

## MMCX Plug to N Female Bulkhead Low Loss Cable Using LMR-100 Coax with HeatShrink



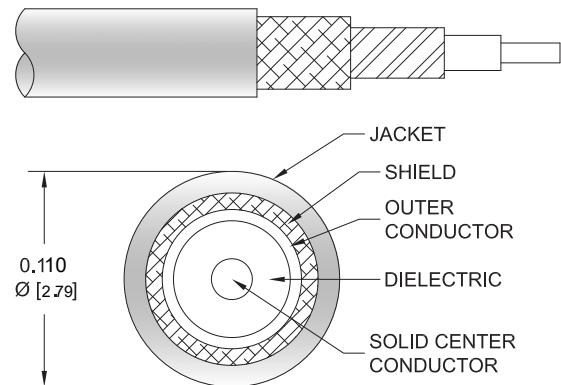
### PE3W08705/HS

#### Configuration

- Connector 1: MMCX Plug
- Connector 2: N Female Bulkhead
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W08705/HS MMCX plug to type N female bulkhead cable using LMR-100 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 MMCX to type N cable assembly has a plug to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3W08705/HS MMCX plug to type N female cable assembly operates to 6 GHz. Our RF cable assembly with type N 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. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W08705/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.115	0.165	0.24	0.398	0.641	dB/ft	
			0.38	0.55	0.79	1.31	2.11	dB/m	
PE3W08705/HS-24	24 In	Insertion Loss (Typ.)	0.43	0.53	0.68	1	1.49	dB	0.108
PE3W08705/HS-36	36 In	Insertion Loss (Typ.)	0.55	0.7	0.92	1.4	2.13	dB	0.117
PE3W08705/HS-48	48 In	Insertion Loss (Typ.)	0.66	0.86	1.16	1.8	2.77	dB	0.126
PE3W08705/HS-100CM	100 CM	Insertion Loss (Typ.)	0.58	0.75	0.99	1.51	2.31	dB	0.12
PE3W08705/HS-200CM	200 CM	Insertion Loss (Typ.)	0.96	1.29	1.78	2.82	4.41	dB	0.15

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.099 pounds
Additional Weight per Inch:	0.00075 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.09 lbs [40.82 g]

##### Cable

Cable Type	LMR-100A
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

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**PE3W08705/HS**

**Connectors**

Description	Connector 1	Connector 2
Type	MMCX Plug	N Female Bulkhead
Specification	BS EN 122340	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	
Outer Conductor Plating Specification	3 µin minimum	
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification	3 µin minimum	100 µin minimum

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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### PE3W08705/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W08705/HS**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W08705/HS-12 = 12 inches long cable  
PE3W08705/HS-100cm = 100 cm long cable

MMCX Plug to N Female Bulkhead Low Loss Cable Using LMR-100 Coax with HeatShrink 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.

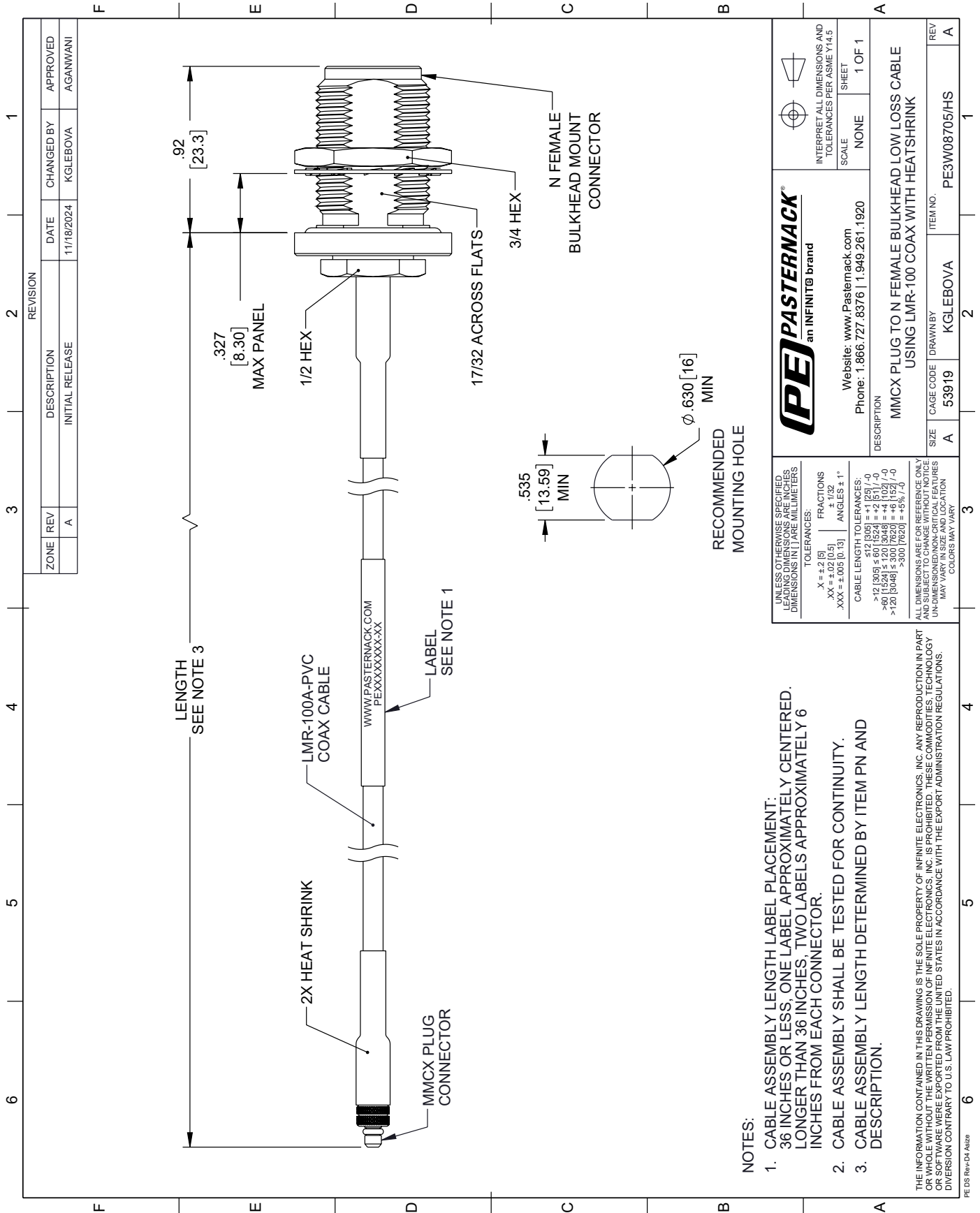
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug to N Female Bulkhead Low Loss Cable Using LMR-100 Coax with HeatShrink PE3W08705/HS](https://www.pasternack.com/mmcx-plug-to-n-female-bulkhead-low-loss-cable-using-lmr-100-with-heatshrink-pe3w08705-hs)

URL: <https://www.pasternack.com/mmcx-plug-to-n-female-bulkhead-low-loss-cable-using-lmr-100-with-heatshrink-pe3w08705-hs-p.aspx>

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# PE3W08705/HS CAD Drawing

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**NOTES:**

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 A1822

REVISION		DATE	CHANGED BY	APPROVED		
ZONE	REV	DESCRIPTION	INITIAL RELEASE	11/18/2024	KGLEBOVA	AGANWANI
	A					

<p><b>PASTERNAK</b> an INFINITTE brand</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a></p> <p>Phone: 1.866.727.8376   1.949.261.1920</p>		<p>DESCRIPTION</p> <p>MMCX PLUG TO N FEMALE BULKHEAD LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK</p>
<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [5]      FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5]      ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&gt;12 [305] ≤ 60 [1524] = +1 [25] / -0</p> <p>&gt;60 [1524] ≤ 120 [3048] = +4 [102] / -0</p> <p>&gt;120 [3048] ≤ 300 [7620] = +5 [127] / -0</p> <p>&gt;300 [7620] = +5 [127] / -0</p>	<p>ITEM NO.</p> <p>PE3W08705/HS</p>	<p>REV</p> <p>A</p>
<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY DIMENSIONS OF CRITICAL FEATURES UNLESS OTHERWISE SPECIFIED MAY VARY IN SIZE AND LOCATION COLORS MAY VARY</p>	<p>SIZE</p> <p>A</p>	<p>DESCRIPTION</p> <p>MMCX PLUG TO N FEMALE BULKHEAD LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK</p>
<p>RECOMMENDED MOUNTING HOLE</p> <p>φ .630 [16] MIN</p>	<p>CAGE CODE</p> <p>53919</p>	<p>ITEM NO.</p> <p>PE3W08705/HS</p>
<p>DRAWN BY</p> <p>KGLEBOVA</p>	<p>SIZE</p> <p>A</p>	<p>DESCRIPTION</p> <p>MMCX PLUG TO N FEMALE BULKHEAD LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK</p>