

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

PE38162



Configuration

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

Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE38162 SMA male to QMA female bulkhead 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 QMA cable assembly has a male to female gender configuration with 50 ohm flexible RG316-DS coax. The PE38162 SMA male to QMA female cable assembly operates to 3 GHz. 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.

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		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
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	
PE38162	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	
PE38162-6	6 inch	Insertion Loss (Typ.)	0.16	0.19	0.24	0.3	0.46	dB	0.033
PE38162-12	12 inch	Insertion Loss (Typ.)	0.2	0.26	0.33	0.44	0.73	dB	0.04
PE38162-24	24 inch	Insertion Loss (Typ.)	0.28	0.39	0.53	0.73	1.26	dB	0.055
PE38162-36	36 inch	Insertion Loss (Typ.)	0.37	0.51	0.72	1.02	1.8	dB	0.069
PE38162-48	48 inch	Insertion Loss (Typ.)	0.45	0.64	0.92	1.31	2.33	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: 0.05 x sqrt(fGHz) dB
 Base Weight: 0.04 pounds
 Additional Weight per Inch: 0.00117 pounds

Mechanical Specifications

Cable Assembly

Weight 0.04 lbs [18.14 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]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	QMA Female Bulkhead
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		100
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 in	
Torque	5 in-lbs 0.57 Nm	

Environmental Specifications

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

Plotted and Other Data

Notes:

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PE38162

Typical Performance Data

How to Order

Part Number Configuration:

PE38162

- xx

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

Length

Base Number

Example: PE38162-12 = 12 inches long cable
PE38162-100cm = 100 cm long cable

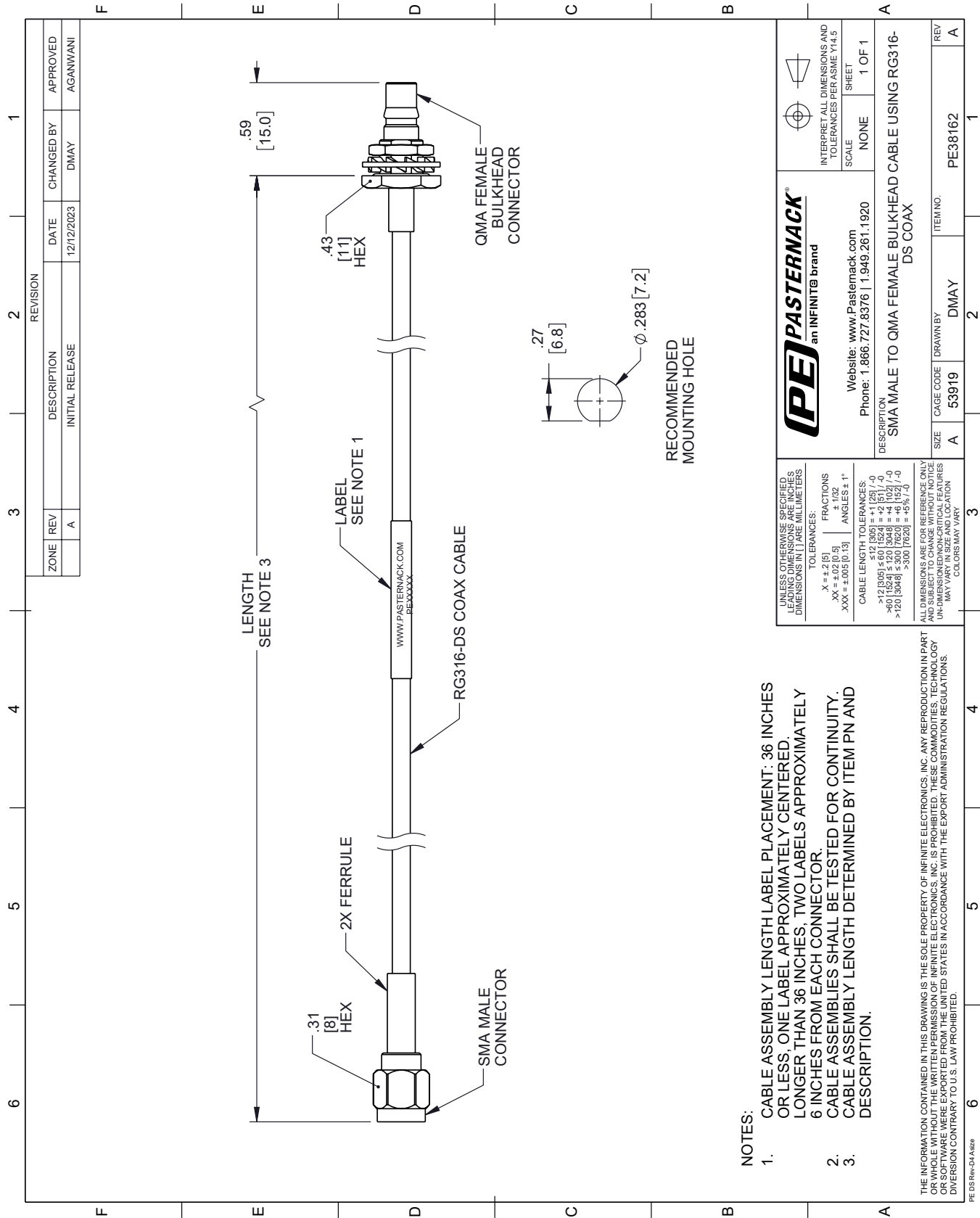
SMA Male to QMA Female Bulkhead Cable Using RG316-DS Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 QMA Female Bulkhead Cable Using RG316-DS Coax PE38162](https://www.pasternack.com/sma-male-to-qma-female-bulkhead-cable-using-rg316-ds-pe38162-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-qma-female-bulkhead-cable-using-rg316-ds-pe38162-p.aspx>

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PE38162 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.

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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X = ±.2 [5] FRACTIONS
XX = ±.02 [0.5] ±.132
XXX = ±.005 [0.13] ANGLES ± 1°

CABLE LENGTH TOLERANCES:
≤ 12 [305] = +.1 [25] / -0
> 12 [305] ≤ 60 [1524] = +.2 [51] / -0
> 60 [1524] ≤ 120 [3048] = +.3 [76.2] / -0
> 120 [3048] ≤ 300 [7620] = +.5 [127] / -0
> 300 [7620] = +.5% / -0

PE PASTERNAK
an INFINITE brand

Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND
TOLERANCES PER ASME Y14.5

SCALE NONE
SHEET 1 OF 1

DESCRIPTION
SMA MALE TO QMA FEMALE BULKHEAD CABLE USING RG316-DS COAX

SIZE A CAGE CODE A 53919 DRAWN BY DMAY ITEM NO. PE38162 REV A