

Fire Rated N Male to N Male Low Loss Cable Using LMR-400-FR Coax with HeatShrink, LF Solder



PE3W12484LF/HS

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-400-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- FRPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12484LF/HS type N male to type N male cable using LMR-400-FR 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-FR coax. The PE3W12484LF/HS type N male to type N male cable assembly operates to 8 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		8	GHz
VSWR			1.5:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W12484LF/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.041	0.06	0.079	0.108	dB/ft	
			0.1	0.14	0.2	0.26	0.36	dB/m	
PE3W12484LF/HS-12	12 inch	Insertion Loss (Typ.)	0.23	0.25	0.26	0.28	0.31	dB	0.231
PE3W12484LF/HS-24	24 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.36	0.42	dB	0.312
PE3W12484LF/HS-36	36 inch	Insertion Loss (Typ.)	0.29	0.33	0.38	0.44	0.53	dB	0.393
PE3W12484LF/HS-48	48 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.52	0.64	dB	0.474
PE3W12484LF/HS-60	60 inch	Insertion Loss (Typ.)	0.34	0.41	0.5	0.6	0.74	dB	0.555

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: 0.231 pounds
 Additional Weight per Inch: 0.00675 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.231 lbs [104.78 g]

Cable

Cable Type LMR-400-FR
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper
 Dielectric Type Foam PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper
 Jacket Material FRPE, Black
 Jacket Diameter 0.405 in [10.29 mm]
 One Time Minimum Bend Radius 1 in [25.4 mm]
 Repeated Minimum Bend Radius 4 in [101.6 mm]
 Bending Moment 0.5 lbs-ft [0.68 N-m]
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]
 Tensile Strength 160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	15 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	18 mm	18 mm

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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Typical Performance Data

How to Order

Part Number Configuration:

PE3W12484LF/HS - xx uu



Example: PE3W12484LF/HS-12 = 12 inches long cable
PE3W12484LF/HS-100cm = 100 cm long cable

Fire Rated N Male to N Male Low Loss Cable Using LMR-400-FR 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Male Low Loss Cable Using LMR-400-FR Coax with HeatShrink, LF Solder PE3W12484LF/HS](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-male-low-loss-cable-using-lmr-400-fr-with-heatshrink-lf-solder-pe3w12484lf-hs-p.aspx>

The information contained within 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 impliment improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W12484LF/HS CAD Drawing

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