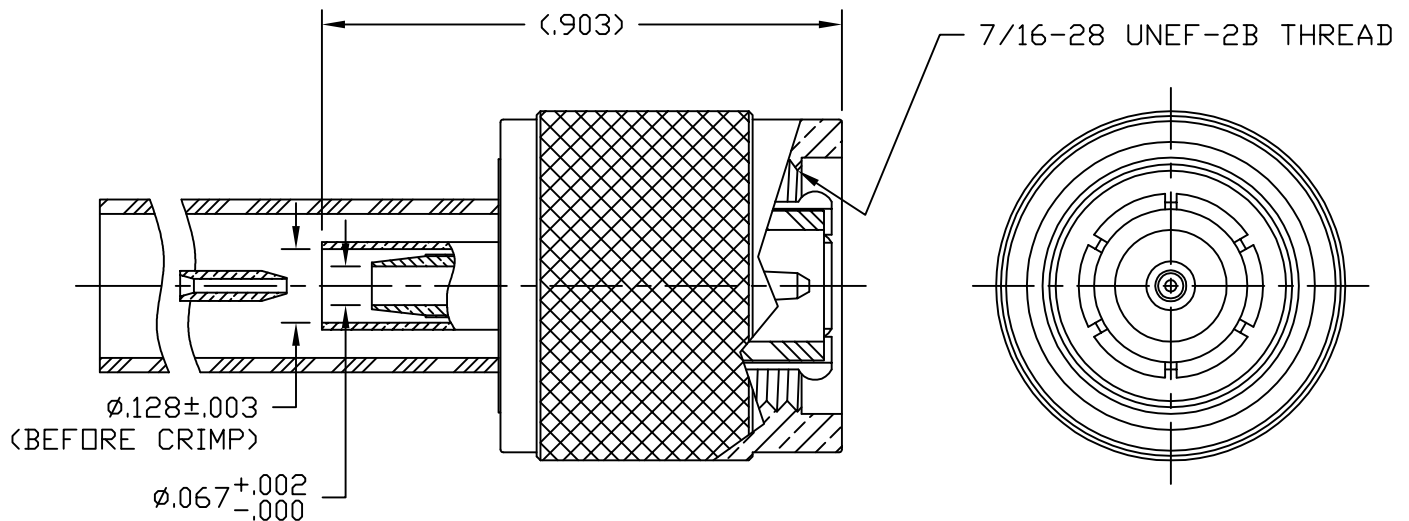


NOTICE OF PROPRIETARY RIGHTS THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
-	RELEASED FOR PRODUCTION	J. C. L.	8/20/03	J. C. L.	8/20/03
A	CHANGED PER CDC #36704	D. J. H.	1/14/13	J. D. B.	1/15/13



NOTES:

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348.
- MATERIAL: BODY & NUT - BRASS PER ASTM B16.
CONTACT FINGERS & CONTACTS - BERYLLIUM COPPER PER ASTM B196.
INSULATOR - TEFLON PER ASTM D1710.
CRIMP SLEEVE - D.H.P. COPPER CDA ALLOY 122.
RETAINING RING - PHOSPHOR BRONZE PER QQ-B-750.
GASKET - SILICONE RUBBER PER ZZ-R-765.
SHRINK SLEEVE - SHRINKABLE POLYOLEFIN PER MIL-I-23053/5.
- FINISHES: RETAINING RING - NOT PLATED.
CONTACTS - GOLD PLATE PER MIL-G-45204.
ALL OTHER METAL PARTS - SILVER PLATE PER QQ-S-365.
- CONTACT PIN IS SOLDERED.
- CRIMP THE FERRULE TO .128" HEX.

MATL:		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH N/A RMS MAX. REMOVE ALL BURRS .005 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS . XX ± .03 .XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/32		DFTM.	TIMES MICROWAVE SYSTEMS									
				J, C, L,										
USED ON: _				DATE	8/20/03									
				CHKD.	J, C, L,									
				DATE	8/20/03									
				APPD.	J, C, L,									
SCALE: N/A		DWG. SIZE	A	DO NOT SCALE DRAWING		CODE IDENT	68999	DATE	8/20/03	SHEET	1 of 1	SD3190-1552	REV	A



MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact

RF Connectors Technical Data Sheet

PE45251

Configuration

- Snap-On MMBX Plug Connector
- 50 Ohms
- Straight Body Geometry
- RG316, RG174 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.11:1
- Gold Plated Beryllium Copper Contact
- Reliable Snap-On connection method
- Small circuit footprint for high density applications
- Mechanical misalignment tolerance of 4.5°/0.7mm Max

Applications

- General Purpose Test
- Custom Cable Assemblies
- Low cost blind mate interconnect
- Multi circuit board radios
- Board to board applications requiring multiple coaxial connections

Description

Pasternack's PE45251 MMBX plug snap-on connector crimp/solder attachment for RG316 and RG174 is part of our full line of RF components available for same-day shipping. Our MMBX plug connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.11:1.

Our MMBX plug connector PE45251 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 connector assemblies for you and ship same-day.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.11:1	
Insertion Loss			0.2	dB
Operating Voltage (DC)			250	Vdc
Dielectric Withstanding Voltage (DC)			750	Vdc
Insulation Resistance	1,000			MOhms

Electrical Specification Notes:
MMBX Plug has a male center contact

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact PE45251](#)



MMBX Plug Snap-On Connector Crimp/Solder Attachment
for RG316, RG174, With Male Center Contact

RF Connectors Technical Data Sheet

PE45251

Mechanical Specifications

Size

Length 0.57 in [14.48 mm]

Width/Dia. 0.185 in [4.70 mm]

Weight 0.00662 lbs [3 g]

Mating Cycles 100 Cycles

Material Specifications

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

Environmental Specifications

Temperature

Operating Range -55 to 155 deg C

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact PE45251](#)



MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact

RF Connectors Technical Data Sheet

PE45251

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

Plotted and Other Data

Notes:

MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact 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.

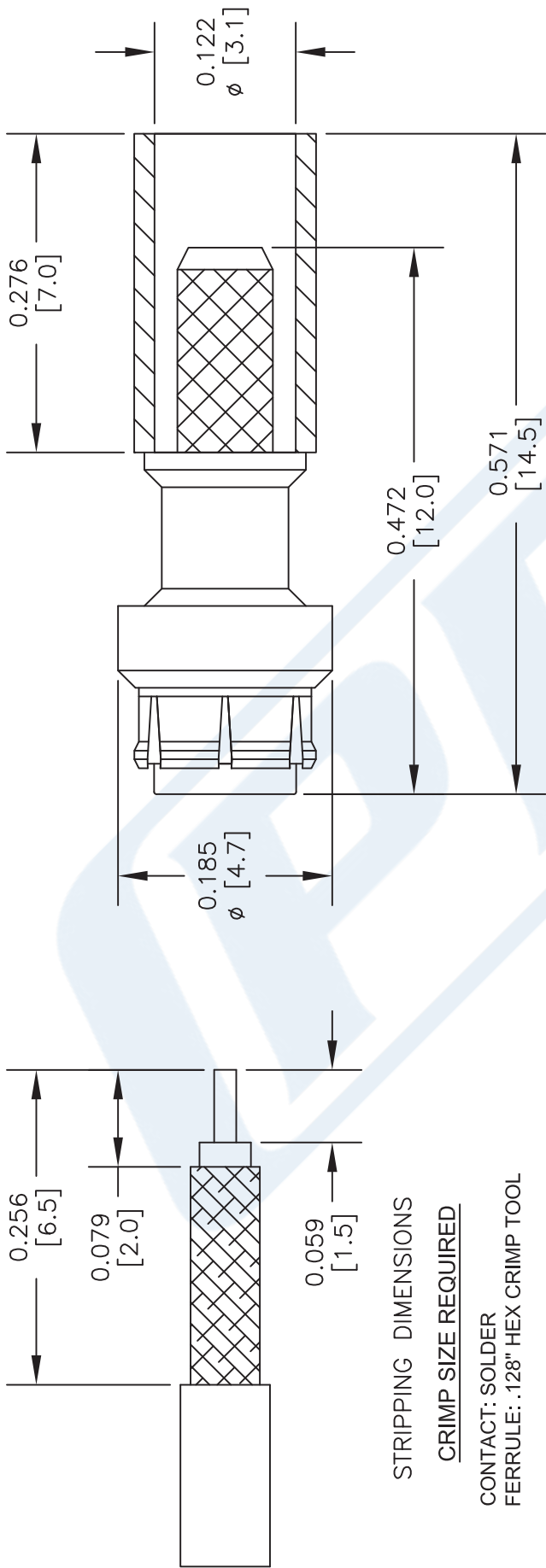
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMBX Plug Snap-On Connector Crimp/Solder Attachment for RG316, RG174, With Male Center Contact PE45251](#)

URL: <https://www.pasternack.com/mmbx-plug-snap-on-rg316-rg174-connector-pe45251-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.

PE45251 CAD Drawing

MMBX Plug Snap-On Connector Crimp/Solder Attachment
for RG316, RG174, With Male Center Contact



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER

FERRULE: .128" HEX CRIMP TOOL

STANDARD TOLERANCES

.X ±0.2

.XX ±0.1

.XXX ±0.05

*STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES

PE PASTERNAK®
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.

P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

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

DWG TITLE

PE45251

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 092816

SCALE N/A

SIZE A

2233

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

Configuration

- Flexible Cable
- 1 Shield(s)

Features

- High Flexibility
- FEP Jacket
- Velocity of Propagation 69%

Applications

- General Purpose
- Antenna Feeds
- Communication Systems
- Wireless Systems
- Indoor / Outdoor Uses
- High Temperature Applications
- High Flexibility Applications
- Jumper Cable Assemblies

Description

Flexible coaxial cable are ideal for applications where tight bends and continual flexure are required. Pasternack's RG316/U is a single shielded flexible coax cable with FEP jacket and compatible with a wide selection of connector types. This RG316/U coaxial cable has a stranded inner conductor for better flexibility and operates up to 3 GHz. The FEP jacket of this RG316/U coax cable makes it suitable for indoor/outdoor uses and high temperature applications. RG316/U datasheet specifications and outline drawing for this flexible cable are shown in the PDF below.

Pasternack carries a wide range of cables ready to ship same day to fit your needs. They are available in corrugated, flexible, formable or semi-rigid versions with different constructions of conductor materials, dielectric materials, shielding configurations and jacket materials. Our cables are designed to fit a wide range of performance criteria including attenuation, operating temperature, environmental factor, and power capability.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Velocity of Propagation		69		%
Operating Voltage (AC)			900	Vrms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Jacket Spark			2,000	Vrms
Nominal Capacitance		29.4 [96.46]		pF/ft [pF/m]

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

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.05	0.1	0.4	1	3	GHz
Attenuation, Typ	7.5	11	21	38	58	dB/100ft
	24.61	36.09	68.9	124.67	190.29	dB/100m

Mechanical Specifications

Diameter	0.102 in [2.59 mm]
Weight	0.01 lbs/ft [0.01 Kg/m]

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 95% coverage	
Jacket	FEP, Tan	0.102 in [2.59 mm]

Environmental Specifications

Temperature Operating Range	-55 to +200 deg C
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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 RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket

RF Cables Technical Data Sheet

RG316/U

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

Plotted and Other Data

Notes:

Flexible RG316 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.

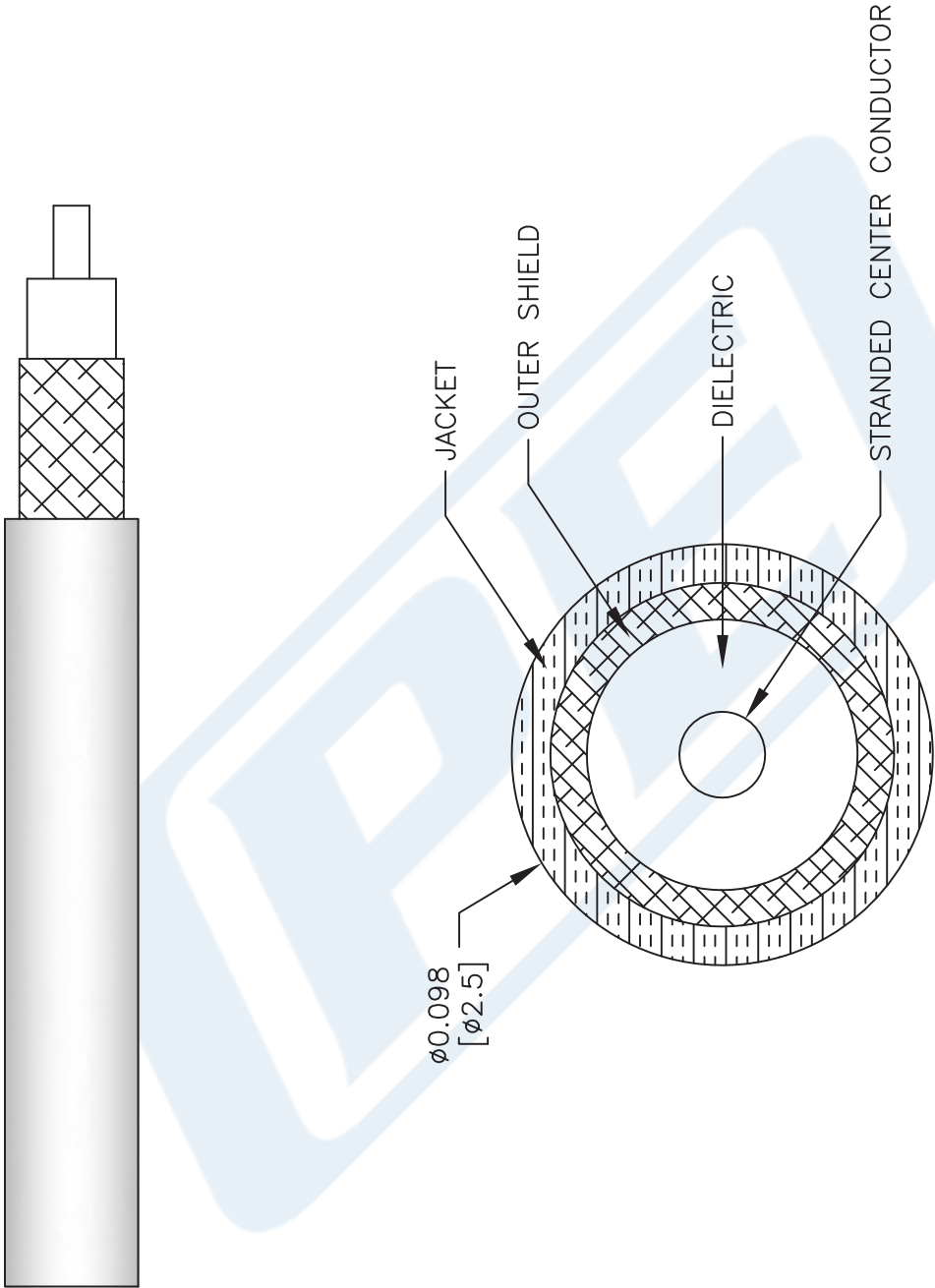
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket RG316/U](#)

URL: <https://www.pasternack.com/50-ohm-flexible-rg316u-fep-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-tan-rg316-u-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.

RG316/U CAD Drawing

Flexible RG316 Coax Cable Single Shielded with Tan FEP Jacket



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3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
RG316/U

FSCM NO. 53919

41742

SIZE A

SCALE N/A

111716

CAD FILE