

SMA Male to SMA Female Cable Using RG316-DS Coax



PE3W09740

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: RG316-DS
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 85 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W09740 SMA male to SMA female cable using RG316-DS 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 SMA cable assembly has a male to female gender configuration with 50 ohm flexible RG316-DS coax. The PE3W09740 SMA male to SMA female cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 85 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		3	GHz
VSWR		1.4:1		
Velocity of Propagation		69.5		%
RF Shielding	85			dB
Capacitance		28.96 [95.01]		pF/ft [pF/m]
DC Resistance Inner Conductor		83.82 [275]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		5.33 [17.49]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W09740	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.13	0.194	0.29	0.535	dB/ft	
			0.27	0.42	0.64	0.96	1.76	dB/m	
PE3W09740-6	6 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.35	0.47	dB	0.033
PE3W09740-12	12 inch	Insertion Loss (Typ.)	0.29	0.33	0.4	0.49	0.74	dB	0.04
PE3W09740-24	24 inch	Insertion Loss (Typ.)	0.37	0.46	0.59	0.78	1.27	dB	0.055
PE3W09740-36	36 inch	Insertion Loss (Typ.)	0.45	0.59	0.79	1.07	1.81	dB	0.069
PE3W09740-48	48 inch	Insertion Loss (Typ.)	0.53	0.72	0.98	1.36	2.34	dB	0.083

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:	0.04 pounds
Additional Weight per Inch:	0.00117 pounds

Mechanical Specifications

Cable Assembly

Weight	0.04 lbs [18.14 g]
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Cable

Cable Type	RG316-DS
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Tan
Jacket Diameter	0.114 in [2.9 mm]
One Time Minimum Bend Radius	0.59 in [14.99 mm]
Repeated Minimum Bend Radius	1.57 in [39.88 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Female
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	
Torque	5 in-lbs 0.57 Nm	

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

Plotted and Other Data

Notes:

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PE3W09740

Typical Performance Data

How to Order

Part Number Configuration: **PE3W09740** **- xx** **uu**

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

Length

Base Number

Example: PE3W09740-12 = 12 inches long cable
PE3W09740-100cm = 100 cm long cable

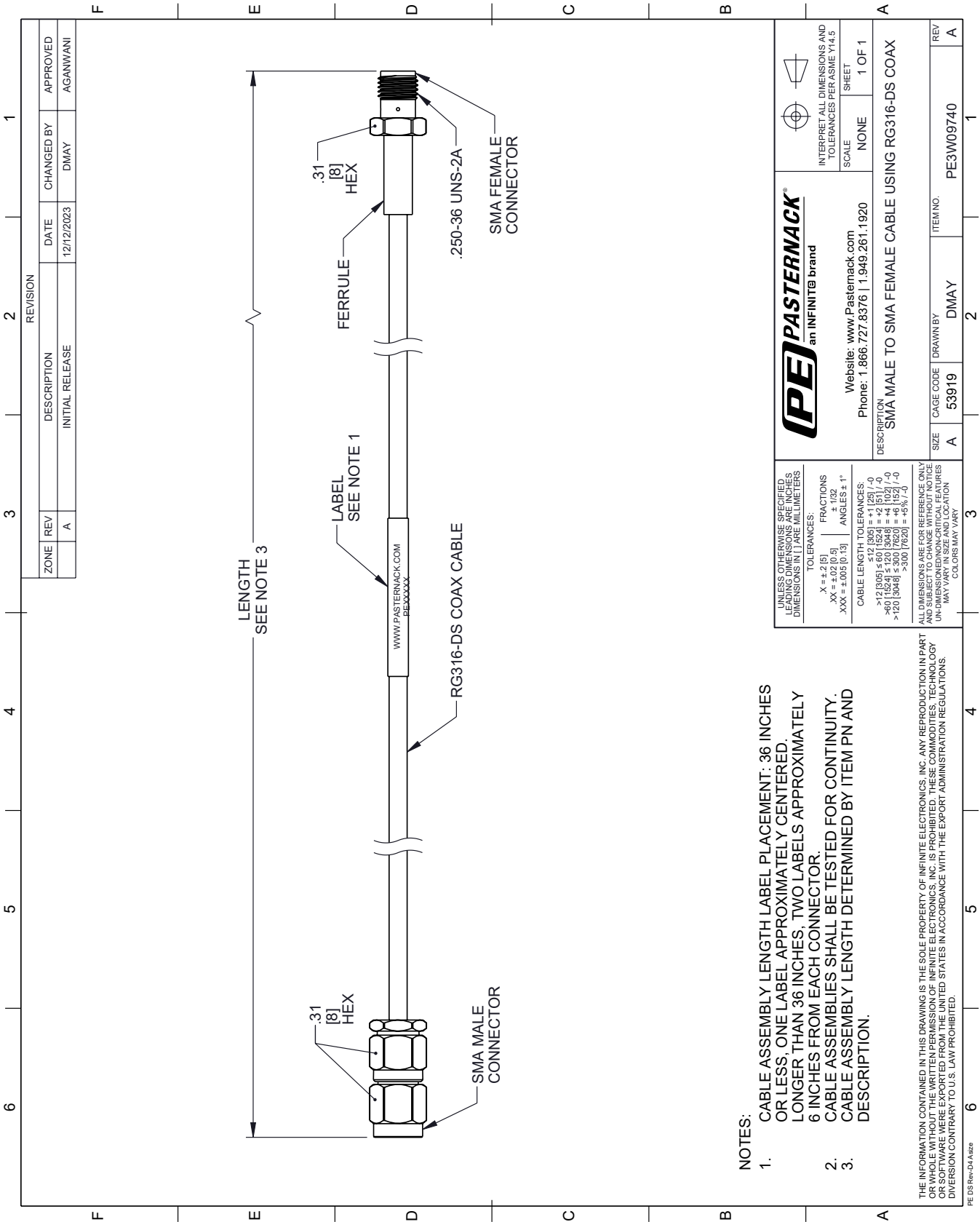
SMA Male to SMA Female Cable Using RG316-DS Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Cable Using RG316-DS Coax PE3W09740](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-cable-using-rg316-ds-pe3w09740-p.aspx>

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PE3W09740 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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

Table with 3 columns: TOLERANCES, CABLE LENGTH TOLERANCES, and SHEET. It includes specifications for dimensions, tolerances, and sheet information.

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