

## 50 Ohm SMA Male Right Angle to 75 Ohm BNC Male Right Angle Cable Using 75 Ohm RG179 Coax



### PE3C5918

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: BNC Male Right Angle
- Cable Type: RG179
- Coax Flex Type: Flexible

#### Features

- Max Frequency 500 MHz
- 70% Phase Velocity
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C5918 50 ohm SMA male right angle to 75 ohm BNC male right angle cable using 75 ohm RG179 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 BNC cable assembly has a male to male gender configuration with 75 ohm flexible RG179 coax. The PE3C5918 SMA male to BNC male cable assembly operates to 500 MHz. The right angle SMA and right angle BNC interfaces on the RG179 cable allow for easier connections in tight spaces.

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		500	MHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		19.4 [63.65]		pF/ft [pF/m]
Operating Voltage (AC)			335	V <sub>rms</sub>

#### Specifications by Frequency

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**PE3C5918**

Part Number	Length	Description	F1	F2	F3	Units	Weight (lbs)
			Frequency			MHz	
PE3C5918	Custom Lengths Available	Insertion Loss (Typ.)	0.09	0.14	0.203	dB/ft	
			0.3	0.45	0.67	dB/m	
PE3C5918-12	12 inch	Insertion Loss (Typ.)	0.49	0.54	0.61	dB	0.086
PE3C5918-24	24 inch	Insertion Loss (Typ.)	0.58	0.68	0.81	dB	0.095
PE3C5918-36	36 inch	Insertion Loss (Typ.)	0.67	0.82	1.01	dB	0.104
PE3C5918-48	48 inch	Insertion Loss (Typ.)	0.76	0.95	1.22	dB	0.113
PE3C5918-72	72 inch	Insertion Loss (Typ.)	0.94	1.23	1.62	dB	0.131

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: 0.2 dB  
 Loss due to Connector 2: 0.2 dB  
 Base Weight: 0.086 pounds  
 Additional Weight per Inch: 0.00075 pounds

**Mechanical Specifications**

**Cable Assembly**

Weight 0.086 lbs [39.01 g]

**Cable**

Cable Type RG179  
 Impedance 75 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 1  
 Shield Layer 1 Silver Plated Copper Braid  
 Jacket Material FEP, Tan  
 Jacket Diameter 0.1 in [2.54 mm]  
 Repeated Minimum Bend Radius 0.4 in [10.16 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	BNC Male Right Angle
Specification	MIL-STD-348A	
Impedance	50 Ohms	75 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	
Torque	3 in-lbs 0.34 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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**PE3C5918**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**PE3C5918**

**- xx**

**uu**

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

Example: PE3C5918-12 = 12 inches long cable  
PE3C5918-100cm = 100 cm long cable

50 Ohm SMA Male Right Angle to 75 Ohm BNC Male Right Angle Cable Using 75 Ohm RG179 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.

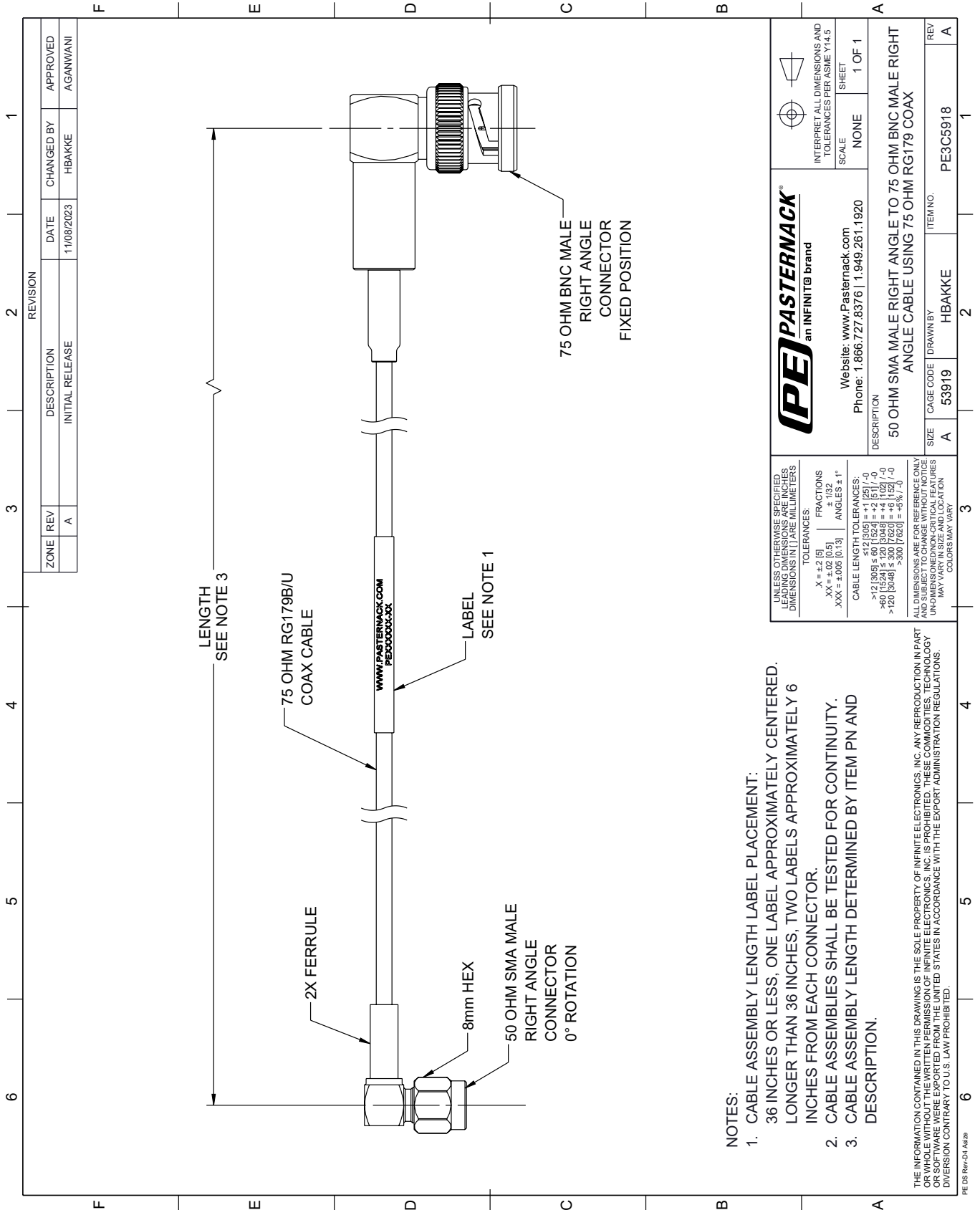
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [50 Ohm SMA Male Right Angle to 75 Ohm BNC Male Right Angle Cable Using 75 Ohm RG179 Coax PE3C5918](#)

URL: <https://www.pasternack.com/50-ohm-sma-male-right-angle-to-75-ohm-bnc-male-cable-using-rg179-pe3c5918-p.aspx>

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# PE3C5918 CAD Drawing

50 Ohm SMA Male Right Angle to 75 Ohm BNC Male Right Angle Cable Using 75 Ohm RG179 Coax



<b>PE PASTERNAK</b> an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		
DESCRIPTION <b>50 OHM SMA MALE RIGHT ANGLE TO 75 OHM BNC MALE RIGHT ANGLE CABLE USING 75 OHM RG179 COAX</b>		
SIZE: A	CAGE CODE: 53919	DRAWN BY: HBAKKE
		ITEM NO.: PE3C5918

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

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS  
 ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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PE DS Rev-04 Add2

- NOTES:
- 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.
  - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.