



Push-On SMP Female Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with 180 Deg. Clock

RF Cable Assemblies Technical Data Sheet

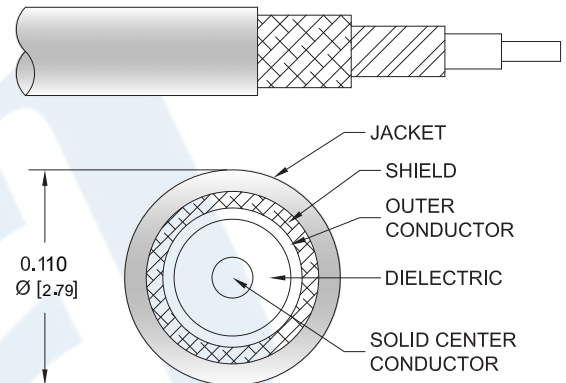
PE3C3749/PH180

Configuration

- Connector 1: Push-OnSMP Female Right Angle
- Connector 2: Push-OnSMP Female Right Angle
- Cable Type: LMR-100A

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C3749/PH180 SMP female push-on right angle to SMP female push-on right angle cable using LMR-100 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 SMP to SMP cable assembly has a female to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3C3749/PH180 SMP female to SMP female cable assembly operates to 3 GHz. The right angle SMP interfaces on the LMR-100A cable allow for easier connections in tight spaces. 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: [Push-On SMP Female Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with 180 Deg. Clock PE3C3749/PH180](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Operating Voltage (AC)			350	Vrms
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.434	dB/ft
	0.23	0.38	0.54	0.79	1.42	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.05 \times \sqrt{\text{fGHz}}$ dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.025 lbs [11.34 g]

Cable

Cable Type LMR-100A
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 Dielectric Type PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid

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Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	SMP Female Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Connection Method	Push-On	Push-On
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	30µ in. minimum	30µ in. minimum
Dielectric Type	Teflon	Teflon
Outer Conductor Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Outer Conductor Plating Specification	3µ in. minimum	3µ in. minimum
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification	3µ in. minimum	3µ in. minimum

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3C3749/PH180

How to Order

Part Number Configuration:

PE3C3749/PH180

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C3749/PH180-12 = 12 inches long cable
PE3C3749/PH180-100cm = 100 cm long cable

Push-On SMP Female Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with 180 Deg. Clock 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.

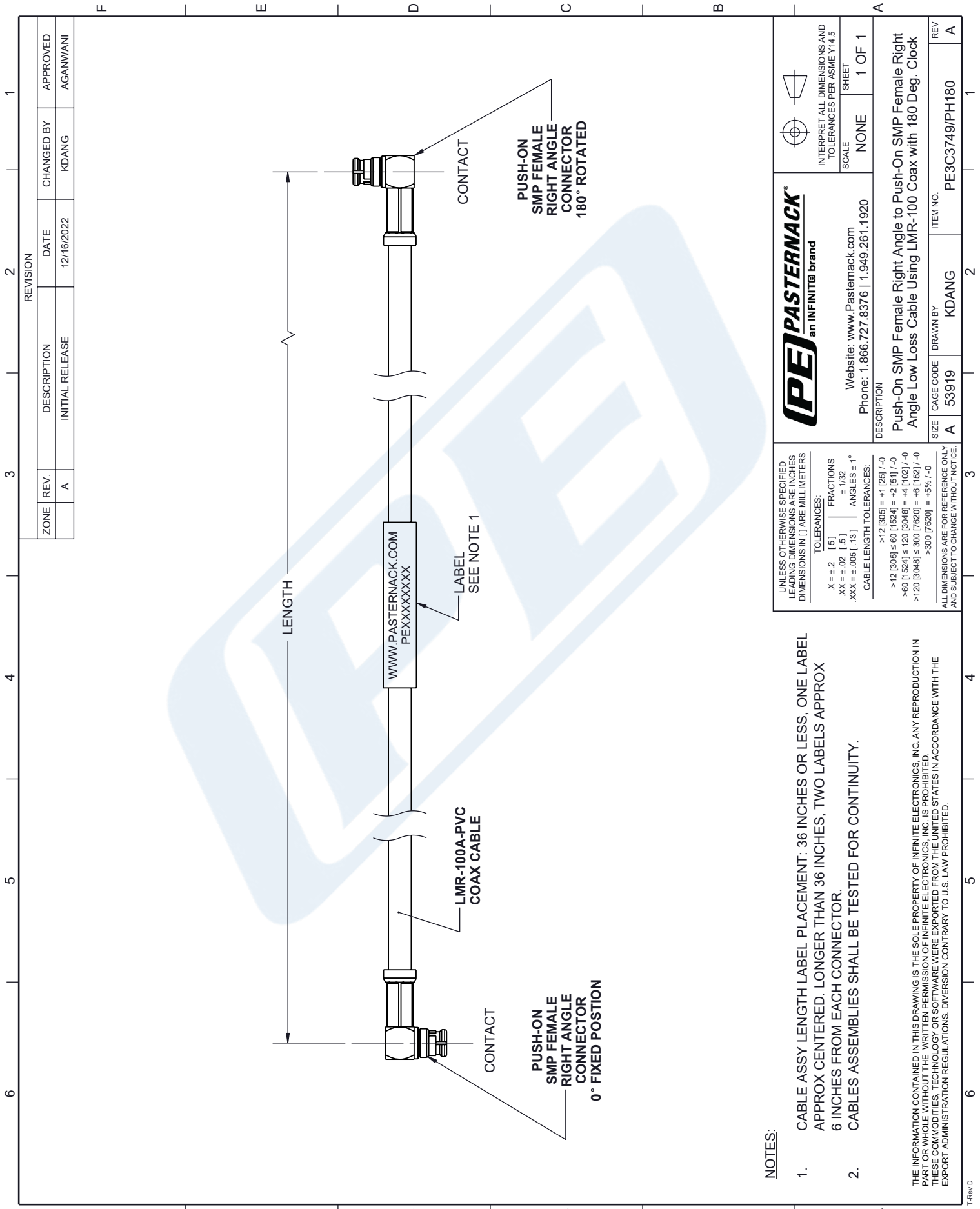
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URL: <https://www.pasternack.com/push-on-smp-female-right-angle-to-push-on-smp-female-low-loss-cable-using-lmr-100-with-180-deg.-clock-pe3c3749-ph180-p.aspx>

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PE3C3749/PH180 CAD Drawing

Push-On SMP Female Right Angle to Push-On SMP Female Right Angle
Low Loss Cable Using LMR-100 Coax with 180 Deg. Clock



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.Pastermack.com Phone: 1.866.727.8376 1.949.261.1920		DESCRIPTION: Push-On SMP Female Right Angle to Push-On SMP Female Right Angle Low Loss Cable Using LMR-100 Coax with 180 Deg. Clock
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X = ±.2 [.5] XX = ±.02 [.5] .XXX = ±.005 [.13] FRACTIONS ± 1/32 ANGLES ± 1° CABLE LENGTH TOLERANCES: >12 [305] = +1 [25] / -0 >60 [1524] ≤ 60 [1524] = -2 [51] / -0 >60 [1524] ≤ 120 [3048] = +4 [102] / -0 >120 [3048] ≤ 300 [7620] = +6 [152] / -0 >300 [7620] = +5% / -0	SIZE: A CAGE CODE: 53919 DRAWN BY: KDANG ITEM NO.: PE3C3749/PH180	REV: A