



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

RF Connectors Technical Data Sheet

PE4417

Configuration

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

Features

- Max. Operating Frequency 18 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4417 SMA female connector with solder/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 and offers good VSWR of 1.5:1.

Our SMA female connector PE4417 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
VSWR			1.5:1	
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms

Mechanical Specifications

Size	
Length	0.603 in [15.32 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.008 lbs [3.63 g]

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 Solder Attachment for RG188-DS, RG316-DS PE4417](#)



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

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Material Specifications

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

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

SMA Female Connector 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 Solder Attachment for RG188-DS, RG316-DS PE4417](#)

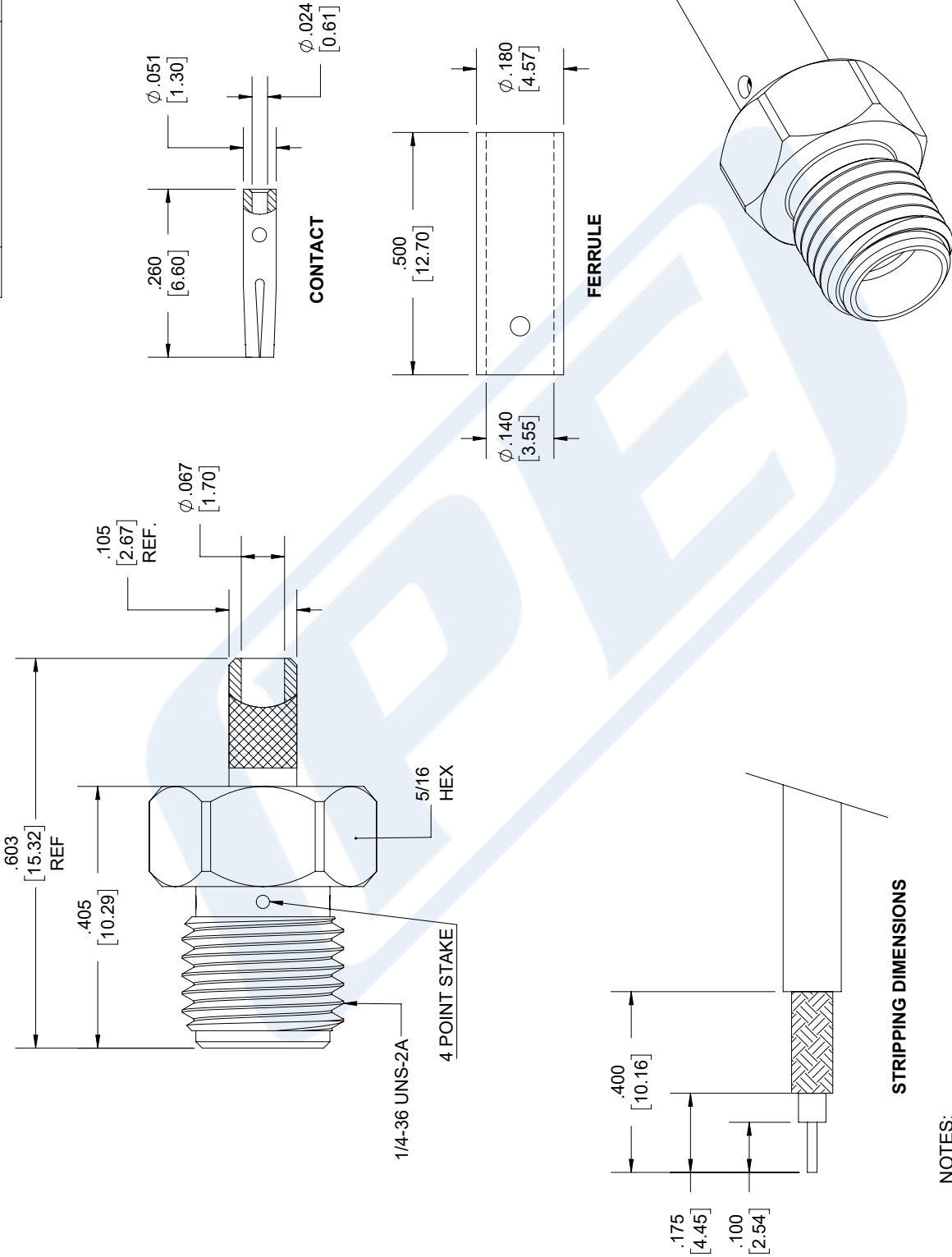
URL: <https://www.pasternack.com/sma-female-standard-rg188-ds-rg316-ds-connector-pe4417-p.aspx>

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.

PE4417 CAD Drawing

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR PE4417 20190620	07/01/19	S. SELLIS



STRIPPING DIMENSIONS

- NOTES:
- CABLE ATTACHMENT:
 - OUTER: SOLDER.
 - INNER: SOLDER.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
.XX±.01 [.25]	
.XXX±.005 [.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

PE PASTERNAK
an INFINITO brand

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SHEET 1 OF 1
SCALE N/A

SIZE A CAGE DRAWN BY PART NUMBER REV
53919 KDANG PE4417 1.1

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MMCX Plug Right Angle Connector Crimp/
Solder Attachment For RG316-DS

TECHNICAL DATA SHEET

PE44784

Configuration

Connector	MMCX Plug
Connector Specification	BS EN 122340
Connector Interface Type	RG316-DS
Cable Attachment Method (Shield/Contact)	Crimp/Solder
Body Style	Right Angle

Electrical Specifications

Frequency Range, GHz	DC to 6
Impedance, Ohms	50
Maximum VSWR	1.35:1
Maximum Operating Voltage, Volts	250

Mechanical Specifications

Temperature

Operating Range, deg C	-55 to +155
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Size

Length, in [mm]	0.53 [13.46]
Width/Dia., in [mm]	0.28 [7.11]
Weight, lbs [g]	0.003 [1.36]

Connector

Type	MMCX Plug
Contact Material and Plating	Brass, Gold
Contact Plating Specification	30µ in. minimum
Body Material and Plating	Brass, Gold
Body Plating Specification	3µ in. minimum
Dielectric Type	Teflon

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

RoHS Compliant	Yes
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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: [MMCX Plug Right Angle Connector Crimp/Solder Attachment For RG316-DS PE44784](#)

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.



MMCX Plug Right Angle Connector Crimp/ Solder Attachment For RG316-DS

TECHNICAL DATA SHEET

PE44784

Plotted and Other Data

Notes:

Values at 25 °C, sea level

MMCX Plug Right Angle Connector Crimp/Solder Attachment For RG316-DS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

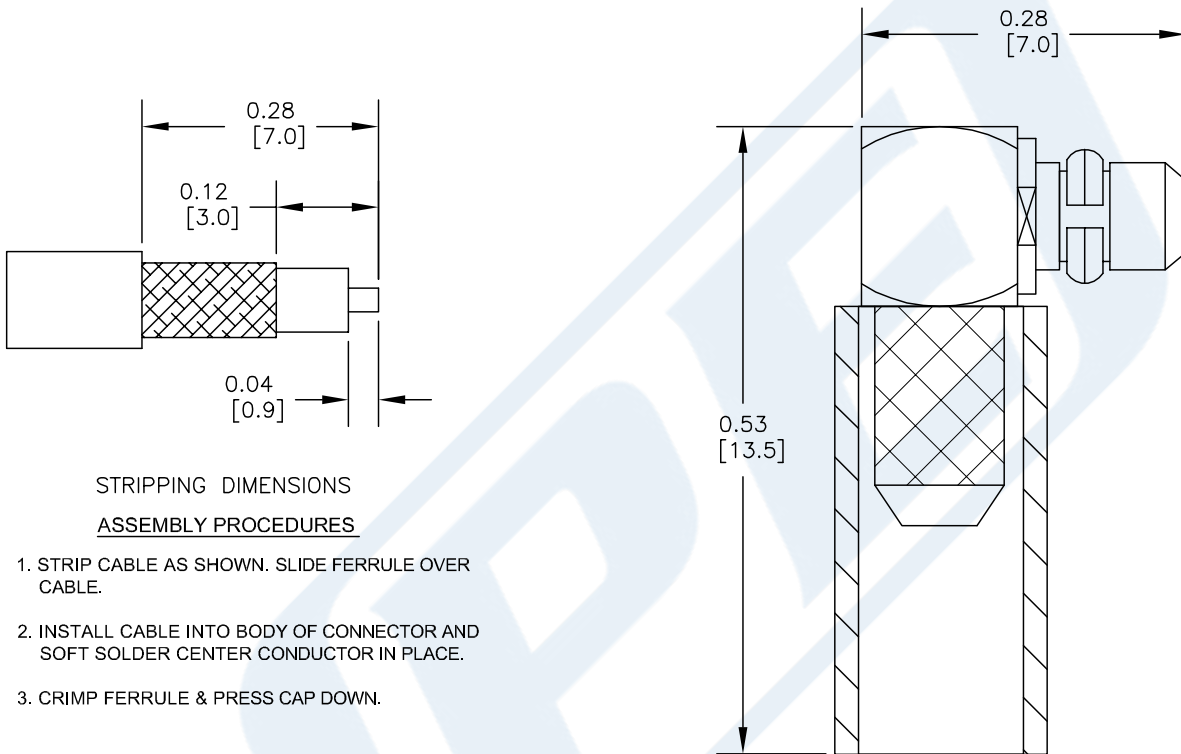
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug Right Angle Connector Crimp/Solder Attachment For RG316-DS PE44784](http://www.pasternack.com/mmcx-plug-right-angle-connector-crimp-solder-attachment-for-rg316-ds-pe44784)

URL: <http://www.pasternack.com/mmcx-plug-standard-rg316-ds-connector-pe44784-p.aspx>

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PE44784 CAD Drawing

MMCX Plug Right Angle Connector Crimp/Solder Attachment For RG316-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: .128" HEX CRIMP TOOL



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DWG TITLE

PE44784

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.

FSCM NO. 53919

CAD FILE 021814

SCALE N/A

SIZE A

2233

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



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
X±.2 [5.08]	FRACTIONS ±.132
.XX±.01 [.25]	±.132
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SHEET 1 OF 1
SCALE N/A

SIZE A
CAGE NUMBER 53919
DRAWN BY K.Dang
PART NUMBER RG316-DS
REV A

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