



## SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4398

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG178, RG196
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 1 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50  $\mu$ m minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4398 SMA male connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 1 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4398 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		1,000	MHz
VSWR			1.3:1	
Operating Voltage (AC)			250	Vrms

#### Mechanical Specifications

##### Size

Length	1.047 in [26.59 mm]
Width/Dia.	0.315 in [8.00 mm]
Weight	0.019 lbs [8.62 g]
Mating Torque	3 to 5 in-lbs [0.34 to 0.57 Nm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE4398](#)



## SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4398

#### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum
Crimp Sleeve	Brass	Nickel

#### Environmental Specifications

##### Temperature

Operating Range -65 to +165 deg C

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

#### Plotted and Other Data

Notes:

SMA Male 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: [SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE4398](#)

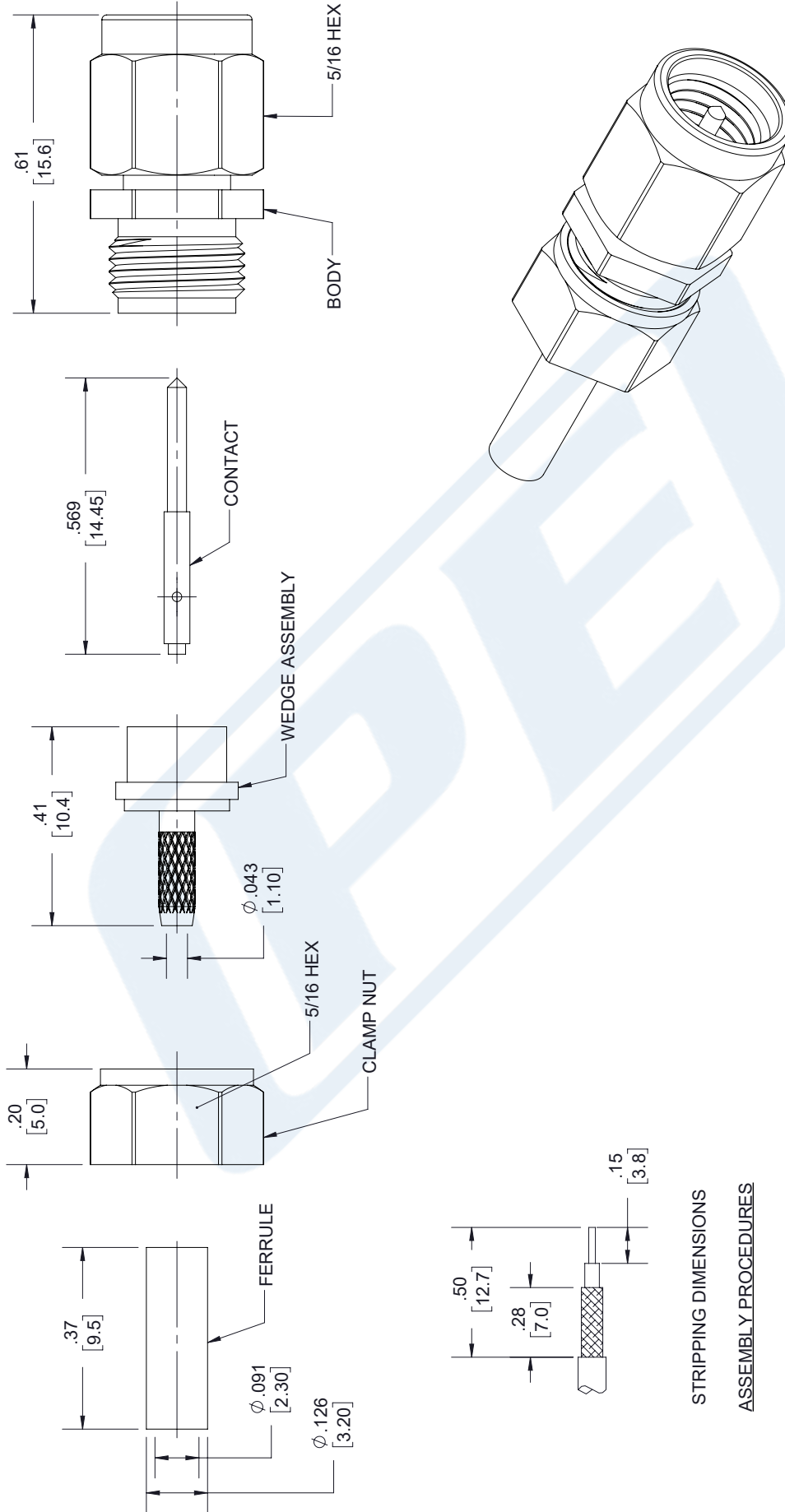
URL: <https://www.pasternack.com/sma-male-standard-rg178-rg196-connector-pe4398-p.aspx>

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.

# PE4398 CAD Drawing

SMA Male Connector Crimp/Solder Attachment for RG178, RG196

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PCR PE4398 20200902	09/22/20	SRAUTUS



1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. TIN CENTER CONDUCTOR.

2. SLIDE FERRULE & CLAMP NUT OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE OVER BRAID & AGAINST EXTENSION. CRIMP FERRULE USING .100" HEX CRIMP TOOL.

3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN TO 8~10 IN-LBS.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08] FRACTIONS ± 1/32  
 .XX = ±.02 [.51] ANGLES ± 1°  
 .XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.



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THIRD-ANGLE PROJECTION

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SHEET	1	OF	1
SCALE	N/A		

SIZE	A	DRAWN BY	SLI	ITEM NO.	PE4398	REV	A
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## RP-MCX Plug Right Angle Push-On Connector Crimp/ Solder Attachment for RG178, RG196, Gold Color

### RF Connectors Technical Data Sheet

PE45051

#### Configuration

- Push-On MCX Plug Reverse Polarity Connector
- 50 Ohms
- Right Angle Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Beryllium Copper Contact
- Reverse Polarity

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45051 RP MCX plug push-on right angle connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. The plug reverse polarity configuration uses a plug connector body with an inner contact receptacle. Our MCX plug connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Our reverse polarity MCX plug right angle connector PE45051 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			1.3:1	
Operating Voltage (AC)			470	Vrms
Operating Voltage (DC)			335	Vdc
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Inner Conductor DC Resistance			5	mOhms
Outer Conductor DC Resistance			5	mOhms
Insulation Resistance	1,000			MOhms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-MCX Plug Right Angle Push-On Connector Crimp/Solder Attachment for RG178, RG196, Gold Color PE45051](#)



RP-MCX Plug Right Angle Push-On Connector Crimp/  
Solder Attachment for RG178, RG196, Gold Color

RF Connectors  
Technical Data Sheet

PE45051

**Mechanical Specifications**

**Size**

Length	0.342 in [8.69 mm]
Width/Dia.	0.2 in [5.08 mm]
Height	0.402 in [10.21 mm]
Weight	0.001 lbs [0.45 g]

**Material Specifications**

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

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

RP-MCX Plug Right Angle Push-On Connector Crimp/Solder Attachment for RG178, RG196, Gold Color 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.

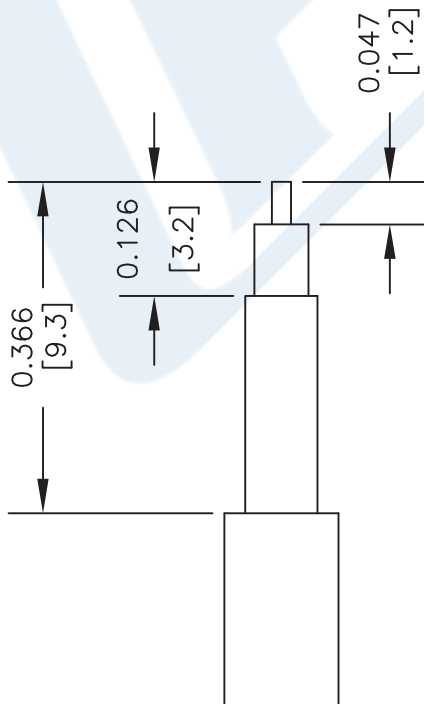
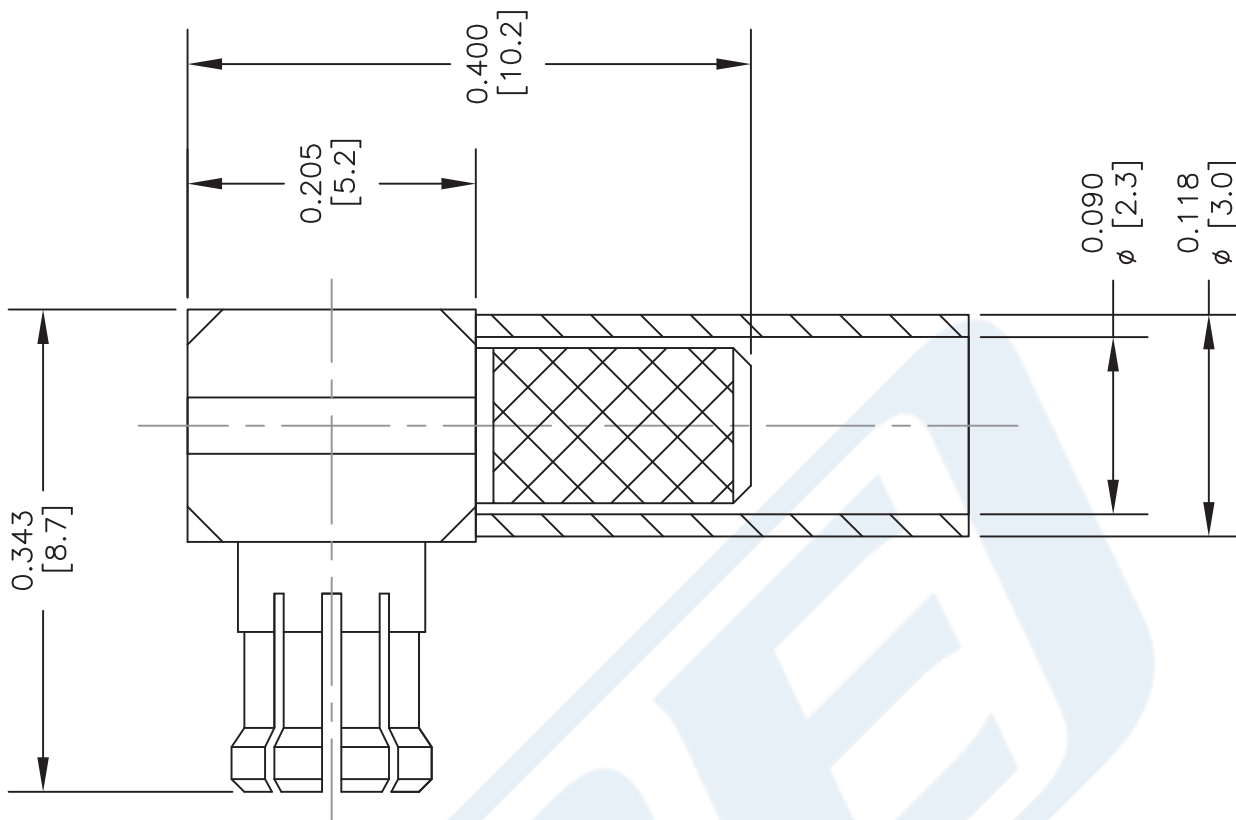
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-MCX Plug Right Angle Push-On Connector Crimp/Solder Attachment for RG178, RG196, Gold Color PE45051](#)

URL: <https://www.pasternack.com/mcx-plug-reverse-polarity-push-on-rg178-rg196-connector-pe45051-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.

# PE45051 CAD Drawing

RP-MCX Plug Right Angle Push-On Connector Crimp/  
Solder Attachment for RG178, RG196, Gold Color



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

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

## CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL

DWG TITLE

**PE45051**

- 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 022615

SCALE N/A

SIZE A

2233



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

## 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 dB/100m
	45.31	91.21	145.7	257.22		

#### 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:  
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  
**RG178B/U**

CAGE CODE 53919

CAD FILE 062117

SCALE N/A

SIZE A

2233

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