



## QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

### RF Connectors Technical Data Sheet

PE44505

#### Configuration

- QMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- RG316-DS, RG188-DS Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 18 GHz
- Gold Plated Brass Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44505 QMA male right angle connector with crimp/solder attachment for RG316-DS and RG188-DS is part of our full line of RF components available for same-day shipping. Our QMA male connector operates up to a maximum frequency of 18 GHz. Its right angle body geometry allows for easier connections in tight spaces.

Our QMA male right angle connector PE44505 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		18	GHz
Operating Voltage (AC)			350	Vrms
Test Voltage (AC)			750	Vrms
Inner Conductor DC Resistance			3	mOhms
Outer Conductor DC Resistance			2.5	mOhms
Insulation Resistance	5,000			MOhms

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 4	4 to 6			GHz
VSWR, Max	1.11:1	1.14:1	1.29:1			

#### Electrical Specification Notes:

RF leakage: 95 dB (up to 2 GHz), 80 dB (up to 4 GHz), 70 dB (up to 6 GHz) min.  
 Insertion loss = 0.05 x sqrt(fGHz) dB max up to 6 GHz.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE44505](#)



QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS

RF Connectors Technical Data Sheet

PE44505

**Mechanical Specifications**

**Size**

Length	0.63 in [16 mm]
Width/Dia.	0.41 in [10.41 mm]
Height	0.71 in [18.03 mm]
Weight	0.006 lbs [2.72 g]
Mating Cycles	100 Cycles

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold
Insulation	PTFE	
Outer Conductor	Spring Bronze	Tri-Metal
Body	Brass	Tri-Metal

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +85 deg C
Storage Range	-40 to +85 deg C
Humidity	IEC 60169-1 16.3 (96 hours)
Vibration	IEC 60068-2-64 random
Thermal Shock	IEC 60169-1 16.4 (-40/+85°C)
Salt Spray	IEC 60109-1 16.7 (48 hrs)

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QMA Male Right Angle Connector Crimp/Solder  
Attachment for RG316-DS, RG188-DS

RF Connectors Technical Data Sheet

PE44505

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

**Plotted and Other Data**

Notes:

QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS 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.

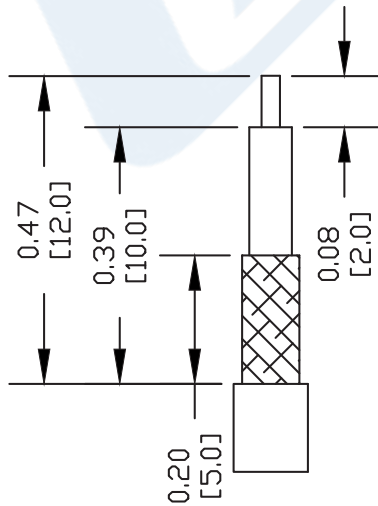
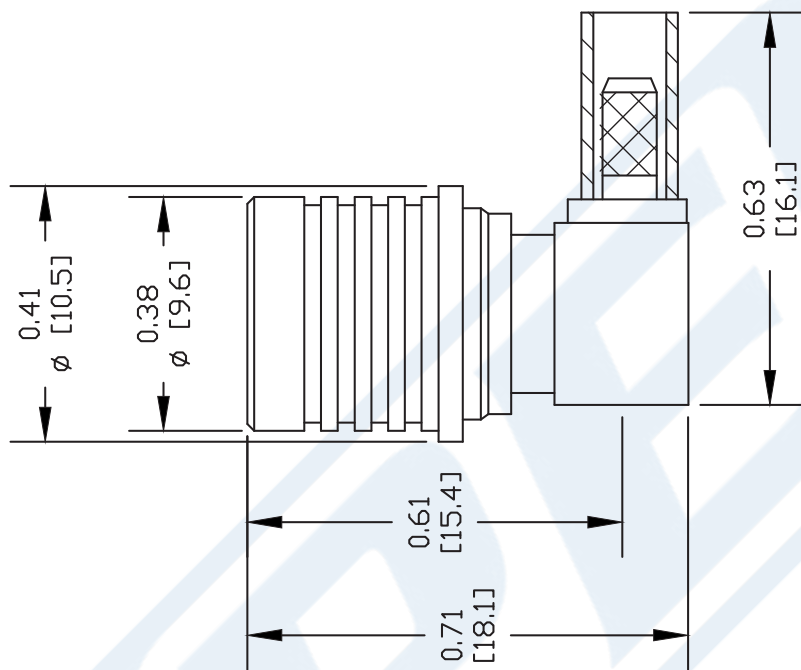
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS PE44505](#)

URL: <https://www.pasternack.com/qma-male-standard-rg316-ds-connector-pe44505-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.

# PE44505 CAD Drawing

QMA Male Right Angle Connector Crimp/Solder Attachment for RG316-DS, RG188-DS



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

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

## CRIMP SIZE REQUIRED

FERRULE: 3.25 CRIMP TOOL

DWG TITLE

**PE44505**

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 090711-A

SCALE N/A

SIZE A

2231

**PE PASTERNAK®**

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# SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

## RF Connectors Technical Data Sheet

PE4416

### Configuration

- SMA Female Connector
- 50 Ohms
- Straight Body Geometry
- RG188-DS, RG316-DS Interface Type
- Crimp/Solder Attachment

### Features

- Max. Operating Frequency 18 GHz

### Applications

- General Purpose Test
- Custom Cable Assemblies

### Description

Pasternack's PE4416 SMA female connector with crimp/solder attachment for RG188-DS and RG316-DS is part of our full line of RF components available for same-day shipping. Our SMA female connector operates up to a maximum frequency of 18 GHz.

Our SMA female connector PE4416 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		18	GHz
Dielectric Withstanding Voltage (AC)			750	Vrms

### Mechanical Specifications

Weight 0.008 lbs [3.63 g]

### Material Specifications

Description	Material	Plating
Body	Brass	Nickel

### Environmental Specifications

#### Temperature

Operating Range -65 to +165 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4416](#)



## SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

PE4416

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

#### Plotted and Other Data

Notes:

SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS 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: [SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4416](#)

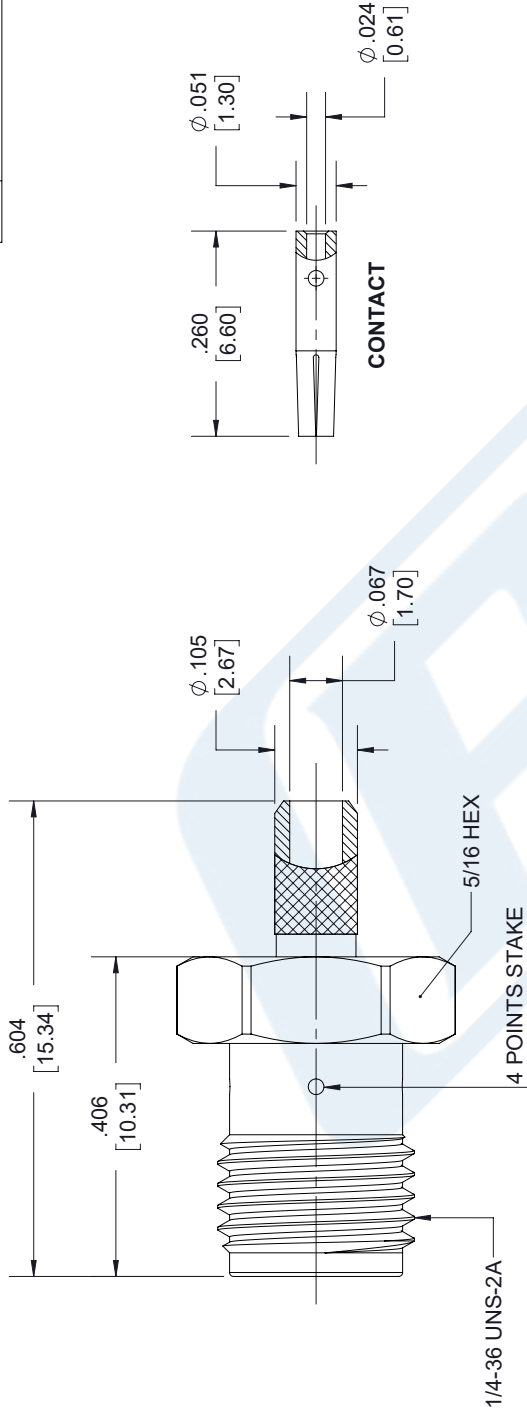
URL: <https://www.pasternack.com/sma-female-rg188-ds-rg316-ds-connector-pe4416-p.aspx>

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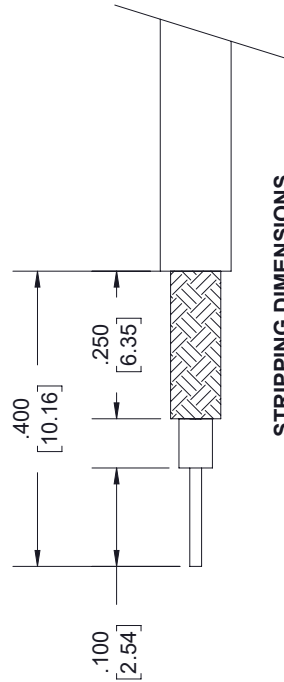
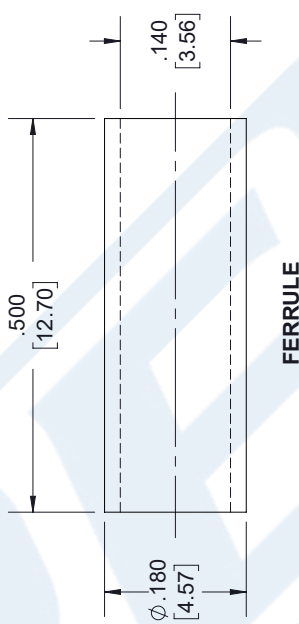
# PE4416 CAD Drawing

SMA Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR PE4416 20190319	03/29/19	J.GARCIA

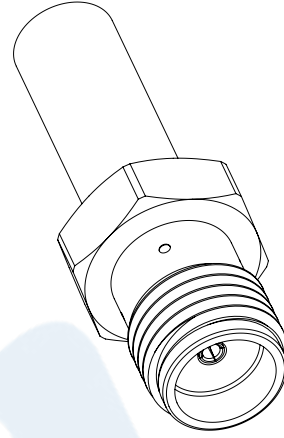


SMA FEMALE



NOTES:

- CABLE ATTACHMENT:
  - OUTER: CRIMP.
  - INNER: SOLDER.
- CRIMP SIZE REQUIRED:
  - FERRULE: .151 [3.84] HEX. CRIMP TOOL
  - CONTACT: SOLDER.



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X $\pm$ .2	[5.08]
.XX $\pm$ .01	[.25]
.XXX $\pm$ .005	[.13]
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THIRD-ANGLE PROJECTION	

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SHEET 1 OF 1  
SCALE N/A

SIZE A CAGE DRAWN BY PART NUMBER REV  
53919 K.DANG PE4416 A

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## Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316-DS

#### Configuration

- Flexible Cable
- 2 Shield(s)

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Shielding Effectiveness	85			dB
Operating Voltage (AC)			1,200	Vrms
Inner Conductor DC Resistance			83.82	Ohms/1000ft
Outer Conductor DC Resistance			5.33	Ohms/1000ft
Nominal Capacitance		28.96 [95.01]		pF/ft [pF/m]
Insulation Resistance	304.8			MOhms/1000ft

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	2	3	GHz
Attenuation, Max	10.97	20.97	37.95	45.05	57.94	dB/100ft
	35.99	68.8	124.51	147.8	190.09	dB/100m
Attenuation, Typ	8.29	17.5	29	39.41	53.55	dB/100ft
	27.2	57.41	95.14	129.3	175.69	dB/100m
Input Power (CW), Max	375	185	120	85	65	Watts

#### Mechanical Specifications

Diameter	0.114 in [2.9 mm]
Weight	0.015 lbs/ft [0.02 Kg/m]
Min. Bend Radius (Installation)	0.59 in [14.99 mm]
Min. Bend Radius (Repeated)	1.57 in [39.88 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

## Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG316-DS

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.02 in 0.51 mm
Conductor Type	Stranded	
Dielectric	PTFE	0.06 in [1.52 mm]
First Shield	Silver Plated Copper Braid	
Second Shield	Silver Plated Copper Braid	0.094 in 2.39 mm
Jacket	FEP, Tan	0.114 in [2.9 mm]

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +200 deg C

Storage Range

0 to +40 deg C

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

#### Plotted and Other Data

Notes:

Flexible RG316-DS Coax Cable Double 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 RG316-DS Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

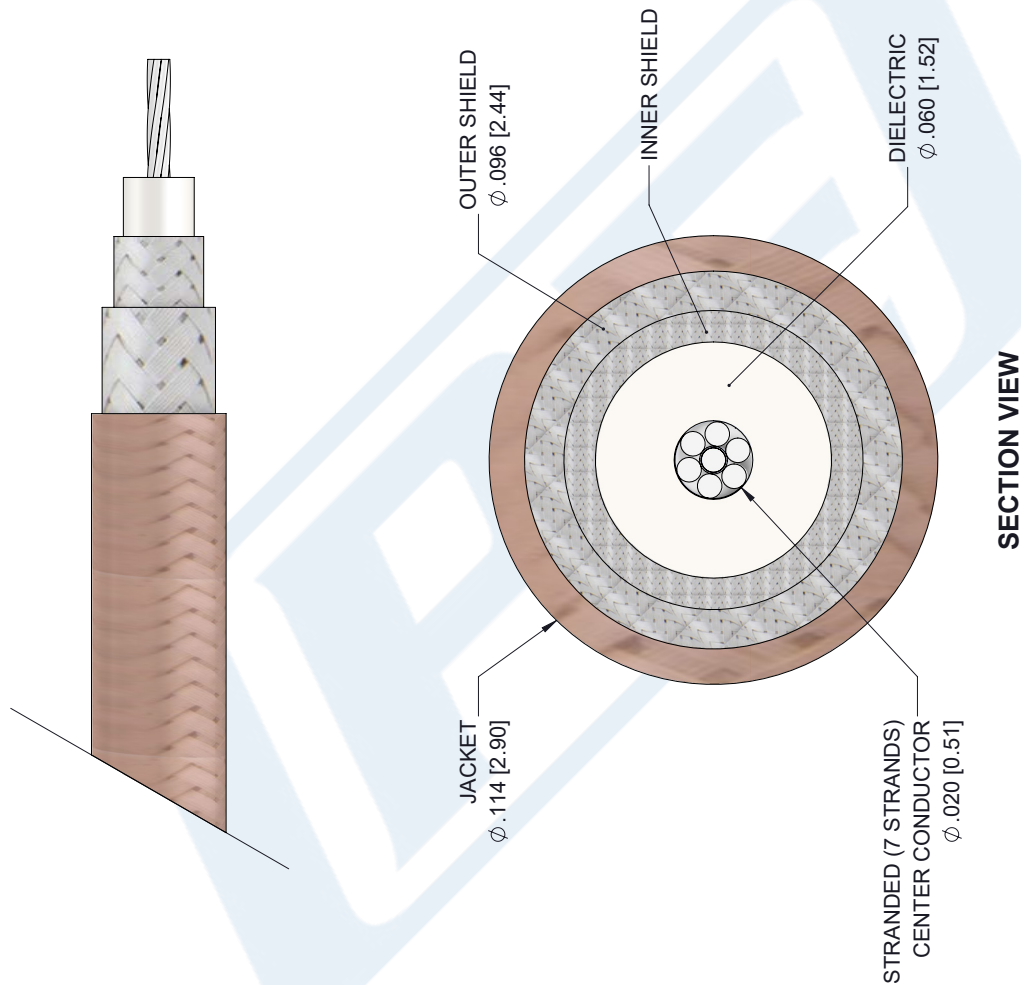
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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# RG316-DS CAD Drawing

Flexible RG316-DS Coax Cable Double Shielded with Tan FEP Jacket

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR RG316-DS 20190701	07/15/19	S.ELLIS



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TOLERANCES:	
X±.2 [5.08]	FRACTIONS ±.132
.XX±.01 [.25]	ANGLES ± 1°
.XXX±.005 [.13]	
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SIZE A CAGE 53919 DRAWN BY K.Dang	PART NUMBER RG316-DS	REV A

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