

N Male to QD QMA Male Low Loss Cable Using LMR-240 Coax with HeatShrink



PE3C1980/HS

Configuration

- Connector 1: N Male
- Connector 2: QD QMA Male
- Cable Type: LMR-240
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1980/HS type N male to QMA male QD cable using LMR-240 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 QMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3C1980/HS type N male to QMA male cable assembly operates to 6 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C1980/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.056	0.076	0.129	0.204	dB/ft	
			0.13	0.19	0.25	0.43	0.67	dB/m	
PE3C1980/HS-12	12 inch	Insertion Loss (Typ.)	0.42	0.44	0.46	0.51	0.59	dB	0.22
PE3C1980/HS-24	24 inch	Insertion Loss (Typ.)	0.46	0.5	0.54	0.64	0.79	dB	0.253
PE3C1980/HS-36	36 inch	Insertion Loss (Typ.)	0.5	0.55	0.61	0.77	1	dB	0.286
PE3C1980/HS-48	48 inch	Insertion Loss (Typ.)	0.54	0.61	0.69	0.9	1.2	dB	0.319
PE3C1980/HS-60	60 inch	Insertion Loss (Typ.)	0.58	0.66	0.76	1.03	1.4	dB	0.352

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:	0.28 dB
Base Weight:	0.22 pounds
Additional Weight per Inch:	0.00275 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.187 lbs [84.82 g]

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	QMA Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method		QD
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification		50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80 µin minimum

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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PE3C1980/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3C1980/HS - xx uu



Example: PE3C1980/HS-12 = 12 inches long cable
PE3C1980/HS-100cm = 100 cm long cable

N Male to QD QMA Male Low Loss Cable Using LMR-240 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.

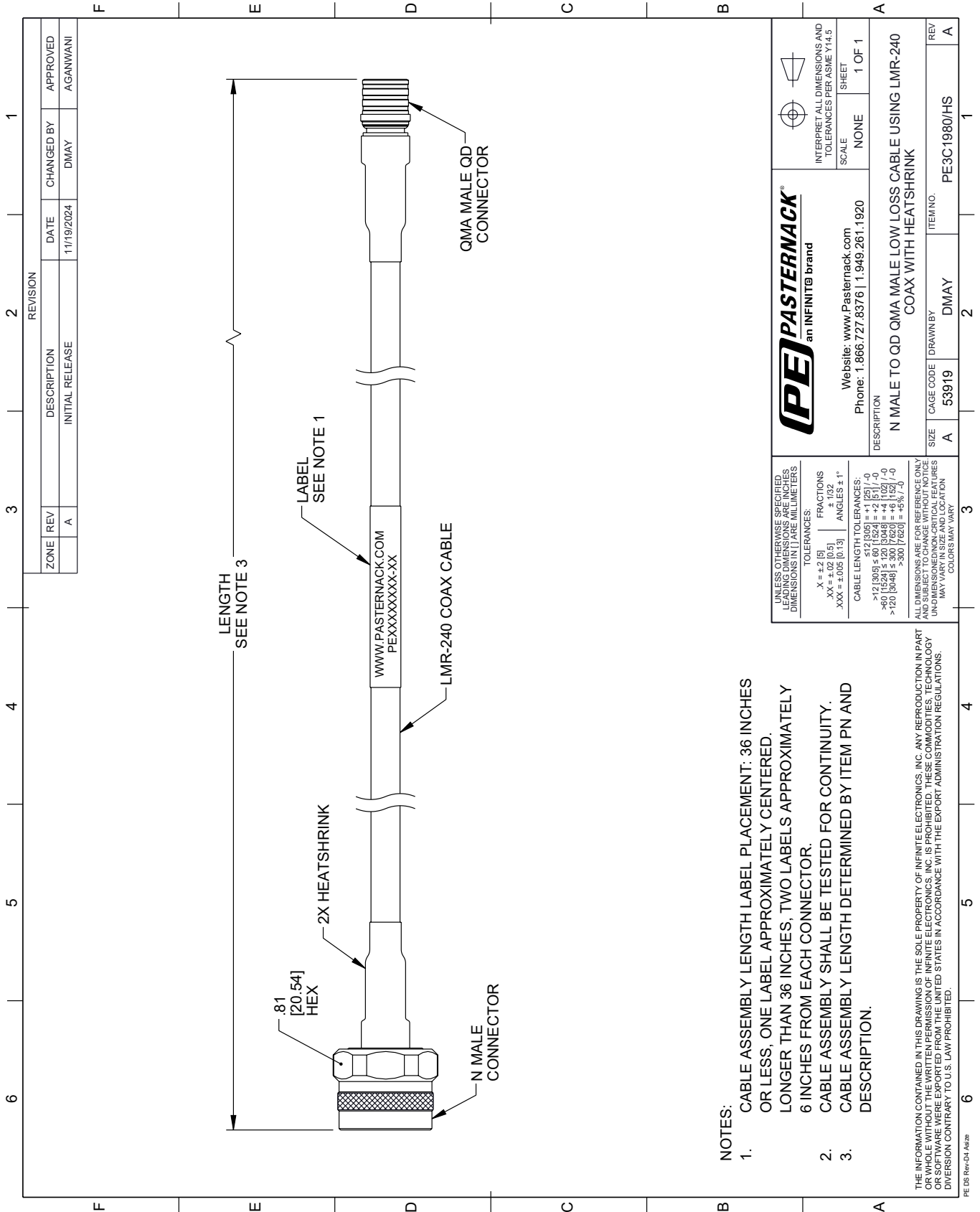
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to QD QMA Male Low Loss Cable Using LMR-240 Coax with HeatShrink PE3C1980/HS](#)

URL: <https://www.pasternack.com/n-male-to-qd-qma-male-low-loss-cable-using-lmr-240-with-heatshrink-pe3c1980-hs-p.aspx>

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PE3C1980/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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PE DS Rev-D4 Add2

 <p>PASTERNAK an INFINITE brand</p>	<p>Website: www.Pasternack.com</p> <p>Phone: 1.866.727.8376 1.949.261.1920</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
	<p>DESCRIPTION</p> <p>N MALE TO QD QMA MALE LOW LOSS CABLE USING LMR-240 COAX WITH HEATSHRINK</p>	
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND UNLEADING DIMENSIONS ARE IN MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 (5) FRACTIONS ± 1/32</p> <p>.XX = ±.02 (0.5) ANGLES ± 1°</p> <p>.XXX = ±.005 (0.13)</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 (305) ≤ 60 (1524) = ±.1 (2.5) / -0</p> <p>>60 (1524) ≤ 120 (3048) = ±.4 (10.2) / -0</p> <p>>120 (3048) ≤ 300 (7620) = ±.6 (15.2) / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>	<p>SIZE: A</p> <p>CAGE CODE: 53919</p> <p>DRAWN BY: DMAY</p> <p>ITEM NO.: PE3C1980/HS</p>	<p>REV: A</p>