

## QMA Female Bulkhead to SMA Male Right Angle Cable Using RG316-DS Coax

**PE39549**



### Configuration

- Connector 1: QMA Female Bulkhead
- Connector 2: SMA Male Right Angle
- 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 PE39549 QMA female bulkhead to SMA male right angle 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 QMA to SMA cable assembly has a female to male gender configuration with 50 ohm flexible RG316-DS coax. The PE39549 QMA female to SMA male cable assembly operates to 3 GHz. The right angle SMA interface on the RG316-DS cable allows for easier connections in tight spaces. Our RF cable assembly with QMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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]
Operating Voltage (AC)			335	Vrms

### 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	
PE39549	Custom Lengths Available	Insertion Loss (Typ.)	0.08	0.13	0.19	0.29	0.536	dB/ft	
			0.28	0.43	0.64	0.96	1.76	dB/m	
PE39549-6	6 inch	Insertion Loss (Typ.)	0.35	0.37	0.4	0.45	0.57	dB	0.037
PE39549-12	12 inch	Insertion Loss (Typ.)	0.39	0.43	0.5	0.59	0.84	dB	0.044
PE39549-24	24 inch	Insertion Loss (Typ.)	0.47	0.56	0.69	0.88	1.38	dB	0.059
PE39549-36	36 inch	Insertion Loss (Typ.)	0.55	0.69	0.89	1.17	1.91	dB	0.073
PE39549-48	48 inch	Insertion Loss (Typ.)	0.64	0.82	1.08	1.46	2.45	dB	0.087

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:	0.2 dB
Base Weight:	0.044 pounds
Additional Weight per Inch:	0.00117 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.044 lbs [19.96 g]

#### 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	QMA Female Bulkhead	SMA Male Right Angle
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	100	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification		50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	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		3 in-lbs 0.34 Nm

### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

### Plotted and Other Data

Notes:

## QMA Female Bulkhead to SMA Male Right Angle Cable Using RG316-DS Coax



**PE39549**

### Typical Performance Data

### How to Order

Part Number Configuration:

**PE39549**

**- xx**

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

Length

Base Number

Example: PE39549-12 = 12 inches long cable  
PE39549-100cm = 100 cm long cable

QMA Female Bulkhead to SMA Male Right Angle 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: [QMA Female Bulkhead to SMA Male Right Angle Cable Using RG316-DS Coax PE39549](https://www.pasternack.com/qma-female-bulkhead-to-sma-male-right-angle-cable-using-rg316-ds-coax-pe39549-p.aspx)

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PE39549 CAD Drawing
QMA Female Bulkhead to SMA Male Right Angle Cable Using RG316-DS Coax

