

Blue FAKRA Plug to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink



PE3W15211/HS

Configuration

- Connector 1: FAKRA Plug
- Connector 2: SMA Male
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W15211/HS blue FAKRA plug to SMA male 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 FAKRA to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W15211/HS FAKRA plug to SMA male cable assembly operates to 4 GHz. 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]

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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	
PE3W15211/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.064	0.115	0.165	0.24	0.502	dB/ft	
			0.21	0.38	0.55	0.79	1.65	dB/m	
PE3W15211/HS-24	24 In	Insertion Loss (Typ.)	0.33	0.43	0.53	0.68	1.21	dB	0.035
PE3W15211/HS-36	36 In	Insertion Loss (Typ.)	0.4	0.55	0.7	0.92	1.71	dB	0.044
PE3W15211/HS-48	48 In	Insertion Loss (Typ.)	0.46	0.66	0.86	1.16	2.21	dB	0.053
PE3W15211/HS-100CM	100 CM	Insertion Loss (Typ.)	0.41	0.58	0.75	0.99	1.85	dB	0.047
PE3W15211/HS-200CM	200 CM	Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.5	dB	0.077

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:	0.026 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.017 lbs [7.71 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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Connectors

Description	Connector 1	Connector 2
Type	FAKRA Plug	SMA Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Color	BL	
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		30 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:

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PE3W15211/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W15211/HS - xx uu

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

Length

Base Number

Example: PE3W15211/HS-12 = 12 inches long cable
PE3W15211/HS-100cm = 100 cm long cable

Blue FAKRA Plug to SMA Male 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.

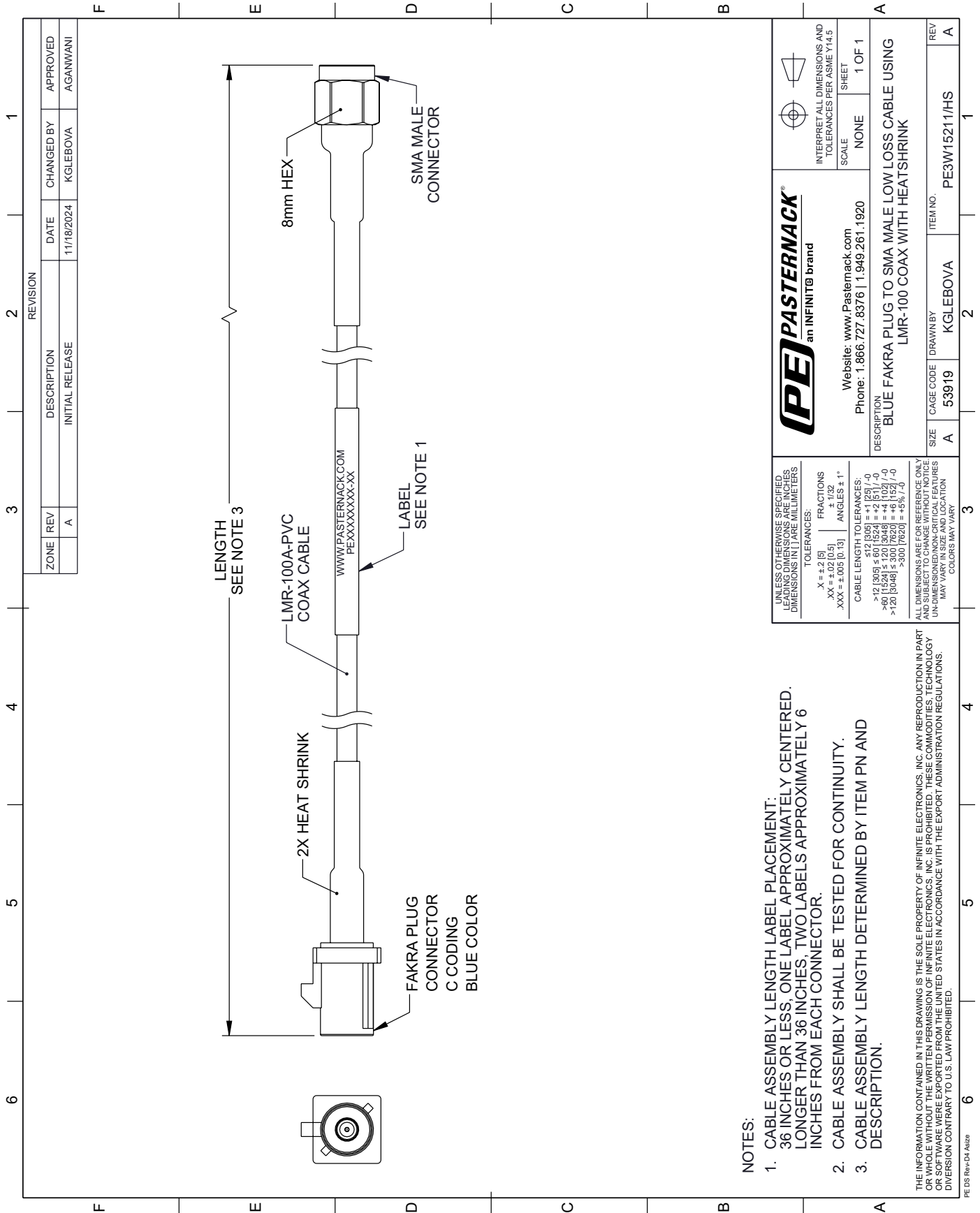
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Blue FAKRA Plug to SMA Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3W15211/HS](#)

URL: <https://www.pasternack.com/fakra-plug-to-sma-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3w15211-hs-p.aspx>

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PE3W15211/HS CAD Drawing

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- NOTES:**
- 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.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: BLUE FAKRA PLUG TO SMA MALE LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK

SIZE: A
CAGE CODE: 53919
DRAWN BY: KGLEBOVA
ITEM NO.: PE3W15211/HS

REV: A