

Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-600-FR Coax with Times Microwave Components with HeatShrink

PE3C10780/HS



Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: LMR-600-FR
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10780/HS type N male to type N male right angle cable using LMR-600-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-600-FR coax. The PE3C10780/HS type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the LMR-600-FR 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.53 [1.74]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3C10780/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.012	0.017	0.026	0.044	0.073	dB/ft	
			0.04	0.06	0.09	0.15	0.24	dB/m	
PE3C10780/HS-12	12 In	Insertion Loss (Typ.)	0.17	0.19	0.23	0.31	0.42	dB	0.535
PE3C10780/HS-36	36 In	Insertion Loss (Typ.)	0.19	0.23	0.28	0.4	0.57	dB	0.865
PE3C10780/HS-48	48 In	Insertion Loss (Typ.)	0.2	0.24	0.31	0.44	0.64	dB	1.03
PE3C10780/HS-180	180 In	Insertion Loss (Typ.)	0.33	0.43	0.59	0.92	1.44	dB	2.845
PE3C10780/HS-240	240 In	Insertion Loss (Typ.)	0.39	0.52	0.72	1.14	1.81	dB	3.67

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*SQRT(FGHz) dB
Base Weight:	0.535 pounds
Additional Weight per Inch:	0.01375 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.036 lbs [16.33 g]

Cable

Cable Type	LMR-600-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	PE, Black
Jacket Diameter	0.59 in [14.99 mm]
One Time Minimum Bend Radius	1.5 in [38.1 mm]
Repeated Minimum Bend Radius	6 in [152.4 mm]
Bending Moment	2.75 lbs-ft [3.73 N-m]
Flat Plate Crush	60 lbs/in [1.07 Kg/mm]
Tensile Strength	350 lbs [158.76 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100 µin minimum	80 µin minimum
Hex Size	20.57 mm	20.57 mm
Torque	44 in-lbs 4.97 Nm	9 in-lbs 1.02 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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Typical Performance Data

How to Order

Part Number Configuration:

PE3C10780/HS

- xx

uu

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

Length

Base Number

Example: PE3C10780/HS-12 = 12 inches long cable
PE3C10780/HS-100cm = 100 cm long cable

Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR-600-FR Coax with Times Microwave Components 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: [Fire Rated N Male to N Male Right Angle Low Loss Cable Using LMR®-600-FR Coax with Times Microwave Components with HeatShrink PE3C10780/HS](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-male-low-loss-cable-using-lmr-600-fr-with-heatshrink-pe3c10780-hs-p.aspx>

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PE3C10780/HS CAD Drawing

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