



Black FAKRA Jack to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder

RF Cable Assemblies Technical Data Sheet

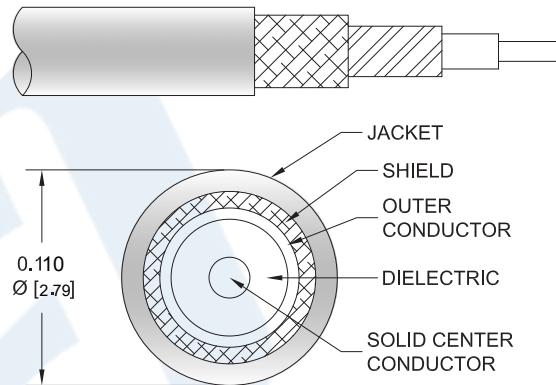
PE3W12104LF/HS

Configuration

- Connector 1: FAKRA Jack
- Connector 2: TNC Male Right Angle
- Cable Type: LMR-100A

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12104LF/HS black FAKRA jack to TNC male right angle 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 TNC cable assembly has a jack to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W12104LF/HS FAKRA jack to TNC male cable assembly operates to 4 GHz. The right angle TNC interface on the LMR-100A 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Black FAKRA Jack to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax with Heat-Shrink, LF Solder PE3W12104LF/HS](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.5:1	
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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Operating Voltage (AC)			335	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.07	0.115	0.166	0.24	0.508	dB/ft
	0.23	0.38	0.54	0.79	1.67	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.05 \times \text{SQRT}(f\text{GHz})$ dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.067 lbs [30.39 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

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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]

Connectors

Description	Connector 1	Connector 2
Type	FAKRA Jack	TNC Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Dielectric Type	PTFE	POM
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W12104LF/HS

How to Order

Part Number Configuration:

PE3W12104LF/HS - xx**uu**

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

Example: PE3W12104LF/HS-12 = 12 inches long cable
PE3W12104LF/HS-100cm = 100 cm long cable

Black FAKRA Jack to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder 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.

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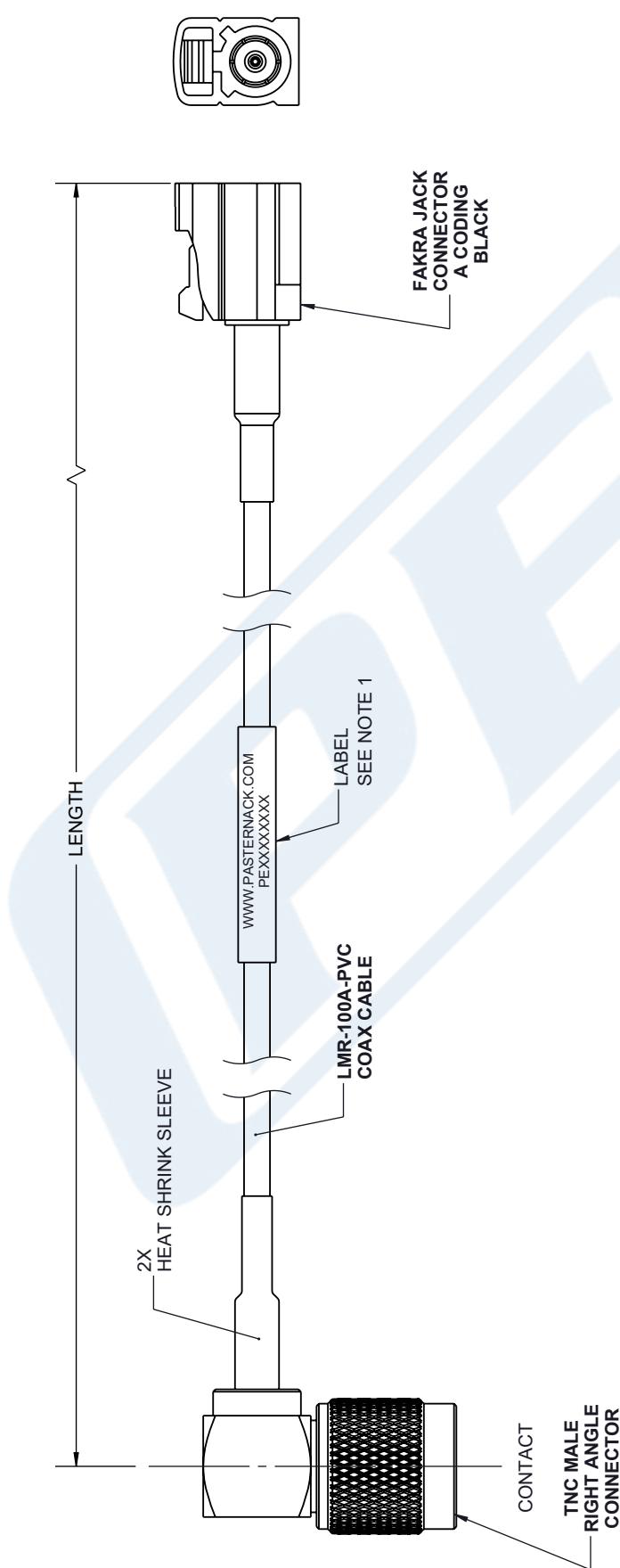
URL: <https://www.pasternack.com/jack-to-tnc-male-low-loss-cable-using-lmr-100-with-heatshrink-lf-solder-pe3w12104lf-hs-p.aspx>

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.

PE3W12104LF/HS CAD Drawing

Black FAKRA Jack to TNC Male Right Angle Low Loss Cable Using LMR-100 Coax with HeatShrink, LF Solder

ZONE	REV.	DESCRIPTION	REVISON	DATE	CHANGED BY	APPROVED
A		INITIAL RELEASE		12/16/2022	KDANG	AGANWANI



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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<p>PASTERNACK® an INFINITI® brand</p> <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table> <tr> <td>$X \pm .2$</td> <td>[.5]</td> <td>FRACTIONS</td> </tr> <tr> <td>$X \pm .02$</td> <td>[.5]</td> <td>$\pm 1/32$</td> </tr> <tr> <td>$XXX \pm .005$</td> <td>[.13]</td> <td>ANGLES $\pm 1^\circ$</td> </tr> </table> <p>CABLE LENGTH TOLERANCES:</p> <table> <tr> <td>>12</td> <td>[305]</td> <td>± 1 [25] / -0</td> </tr> <tr> <td>>12</td> <td>[305]</td> <td>± 2 [51] / -0</td> </tr> <tr> <td>>90</td> <td>[2242]</td> <td>± 120 [3048] / ± 44 [1020] / -0</td> </tr> <tr> <td>>120</td> <td>[3048]</td> <td>± 300 [7620] / ± 46 [1152] / -0</td> </tr> <tr> <td colspan="3">>300 [7620] / -05% / -0</td></tr> </table>		$X \pm .2$	[.5]	FRACTIONS	$X \pm .02$	[.5]	$\pm 1/32$	$XXX \pm .005$	[.13]	ANGLES $\pm 1^\circ$	>12	[305]	± 1 [25] / -0	>12	[305]	± 2 [51] / -0	>90	[2242]	± 120 [3048] / ± 44 [1020] / -0	>120	[3048]	± 300 [7620] / ± 46 [1152] / -0	>300 [7620] / -05% / -0			<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE</p> <p>1 OF 1</p> <p>WEBSITE</p>		REV A
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