

Blue FAKRA Jack to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax with HeatShrink



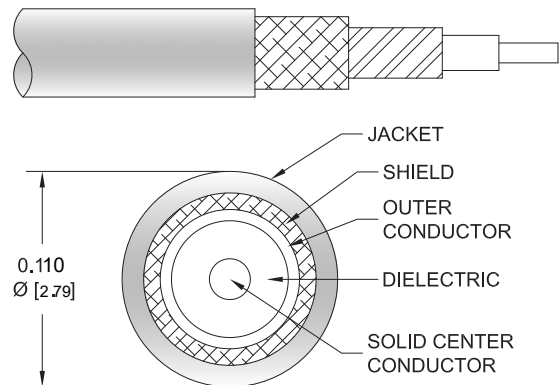
PE3W15242/HS

Configuration

- Connector 1: FAKRA Jack
- Connector 2: SMA Male Right Angle
- Cable Type: LMR-100A-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- TPE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15242/HS blue FAKRA jack to SMA male right angle cable using LMR-100A-UF 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 FAKRA to SMA cable assembly has a jack to male gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3W15242/HS FAKRA jack to SMA male cable assembly operates to 4 GHz. The right angle SMA interface on the LMR-100A-UF cable allows for easier connections in tight spaces. 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		4	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]
Operating Voltage (AC)			335	Vrms

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PE3W15242/HS

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	100	250	500	1000	4000	MHz	
PE3W15242/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.115	0.166	0.24	0.511	dB/ft	
			0.23	0.38	0.55	0.79	1.68	dB/m	
PE3W15242/HS-24	24 In	Insertion Loss (Typ.)	0.44	0.53	0.64	0.78	1.33	dB	0.039
PE3W15242/HS-36	36 In	Insertion Loss (Typ.)	0.51	0.65	0.8	1.02	1.84	dB	0.047
PE3W15242/HS-48	48 In	Insertion Loss (Typ.)	0.58	0.76	0.97	1.26	2.35	dB	0.055
PE3W15242/HS-100CM	100 CM	Insertion Loss (Typ.)	0.53	0.68	0.85	1.09	1.98	dB	0.049
PE3W15242/HS-200CM	200 CM	Insertion Loss (Typ.)	0.76	1.06	1.39	1.88	3.66	dB	0.075

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:	0.2 dB
Base Weight:	0.03 pounds
Additional Weight per Inch:	0.00067 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.022 lbs [9.98 g]

Cable

Cable Type	LMR-100A-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper
Jacket Material	TPE, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.03 in [0.76 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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PE3W15242/HS

Connectors

Description	Connector 1	Connector 2
Type	FAKRA Jack	SMA Male Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Color	BL	
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		50 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

Blue FAKRA Jack to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax with HeatShrink



PE3W15242/HS

Typical Performance Data

How to Order

Part Number Configuration: **PE3W15242/HS - xx uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: PE3W15242/HS-12 = 12 inches long cable
PE3W15242/HS-100cm = 100 cm long cable

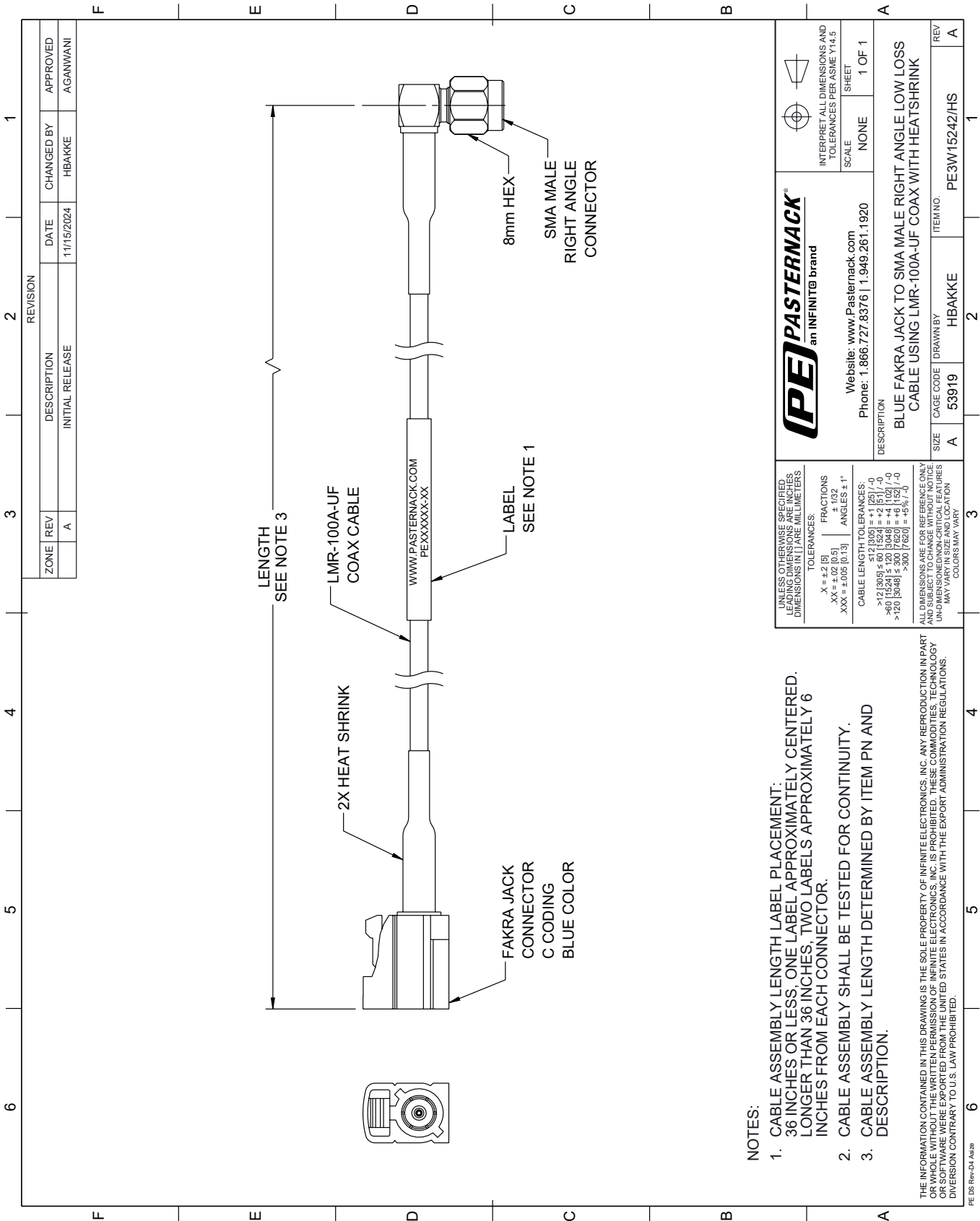
Blue FAKRA Jack to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Blue FAKRA Jack to SMA Male Right Angle Low Loss Cable Using LMR-100A-UF Coax with HeatShrink PE3W15242/HS](https://www.pasternack.com/fakra-jack-to-sma-male-low-loss-cable-using-lmr-100a-uf-with-heatshrink-pe3w15242-hs-p.aspx)

URL: <https://www.pasternack.com/fakra-jack-to-sma-male-low-loss-cable-using-lmr-100a-uf-with-heatshrink-pe3w15242-hs-p.aspx>

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PE3W15242/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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TOLERANCES:		Website: www.Pasternack.com		SCALE	
X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		NONE	
.XX = ±.02 [0.5]				SHEET	
.XXX = ±.005 [0.13]				1 OF 1	
ANGLES ± 1°					
CABLE LENGTH TOLERANCES:		DESCRIPTION			
>12 [305] ≤ 60 [1524] = ±.125 [-0]		BLUE FAKRA JACK TO SMA MALE RIGHT ANGLE LOW LOSS			
>60 [1524] ≤ 120 [3048] = ±.125 [-0]		CABLE USING LMR-100A-UF COAX WITH HEATSHRINK			
>120 [3048] ≤ 300 [7620] = ±.125 [-0]					
>300 [7620] = ±.125 [-0]					
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		SIZE		REV	
		A		A	
		CAGE CODE		ITEM NO.	
		53919		PE3W15242/HS	
		DRAWN BY			
		HBAKKE			