



SMA Male to N Female Cable 50 cm Length Using LMR-240-UF Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3W02398/HS-50CM

Configuration

- Connector 1: SMA Male
- Connector 2: N Female
- Cable Type: LMR-240-UF

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02398/HS-50CM SMA male to type N female 50 cm cable using LMR-240-UF 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 SMA to type N cable assembly has a male to female gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3W02398/HS-50CM SMA male to type N female cable assembly operates to 5.8 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.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to N Female Cable 50 cm Length Using LMR-240-UF Coax with HeatShrink PE3W02398/HS-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.45:1	
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		4.28 [14.04]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω/1000ft [Ω/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	5.8	GHz
Insertion Loss (Max.)	0.31	0.33	0.4	0.5	0.68	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1dB per connector.

Mechanical Specifications

Cable Assembly

Length*	19.69 in [500.13 mm]
Diameter	0.67 in [17.02 mm]

Cable

Cable Type	LMR-240-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
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

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Jacket Material	TPE, 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	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Female
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM B488	
Dielectric Type	Teflon	PTFE
Body Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Body Plating Specification	SAE-AMS-2700	
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

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

Plotted and Other Data

Notes:

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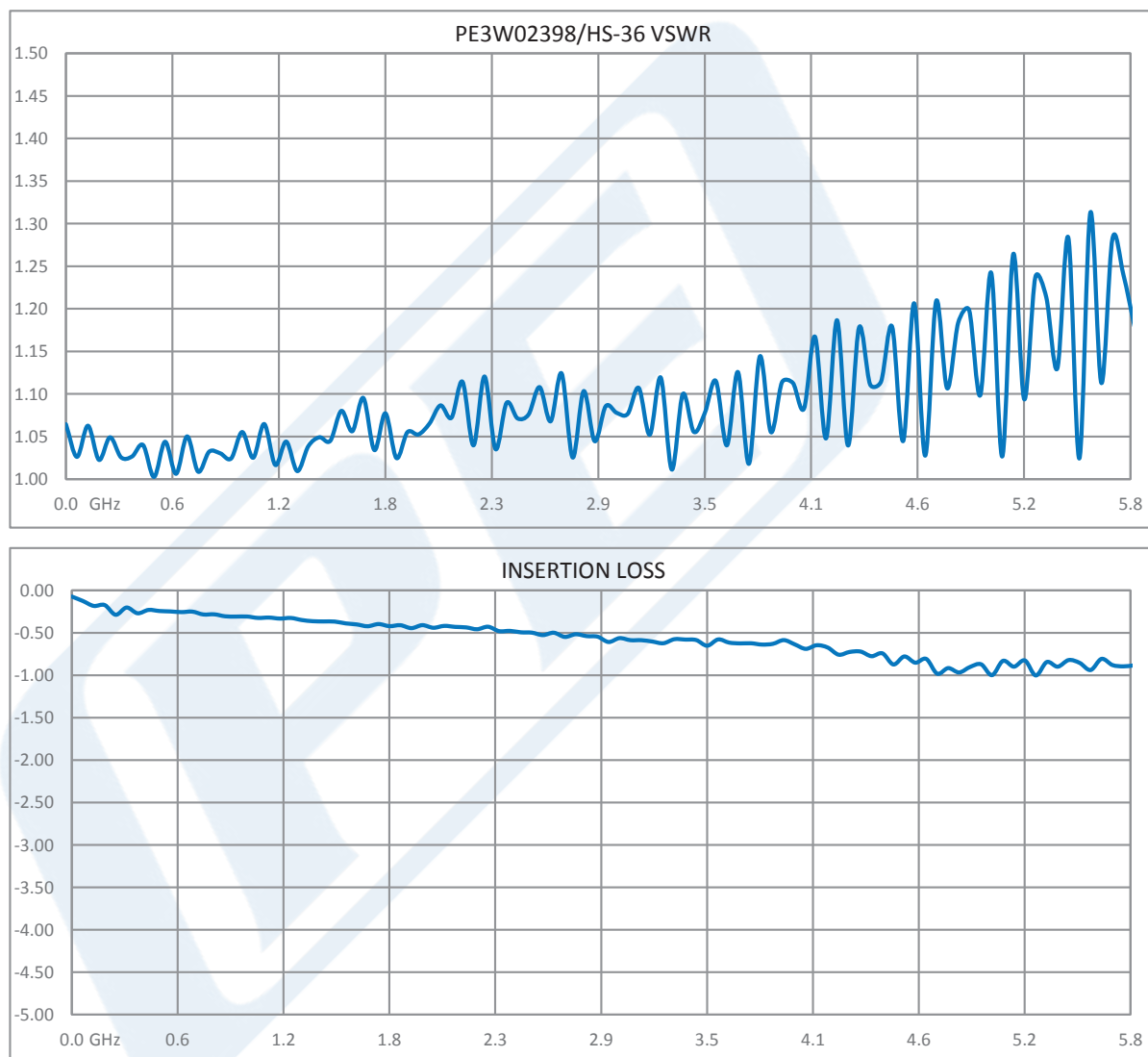


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Typical Performance Data



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How to Order

Part Number Configuration:

PE3W02398/HS

- xx

uu

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

Example: PE3W02398/HS-12 = 12 inches long cable
PE3W02398/HS-100cm = 100 cm long cable

SMA Male to N Female Cable 50 cm Length Using LMR-240-UF 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.

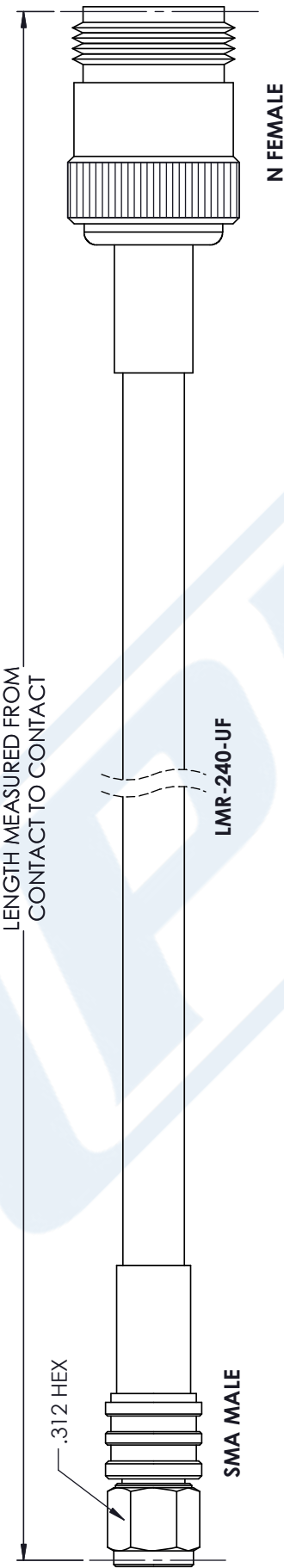
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

PE3W02398/HS-50CM CAD Drawing

SMA Male to N Female Cable 50 cm Length Using LMR-240-UF Coax with HeatShrink



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



PASTERNAK®

THE ENGINEER'S RF SOURCE

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DWG TITLE	PE3W02398/HS
CAGE CODE	53919

NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].			
CAD FILE	06/13/18	SCALE	N/A
SIZE	A		CN2379