MCX Plug to TNC Female Bulkhead Cable
100 cm Length Using RG316 Coax

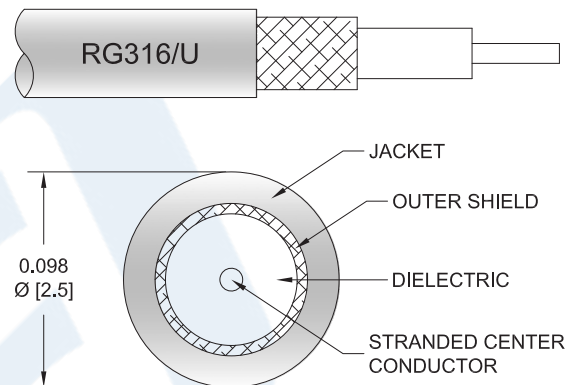## RF Cable Assemblies Technical Data Sheet — PE3W05645-100CM

Configuration
- Connector 1: MCX Plug
- Connector 2: TNC Female Bulkhead
- Cable Type: RG316

Features
- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket

RG316/U

JACKET
OUTER SHIELD
DIELECTRIC
STRANDED CENTER CONDUCTOR

0.098 Ø [2.5]

Applications
- General Purpose
- Laboratory Use

Description

Pasternack's PE3W05645-100CM MCX plug to TNC female bulkhead 100 cm cable using RG316 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack MCX to TNC cable assembly has a plug to female gender configuration with 50 ohm flexible RG316 coax. The PE3W05645-100CM MCX plug to TNC female cable assembly operates to 3 GHz. Our RF cable assembly with TNC bulkhead interface 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.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Jacket Spark			2,000	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: MCX Plug to TNC Female Bulkhead Cable 100 cm Length Using RG316 Coax PE3W05645-100CM

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Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	3	GHz
Insertion Loss (Max.)	0.73	0.98	1.45	1.94	2.11	dB

Electrical Specification Notes:
The Insertion Loss data above is based on the performance specifications of the coax use in the assembly. The Insertion Loss includes an estimated insertion loss of 0.2ddB of connector loss.

Mechanical Specifications

Cable Assembly
Length*	39.37 in [100 cm]
Diameter	0.68 in [17.27 mm]

Cable
Cable Type	RG316
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Shield Layer 1	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.102 in [2.59 mm]

Connectors

Description	Connector 1	Connector 2
Type	MCX Plug	TNC Female Bulkhead
Specification	CECC 22220	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Phosphor Bronze, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	

Mechanical Specification Notes:
*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: MCX Plug to TNC Female Bulkhead Cable 100 cm Length Using RG316 Coax PE3W05645-100CM

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451

Sales@Pasternack.com • Techsupport@Pasternack.com

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Environmental Specifications
Temperature
Operating Range   -55 to +155 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data
Notes:

How to Order

Part Number Configuration: **PE3W05645   - xx   uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W05645-12 = 12 inches long cable
PE3W05645-100cm = 100 cm long cable

MCX Plug to TNC Female Bulkhead Cable 100 cm Length Using RG316 Coax 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: MCX Plug to TNC Female Bulkhead Cable 100 cm Length Using RG316 Coax PE3W05645-100CM
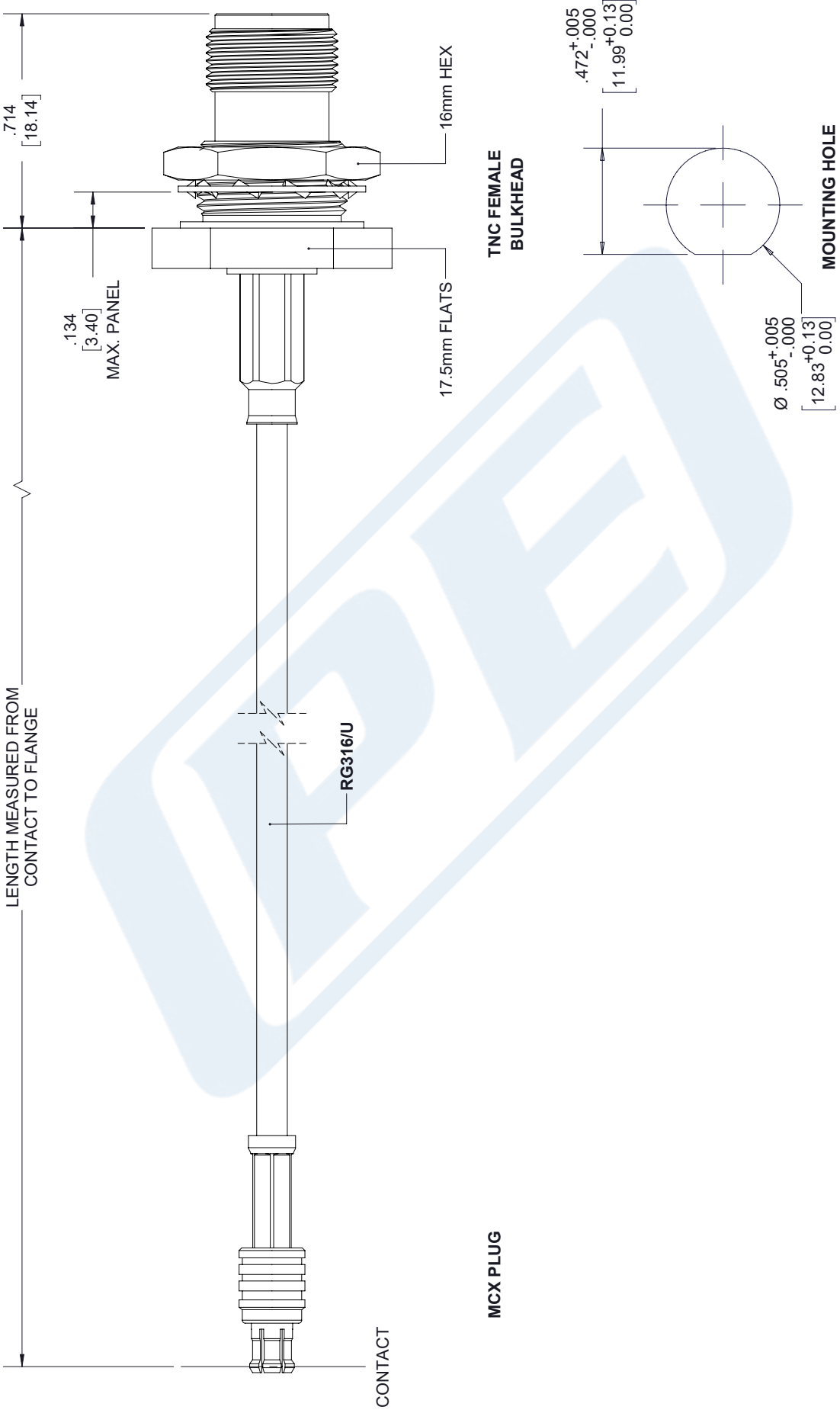
URL: https://www.pasternack.com/mcx-plug-tnc-female-rg316u-cable-assembly-pe3w05645-100cm-p.aspx

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.

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PE3W05645-100CM CAD Drawing

MCX Plug to TNC Female Bulkhead Cable 100 cm Length Using RG316 Coax

.714
[18.14]

16mm HEX

.134
[3.40]
MAX. PANEL

17.5mm FLATS

TNC FEMALE BULKHEAD

LENGTH MEASURED FROM CONTACT TO FLANGE

RG316/U

MCX PLUG

CONTACT

.472 +.005 / -.000
[11.99 +0.13 / 0.00]

MOUNTING HOLE

Ø .505 +.005 / -.000
[12.83 +0.13 / 0.00]

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/30/19	S.ELLIS

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

TOLERANCES:
.X=± .2 [5.08] | FRACTIONS
.XX=± .01 [.25] | ± 1/32
.XXX=± .005 [.13] | ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

PE PASTERNACK
an INFINITE brand

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Phone: 1.949.261.1920 | 1.866.727.8376
Fax: 1.949.261.7451
www.pasternack.com | e-mail: sales@pasternack.com

SIZE	CAGE	DRAWN BY	PART NUMBER
A	53919	K.DANG	PE3W05645

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SHEET 1 OF 1

SCALE N/A

REV A

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T-Rev B