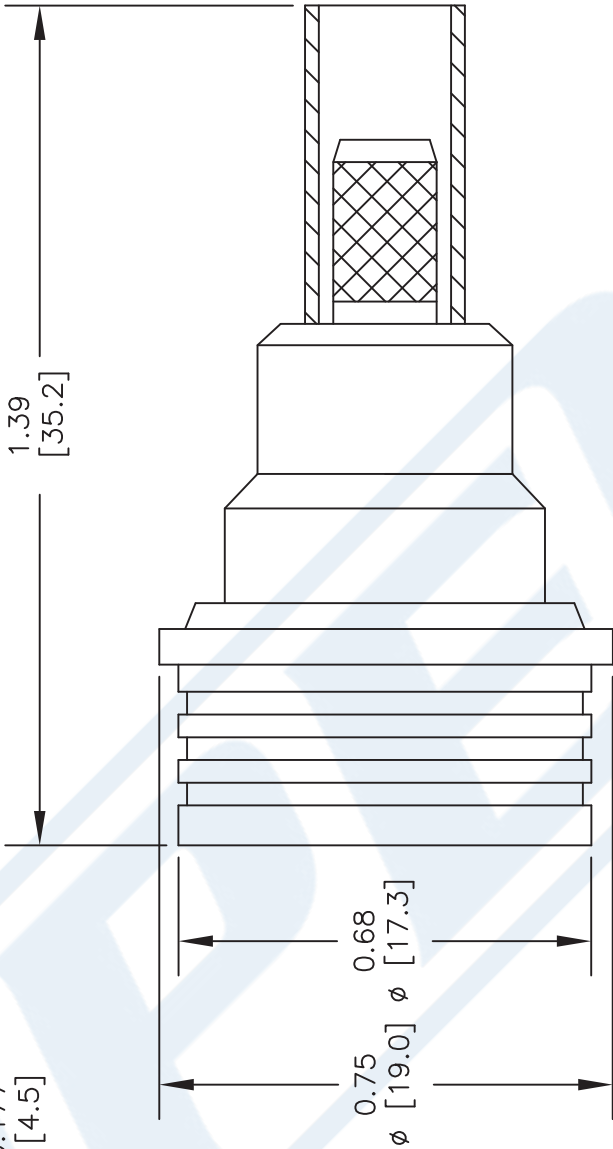
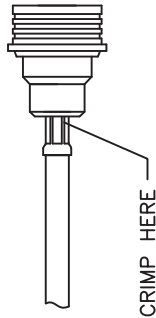
2. INSERT DIELECTRIC INTO CONTACT AND CRIMP IT WITH .100" HEX CRIMP TOOL. SPLAY OUT THE BRAID.



3. INSERT STRIPPED CABLE INTO BODY UNTIL CONTACT ENGAGES PERCEPTIBLY.



4. SLIDE FERRULE OVER BRAID UP TO THE CONNECTOR BODY AND CRIMP AS CLOSE TO THE CONNECTOR BODY AS POSSIBLE USING A .213" HEX CRIMP TOOL.



DWG TITLE

PE44978

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3. DIMENSIONS ARE IN INCHES [mm].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

Website: www.pasternack.com | E-Mail: sales@pasternack.com

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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CAGE CODE 53919

CAD FILE 101016

SCALE N/A

SIZE A

2233



Flexible RG223 Coax Cable Double
Shielded with Black PVC Jacket

TECHNICAL DATA SHEET

RG223/U

Configuration

Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PE
Shield Materials	Silver Plated Copper Braid, Silver Plated Copper Braid
Jacket Material and Color	PVC, Black

Electrical Specifications

Impedance, Ohms	50
Velocity of Propagation, %	66
Maximum Operating Frequency, GHz	12.4
Capacitance, pF/ft [pF/m]	30.8 [101.05]
Maximum Operating Voltage, Volts	1,900

Electrical Specifications by Frequency

Frequency 1

Frequency, MHz	100
Attenuation, dB/100ft [dB/100m]	4 [13.12]

Frequency 2

Frequency, MHz	400
Attenuation, dB/100ft [dB/100m]	8.2 [26.9]

Frequency 3

Frequency, MHz	1000
Attenuation, dB/100ft [dB/100m]	13.4 [43.96]

Frequency 4

Frequency, GHz	3
Attenuation, dB/100ft [dB/100m]	24.8 [81.36]

Frequency 5

Frequency, GHz	5
Attenuation, dB/100ft [dB/100m]	33.5 [109.91]

Frequency 6

Frequency, GHz	11
Attenuation, dB/100ft [dB/100m]	54.1 [177.49]

Mechanical Specifications

Temperature

Operating Range, deg C	-20 to +80
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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: [Flexible RG223 Coax Cable Double Shielded with Black PVC Jacket RG223/U](#)



Flexible RG223 Coax Cable Double Shielded with Black PVC Jacket

TECHNICAL DATA SHEET

RG223/U**Inner Conductor**

Number of Strands	1
Material	Copper
Plating	Silver
Diameter, in [mm]	0.035 [0.89]

Dielectric:

Type	PE
Diameter, in [mm]	0.116 [2.95]

Shield:

Number of	2
Material 1	Silver Plated Copper Braid
Material 2	Silver Plated Copper Braid
Diameter, in [mm]	0.156 [3.96]

Jacket:

Material	PVC
Diameter, in [mm]	0.21 [5.33]
Color	Black
One Time Minimum Bend Radius, in [mm]	0.21 [5.33]
Repeated Minimum Bend Radius, in [mm]	1 [25.4]
Weight, lbs/ft [Kg/m]	0.038 [0.06]

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	06/18/2012

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

Flexible RG223 Coax Cable Double Shielded with Black PVC Jacket 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.

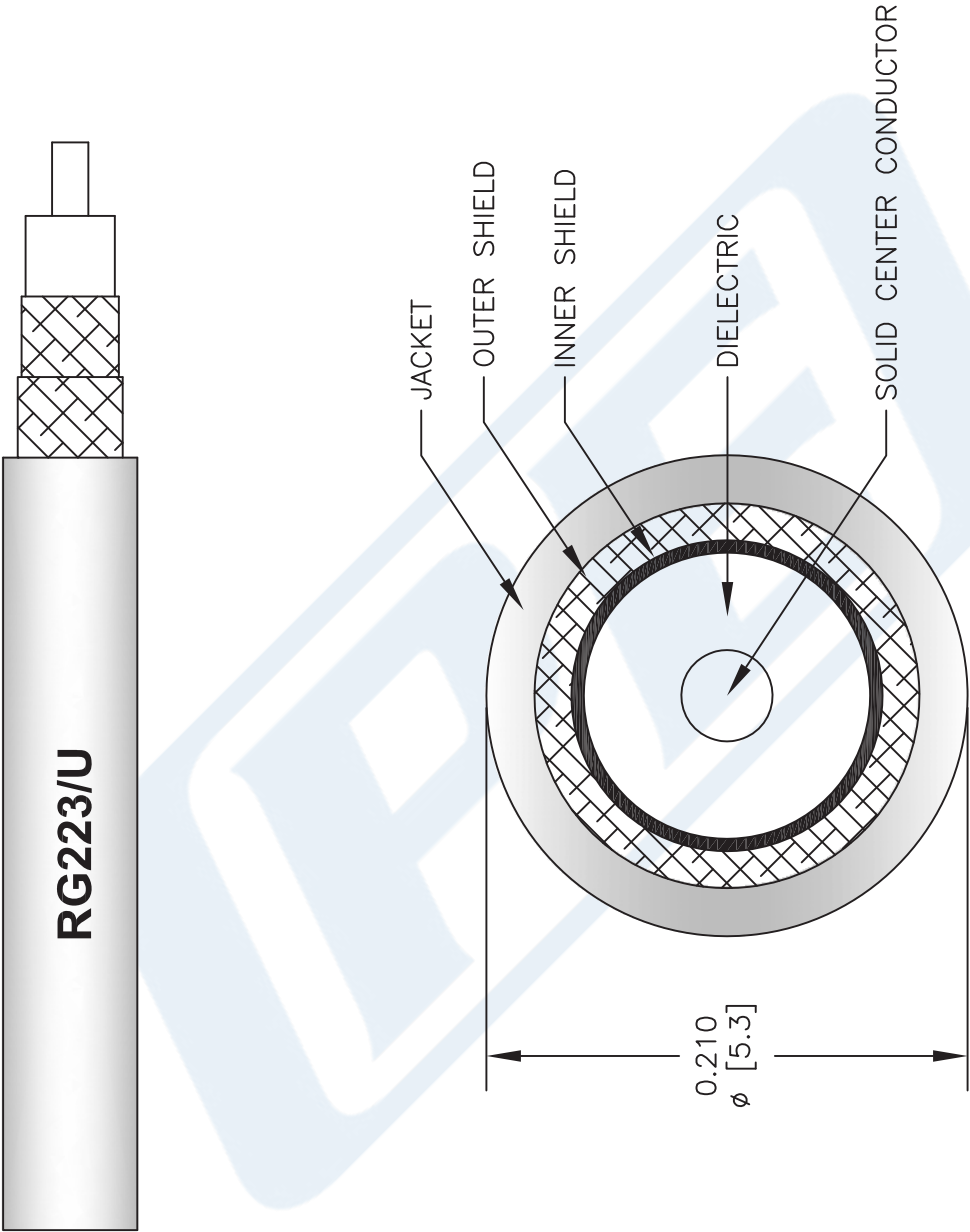
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG223 Coax Cable Double Shielded with Black PVC Jacket RG223/U](#)

URL: <http://www.pasternack.com/flexible-0.216-rg223-50-ohm-coax-cable-pvc-jacket-rg223-u-p.aspx>

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RG223/U CAD Drawing

Flexible RG223 Coax Cable Double Shielded with Black PVC Jacket



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3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
RG223/U

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 060508-B

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